

HAROLD RUGG

Foundations
for American
Education



WORLD BOOK COMPANY
YONKERS-ON-HUDSON, NEW YORK

COPYRIGHT 1947 BY HAROLD RUGG

COPYRIGHT IN GREAT BRITAIN

*All rights reserved, including the right to reproduce
this book or portions thereof in any form*

First Edition

Designed by Robert Josephy

PRINTED IN THE UNITED STATES OF AMERICA

R.FFAE-3

DEDICATED to Six Men Who Led Their Peers in Building
an American Philosophy of Experience

THE HUMAN FRONTIER – A New Biopsychology

Charles Sanders Peirce

William James

John Dewey

THE SOCIAL FRONTIER – A New Sociology

Thorstein Veblen

THE ESTHETIC FRONTIER – A New Esthetics

Walt Whitman

THE FRONTIER OF FREEDOM AND CONTROL – A New
Ethics

Oliver Wendell Holmes, Jr.

IN ACKNOWLEDGMENT

- John Day Company, Inc.: *John Day Pamphlets*, No. 30.
 — and George S. Counts: *Dare the School Build a New Social Order?*
 Dodge Publishing Company and John Martin: *America Dancing*.
 Doubleday & Co., Inc., and Waldo Frank: *Chart for Rough Water*.
 Duell, Sloan & Pearce, Inc., and R. E. Jones: *The Dramatic Imagination*.
 E. P. Dutton & Co. and Pitirim Sorokin: *The Crisis of Our Age*.
 Harcourt, Brace & Co. and Walter Lippmann: *Public Opinion*.
 — and R. S. and H. M. Lynd: *Middletown in Transition*.
 Harper & Brothers and C. C. Fry and H. W. Haggard: *The Anatomy of Personality*.
 D. C. Heath & Co. and John Dewey: *How We Think*.
 Henry Holt & Co. and G. W. Allport: *Personality*.
 — and John Dewey and J. H. Tufts: *Ethics*.
 — and Rosabell MacDonald: *Art as Education*.
 Little, Brown & Co. and Catherine D. Bowen: *Yankee from Olympus*.
 Liveright Publishing Corporation and Sheldon Cheney: *Expressionism in Art*.
 — and Leo Stein: *A-B-C of Aesthetics*.
 Longmans, Green & Co. and Louis Danz: *The Psychologist Looks at Art*.
 The Macmillan Company and P. W. Bridgman: *The Intelligent Individual and Society*.
 — and Franz Boas: *Mind of Primitive Man*.
 — and C. H. Judd: *The Psychology of Social Institutions*.
 — and Joseph Needham: *Time: The Refreshing River*.
 — and Arthur M. Schlesinger: *New Viewpoints in American History*.
 — and George D. Stoddard: *The Meaning of Intelligence*.
 — and Edward L. Thorndike: *The Psychology of Arithmetic and Human Nature and the Social Order*.
 McGraw-Hill Book Company, Inc., and K. Lewin: *A Dynamic Theory of Personality*.
 Minton, Balch & Co. and John Dewey: *Art as Experience*.
 W. W. Norton & Co., Inc., and John B. Watson: *Behaviorism*.
 The Ronald Press Company and George W. Hartmann: *Gestalt Psychology*.
 — and R. S. Woodworth: *Contemporary Schools of Psychology*.
 Charles Scribner's Sons and Reinhold Niebuhr: *Moral Man and Immoral Society*.
 Simon & Schuster, Inc., and Albert Einstein and Leopold Infeld: *The Evolution of Physics*.
 Teachers College, Columbia University, and E. L. Thorndike: *The Measurement of Intelligence*.
 Theatre Arts, Inc., Publishers, and Isadora Duncan: *The Art of the Dance*.
 The Viking Press, Inc., and J. Dorfman: *Thorstein Veblen and His America*.
 — and W. F. Ogburn: *Social Change*.
 — and T. Veblen: *The Instinct of Workmanship and the State of the Industrial Arts (1918)*.
 Warwick & York, Publishers, and W. C. Bagley: *An Essentialist's Platform for the Advancement of Education*, from *Education Administration and Supervision*, April, 1936.

H. R.

In Acknowledgment

On the dedication page and throughout this book I have tried to make clear the vast extent to which my work has been made possible by the pioneering of the distinguished Men of the Consensus. I should like to add here, however, a brief note of deep personal indebtedness

- to my colleagues of the *Social Frontier* in the teachers colleges of America, but especially to my friend and co-worker in “Educational Foundations” — F. Ernest Johnson.
- to my associate in Teachers College, Columbia, B. Marian Brooks, who read and appraised the manuscript throughout its developing stages and advised me concerning its revision.
- to my assistant in Teachers College, Columbia, Ronald Levy, for valued suggestions in revising the manuscript.
- to my assistant in the technical preparation of the manuscript, Dorothy A. Peters, for years of efficient work.

But most of all to Elizabeth May Howe, upon whose friendship, incisive criticism, and wise guidance I have come to depend.

/ / /

I should like also to express my indebtedness to the many publishers and authors who have graciously given me permission to make quotations from their publications. Specifically to the following:

- American Council on Education and the American Youth Commission: *Youth and the Future*.
- American Education Fellowship and Wilford M. Aikin: *Progressive Education Advances* and *The Story of the Eight-Year Study*, Volume I, *Adventure in American Education*.
- American Institute of Architects and Louis Sullivan: *Autobiography of an Idea*.
- D. Appleton-Century Company, Inc., and K. C. Mayhew and A. C. Edwards: *The Dewey School*.
- and V. T. Thayer, C. B. Zachry, and Ruth Kotinsky: *Reorganizing Secondary Education*.
- and Edward L. Thorndike: *The Psychology of Wants, Interests and Attitudes* and *Human Learning*.
- Columbia University Press and Ralph Linton: *Science of Man in the World Crisis*.
- Thomas Y. Crowell Company and R. H. Wheeler and F. T. Perkins: *Principles of Mental Development*.
- I. Dauche, Jr., and I. C. Heffron: *Francis Wayland Parker*.

Contents

FOREWORD Let Your Mind Conclude —	xi
PART ONE THE FOUR FOUNDATIONS OF EDUCATION	
I The Educational Consensus	3
II Education and the Great Shift in Thought	32
PART TWO THE HUMAN FRONTIER: A NEW PSYCHOLOGY FOR A NEW EDUCATION	
III The American Psychology of Experience Founded: Peirce and James	73
IV Dewey and the Psychology of the Act	99
V The Last Stand of Mechanism: Connectionism <i>vs.</i> Gestalt	122
VI The Person and the Psychology of Personality	164
VII The Psychology of the Act — Reinterpreted: How Does Man Know?	206
PART THREE THE SOCIAL FRONTIER: A NEW SOCIOLOGY FOR A NEW EDUCATION	
VIII American Society and Social Change: 1890's–1940's	237
IX The Study of Industrial Culture and Society: Veblen and After	259
X Foundations for a Science of Culture: 1920–	288
XI The Patterns of American Culture	322
XII The Social Psychology of Consent	366

CONTENTS

PART FOUR THE ESTHETIC FRONTIER:
A NEW ESTHETICS
FOR A NEW EDUCATION

- XIII The Creative Revolution Produces the New Esthetics 397
XIV The New Esthetics: Expression and the Creative Act 436

PART FIVE THE MORAL-ETHICAL FRONTIER:
A NEW ETHICS FOR A NEW EDUCATION

- XV The Problem of Ethics in a Changing Society 473

PART SIX THE EDUCATIONAL FRONTIER:
1890's-1940's

- XVI Two Schools of 1890 519
XVII The Progressive Movement in Education:
Child-Centered 540
XVIII Society-Centered Foundations, 1930's-1940's:
The Youth Problem and the High School 571
XIX The Last Stand of Authority in Education:
The Subject-Centered Curriculum 605
XX The Curriculum: What Have We Learned? 650
XXI The Curriculum: Shunned and Neglected Areas 674
XXII The Organization of the Curriculum 698
XXIII Fifty Years of Scientific Method in Education:
What Have We Learned? 719

A Call for the Artist-Teachers of America 806

A New Yardstick on Which to Design and to
Appraise a School 808

Subject Index 814

Index of Names 821

F O R E W O R D

Let Your Mind Conclude —

There is no last chapter in this book. I am taking advantage of the prerogatives of the author's Foreword by writing it as the last chapter — Prologue and Epilogue in one — and printing it in front. Here I take a long breath — after 300,000 words and four years, that is necessary — scrutinize again what I have thought and written, and try to put first things first. In that endeavor I have brought forward to these pages a few of the most detonating concepts of the study, those that have blasted clearer pathways of understanding through a massive wall of confusion. As Prologue, therefore, I hope that this foreword will serve to point up a large body of documented facts; as Epilogue, I trust that it will help the reader to conclude what the facts conclude.

This aspiration, indeed, has governed my writing: *To let my mind conclude what the facts of life conclude.* It has not been easy, for I am human — therefore biased and insecure — and the facts of life are frightening and dreadfully confused. I have watched many of my colleagues — also human, and biased and beset by fears and insecurity — scrutinize our terrifying but potentially magnificent world, freeze with fear at what they see, and refuse to let their minds conclude what the facts of life had concluded. There have been times when I watched myself behave that way: march boldly up to the social and personal frontiers of our times and then back away from the final step of letting my mind accept the clear, self-stated truth. I have seen this happen to so many experimentalists, especially in the past ten years, that I have become skeptical of their liberalism — to the point, indeed, of disavowing the label.

THE MEN OF THE CONSENSUS

As the years passed I have found that the facts of life *did* conclude if only I would *let* them. I was brought to recognize this by

FOREWORD

an exciting and profound body of Americans who had succeeded in doing that very thing. These I have called the Men of the Consensus and to their leaders I have dedicated my book. Throughout the story of their work we can marvel at their traits. Certainly they were neither Liberals nor Conservatives. Not one was of any Party. Partisan politics was not their business and they eschewed all soap-boxes, those of the die-hard Right or Left or of any straddling Liberal party. They were Radicals in the truest dictionary sense — “from the roots thereof”; that is, *they were students of the foundations of man and his culture*. One by one these men — most of them working alone, most of them afraid yet naïvely brave — confronted the facts of modern life and, even against the loyalties and taboos of their people, let their minds conclude what the facts of life conclude.

Each one of this company cut through the doctrinaire tumult of our times and laid bare the ideas upon which we today can build a great education. All the Men of the Consensus were discoverers and defenders of the Philosophy of Experience; there was not an authoritarian among them. Human experience was the motivating source of their bias, the frame of reference in which they let their minds conclude. In the voluminous examples of our book the doctrine of experience has emerged as the prior principle of the social scientists, the philosophers, the psychologists, the artists, the judges — all. It is the one concept so deeply rooted that it underpins all the foundations of education.

The second principle is the organic idea — the principle of organization. In chapter after chapter we have encountered this explosive idea. In the physical sciences it has taken the form of the field-force-energy concept; in the human sciences — organism; in esthetic and spiritual realms — plastic organization. But it is a single idea irrespective of the special label it may have been given. Of all the primary concepts on which the sciences and arts are founded today, the organic idea stands with the concept of experience as super-primary for education. These Men of the Consensus were concerned with the forces which shaped both the superficial conditions and the problems of men, with the *relations between Things* — not with the Things themselves. To drive this point home I have set them apart throughout my book, even giving them the special label of Force People to distinguish them inescapably from the Thing People who have dominated Western culture (Chapters II, XIV, XXIII). The distinction is important because it accounts for the varieties of our

educational programs, technologies, and expressive arts. Membership in one group or the other determines how each of us sees the world. It molds a man's attitude toward social change, his vision of the role of history, his understanding of technology and science, and his expression in the arts. Force People . . . Thing People: one of the great human dichotomies.

THE GREAT SYNTHESIS:

- A PRINCIPLE OF CULTURAL UNITY
- A KEY TO THE SUBJECT MATTER OF EDUCATION

All who accept responsibility for educational reconstruction know that we are caught today in a baffling period of social change and cultural confusion. All schools of thought are agreed that our primary need is to find a principle of unity which will bring order out of chaos, but they have not agreed upon the sources in which the principle will be found. To the Scholastics the source is a modern *Metaphysics* compiled from the Great Books of the past. To their liberal arts cousins in the private prestige colleges it is a "sense of heritage" that constitutes for them the central thread in Western intellectual evolution. But to the men of the Philosophy of Experience the saving principle of cultural unity is found in a great synthesis of the foundational concepts of man, his universe, his earth and its living creatures, his society, his expression, and his controls of conduct.

In this book I have, therefore, devoted my major effort to discovering and organizing such a synthesis of key concepts and now offer it as the four foundations¹ of American education:

- A new biopsychology — the study of man, his nature and behavior. (Part II)
- A new sociology — an emerging science of society and culture. (Part III)
- A new esthetics — the study of man's expression and appreciation. (Part IV)

¹ It would, perhaps, be more accurate to describe these as the four *human* foundations. I may have failed to give sufficient recognition to the physical and natural sciences as a base for education, although the reader will note that I have consciously sought to balance this apparent neglect at various places in my book. Perhaps a more mature handling of this theme in later years will build the new program of education upon five or more foundations. But certainly a great school can be built now upon the substructure of these four.

FOREWORD

- A new ethics – the emerging moral codes and the formulation of first principles of ethical conduct for the new industrial society. (Part V)

Between 1920 and 1940 I tried to do this very thing for the concepts of the social frontier and designed my fourteen-volume *Man and His Changing Society* around a central conceptual core. I have long been convinced that although the prime research tasks of the nineteenth century were explorations in analysis, those of the twentieth would be enterprises in the building of new syntheses of knowledge. Among the students of man and his culture, educators are especially called upon to integrate man's knowledge of his world, for their primary function is to teach others what the scholars have learned. The most significant products of their learning have come, not from their narrow academic compartments of knowledge, but from broad integrations of several fields. From my earlier work I felt sure that the synthesis of primary concepts of man and his culture would provide us with the intellectual outline of the needed program of education – so far as intellectual content was concerned. It was only as my integrative labors were considerably advanced that another outcome also became evident – that this synthesis of the foundational concepts would also prove to be the saving principle of cultural unity.

THE INSISTENT NEED: A PROGRAM OF LIFE AND EDUCATION IN AMERICA

We know full well that order will be brought out of our cultural confusion only after many years of national effort and that it will be achieved progressively only through a nation-wide program of education which will reach from childhood to old age. In this process the principle of cultural unity will work its maximum effect only when it is accepted as the intellectual outline of the program of education. With a sense of urgency upon me, therefore, because of the menacing forces in the power structure of our society, that is exactly what I propose through my book.

I am appalled by the inertia and the social impotence of the educational profession when it is confronted by deep social crises. When the Great Depression overwhelmed us in the early Thirties, we were utterly unprepared; all we could do was publish manifestoes! Today, when we are caught in a still more dangerous impasse, a basic chart for a new course is required of us and we stand with empty

FOREWORD

heads and hands. Students of the social scene warn that in five years the world's worst crisis of stalled production and unemployment will be upon us. As I write, just two years after the close of World War II, our heavy industries are already piling up economic surpluses, our home markets are drying up, there is no world market and no prospect of one unless we finance and build it, and our dazed Congress gives no sign of being able to fumble its way through that morass. In the meantime the perennial business cycle is once more working its ruin — rising economic fear, refusal to plan intelligently, and lack of imagination and courage to carry on a program of full-scale production and employment (Chapters X and XI). Moreover, America is the only nation that can set the world on its productive feet again. We are World Economic Power No. 1 — with half the earth's gold, half of its capacity to produce industrial goods, half of its shipping, and practically all of its exportable capital. We are the only nation that has the capacity to export goods and services in sufficient quantities to rehabilitate Europe's depressed peoples and to lay the foundations for self-sufficient economies for a billion retarded human beings in Asia.

Thus with Manifest Destiny America can ride again. But this time she faces the crucial test: Is she humane enough and politically creative enough to build a great design for the society of abundance and world peace which stands potentially on her horizon? Throughout my book, working as a student of education, I have been documenting the characteristics of our industrial society. Now at its conclusion I dare not dodge the bald fact that while we stand at the threshold of a potential society of abundance, powerful and selfish forces occupy the seats of leadership and block our path to its realization. In a ruthless power world two economic and political giants spar for the first hold in a struggle for supremacy, a struggle that can achieve nothing but the destruction of both. On the domestic scene of every major industrializing nation is a similar waste of national resources, a destructive battle between the forces of individualism and socialization.

I don't question that our people are governed by peaceable intentions, by a spirit of live and let live — even, live and *help* live. They do not want war; they do want the peace and plenty that comes from the greatest possible production and exchange of goods and services and ideas around the entire world. They want a high standard of living for themselves, and from their annual \$200,000,-

FOREWORD

000,000 income of the war years they learned that *they can have it now*. But they do not know how to get all this — they are not yet wise enough to use the profound knowledge of the Men of the Consensus. These next few years are our time for planning. It is now that men of thought can design the major structure of our social system and it is now that educational men of thought can design their new program.

A CALL FOR A JOINT NATIONAL COMMISSION ON THE FOUNDATIONS OF EDUCATION

Recognizing that the conceptual synthesis presented in this book has the limitations that inhere in the experience and scholarship of the lone student, even though he has worked with the wisdom of the Men of the Consensus, I urge that strategic educational organizations now appoint, endow, and direct a *Joint National Commission on the Foundations of School and Society*. We should now have a pooling of the resources of our profession in leading representative groups. If a National Commission could be appointed with a frontier personnel and proper financial support, it could create a truly great synthesis of man and culture. This would fill at one and the same moment two insistent needs: an effective principle of cultural unity and a conceptual skeleton of the needed subject matter of a new education.

THE MAKINGS OF A PSYCHOLOGY

The making of the conceptual synthesis in my book produced more than an outline of educational subject matter. The stuff of a new psychology was born also, and that is sorely needed in our schools and colleges. In the generation between the opening of Dewey's Laboratory School and the publication of his *Human Nature and Conduct* an experimentalist psychology of intelligence and problem-solving thinking was developed and largely adopted by progressive educators. In the more conservative teacher-education institutions a much more limited "connectionist" (Thorndike) psychology of habit was made the psychological course of study. In a few schools and colleges a curious mosaic of the two theories was taught. But it could not be said at any time that American education was founded upon a psychology. Such agreement as there was bore down heavily on intelligence, problem-solving thinking, and habit; but throughout the half-century the schools and teachers colleges have

FOREWORD

lacked a psychology; witness the abysmal psychological ignorance of the doctoral candidates in education — little less than an academic scandal!

And during all this time rich and indispensable, but largely unused, makings of a psychology were available in the work of a score of pioneers from Peirce and James to Allport, Sheldon, and Lewin. In the chapters of my book I have documented five examples:

- The dominant role in the human act of feeling-as-body-response as developed by Peirce, James, Lipps, Watson, and others.
- Confirmation for this feeling-as-body-response emphasis from the psychology of esthetics, and the emergence of the concept of “movement” in a new psychology of meaning and expression.
- A psychology of the Person and personality which emphasizes the role of the temperamental traits — from the researches of William Stern, Gordon Allport, and others.
- A “Constitutional” psychology in which physique and temperament are primary and intelligence secondary — from seventy-five years of physiological studies.
- The faint suggestion of a field-force-energy psychology emphasizing the role of psychic energies — suggested by Lewin’s all too brief work.

All these are organic rather than connectionist. All stress feeling and body-response and build on the powerful interpretative role of movement. All emphasize the role of “innately determined constitutional patterning” in physique and temperament. All make the intelligence secondary to physique and temperament among the raw materials of personality. This does not put intelligence out of the psychological picture; nor does it detract from the giant contribution of Dewey in building a pragmatic psychology of the problem. It keeps intelligence, problem-solving thinking, and habit, but strives to keep them in their most effective places.

Working in a frame of reference that is hospitable to all the dynamic approaches to human nature and behavior, I have gathered up in Part II of my book what I conceive to be an outline of the makings of a psychology. To focus the discussion of such an integration of materials and to serve as the cornerstone of an educational theory, I offer (Chapter VII) a new interpretation of the human act of knowing. I build on the earlier accepted characteristics of the act: that it is an organized whole affair in which stimulus and response

FOREWORD

are one, it is socially constituted and motivated by the unified Self, and the meaning of concepts is interpreted operationally. So much, I think, is now established. But if an adequate theory of teaching is to underpin our work in the schools, the act of knowing must be conceived as an act in which feeling, body-response, and the concept will function together. In 1890 James, with his technical knowledge of anatomy, started us off not only on a new track, but on what seems now to have been the right one. His tremendous emphasis on feeling through body-response was largely ignored, and vast intellectual stress was given to verbal intelligence and the problem by the Dewey and the Gestalt group and even by the Thorndike connectionists. What seems to me to be an impressive confirmation of James's lead by the biologists, the expressional artists, and the students of personality has persuaded me to attempt to bring psychology back to James's lead. The result, a generalized body-feeling interpretation of knowing, is documented in my book, especially in Chapters III-VIII, XIII, XIV, and XXIII. The theory is supported by evidence and logic gathered on the frontiers of physiology, psychology, and esthetics. Its significance for educators lies in the fact that fundamental principles of teaching can be derived from it. My treatment of the role of the concept in touching off the meaning is an extension of Chauncey Wright's idea (Chapter VII) that concepts are finders of scientific laws, not mere summarizers of them.

That this interpretation of the act of knowing, with its apparently all-out stress on feeling and body-response, does not minimize the major role of the concept should be clear from the discussion of the preceding section. My position here is essentially that of Peirce and James and the physiologists rather than that of Dewey and the Gestaltists: the concept is one of the three basic elements of the act of human response; it is indispensable but it is of the "third category," as Peirce called it. It is significant also that curriculum-makers in the sciences, the social studies, and other fields use as the skeletal structure of their school and college curricula a synthesis of concepts.

THE ROLE OF EXPRESSION IN HUMAN LIFE AND EDUCATION

The psychological stress on intelligence and the acts of problem-solving thinking and habit has long closed our minds to the true role of the expressive acts of men. So effectively did it do that, that most of our educationalists have seemed utterly insensitive to the creative

FOREWORD

movement that has been unfolding around us. The documentation of Part IV reveals our times as the first stage of a great Age of Expression that has already lifted itself high above the horizon of modern history. Although the trend is now more than a half-century old, even the best of the experimentalists have refused to make the expressive act (both its creative and appreciative forms) coordinate with thought and habit in their psychology. For twenty years I have importuned my colleagues of the Social Frontier to extend their sociological theory to embrace the expressive acts of men, but with little success. Of all the taboos which prevent educationalists from letting their minds conclude — this is the most incredible one.

My concern about it is great. In this present book I have made it one of the four crucial foundations of education but have devoted only seventy-five pages to an outline of the problem (Part IV). One of my major theses is that the design of education requires *four* foundations — psychology, sociology, esthetics, and ethics — not two or three! And a good school cannot be built on a psychology of intelligence, problem solving, and habit alone; its program of education will fail unless it springs out of the fullest use of feeling and expression.

In this area of the culture also, the lives and works of the Men of the Consensus have documented my thesis. All are *expressional artists*, irrespective of the special mediums in which they cultivate their scene, and of their academic classifications — philosophers, psychologists, sociologists, land reconstructionists, architects, painters, poets, dancers, teachers. All employ the creative act. *Each one is striving to say what he sees, feels, of life his unique way . . . To say, moreover, what his people feel, their way . . . and to say it rigorously with form.* Thus . . . Walt Whitman, expressive precipitant of creative America . . . James and Peirce, laying the cornerstones of a new *expressional* psychology . . . Dewey, founding a new *expressional* education . . . Isadora, first *expressional* dancer . . . Stieglitz, adamant leader of plastic expression in the graphic arts . . . Sullivan, throwing up the first struts of the *expressional* House . . . Holmes, building an *expressional* statement of law and ethics out of the experience of people . . . the leaders of the TVA, integrating a tremendous *expressional* upsurge of life in that Valley. *Expressional* artists, one and all, each making his personal and his country's statement — what belongs to him and to his America.

Thus I have acted on the conviction that it is in the lives and works of producing artists — not of the pedagogues of art or philos-

FOREWORD

ophers of esthetics — that one finds the educational cues for the creative process. The educator must go to this primary source, for *these* are the Force People. Expressive art is the art of Forces — of felt-relations — and the body is the primary expressional instrument of feeling. Thus our findings for the new Esthetics confirm those of the new Psychology. Feeling and body-response are primary.

The most dynamic concept of all is *expressional movement*. In the dancer, singer, or actor, choral speaker or musician, it is, of course, the obvious overt form in which feeling expresses itself. It is also the instrument by which the expressional painter, poet, sculptor, or architect succeeds in saying what he feels of life. And still more startling, perhaps, it is *the instrument by which any human response achieves clear meaning*. In my opinion no educational finding is more important than that a core of designed, graduated movement can and should be built into the curriculum from the nursery school to the college.

THE PERENNIAL CONFLICT OF "I" AND "WE":

THE MORAL-ETHICAL PROBLEM

No issue rose to confront me more insistently on one frontier after another than that of freedom and control. It appeared in every stage of the growth process, from the infancy of the Individual to the maturity of the Person. It focused the struggle for power on the social frontier. On the frontier of the expressive arts it turned the Bill of Rights into a reciprocating Bill-of-Rights-and-Duties. It stood out as the nub of the educational problem of discipline and the root of the chronic traits of inferiority and psychological defense. Thus, although its labels are diverse, it is crucial in every aspect of the culture. I call it, therefore, The Crux — the baffling problem that torments men's minds. In every Part of my book I have sought to expose the hidden places in which it works its powerful effects and to relate it intimately to the other foundational concepts of education.

On every frontier of American culture

there is a pride of Self . . . and a sense of neighbor

— a practical opportunism and an adamant idealism

there is the aggrandizing I . . . and the balancing We

But to make these two men one —

That is the eternal problem.

Thus the Men of the Consensus, encountering the eternal problem, have juxtaposed the four "T" factors of the economic order:

- The Masters of Credit, the Business Structure, the Farmers, and the Workers
- against the two "We" factors:
- The Coöperatives and Government by the People.

Given the stage set of the American Scene: the lure of gain, the public sanction of *laissez faire* — and the law of individual differences — then the problem of the power and the glory emerged time and time again.

Magnificent proofs have come to hand that the problem can be solved in our society. None is more striking than the TVA's revelation that a Mixed Economy — part "I" and part "We" — can produce an abundant life while preserving the framework of a free society.

On the psychological frontier the original form of "I" and "We" is presented in the earliest infant stage of the growth process. In the first acts in which the Individual identifies himself with the Other, the Self idea is, as Cooley says, "a social conception." The philosopher Mead concurs — "the Self arises in conduct," and the esthetician Leo Stein, also — the Self "has existence only as a social product. *One's self is what one-self would be known-as if one knew oneself.*" The psychologist Dewey clinched the concept in book after book — "the complete act is social," and education consists of "a freeing of individual capacity in a progressive growth directed to social ends." From the moment of this initial emergence of the Self the individual is never free of the issue of I and We; the problem of freedom and control dogs his steps throughout his entire life. Step by step, as he grows from childhood through the complexities of adolescence and youth, the Self extends farther into the Other, the relationship of "I" and "We" becomes more tenuous, and the need for delicate imposition of control more acute. As the Men of the Consensus have clarified the great goal of education — that the competing Individual shall be transformed into the coöperative Person, while preserving his creative initiative and individuality — we have learned that serious internal struggles match the overt conflict of the Individual and the Group. To the Freudians especially we owe our insight into the process by which this internal conflict builds inferiority and a powerful set of self-defensive mechanisms — compensation, rationalization, substitution, and other escape devices.

While the makings of a new psychology, sociology, and esthetics are now at hand to serve as foundations for a new education, the

FOREWORD

building of a new ethics has lagged far behind. The principle of cultural lag was evidenced again, social institutions lagging behind changes in the productive material culture and psychological and moral factors changing even more slowly. Nevertheless, one step has been achieved: the concepts which are needed for the new statement of the moral-ethical problem have been assembled. We know now that this statement can be made only in the framework of the Structure of Power of the emerging society. Part IV assays its characteristics. Since, in all democratic societies today, economic power still secures political power, power itself is illegitimate; actually the society is only partly democratized. Hence the chief political task is to restore control to the multitude of individuals who comprise the people. Moreover, we know now both the moral obstacles which confront us and the resources which we can command. The obstacles that lie in the self-interest of the Individual, and even more so of the Group, are impressive. But they are counterbalanced by the moral resources in love, intelligence, and integrity in the Individual and by the very socializing compulsion of social change itself.

Thus we can state the moral-ethical problem of our times: first, to build in our people an understanding and an acceptance of our moral resources and the obstacles in the nature of man and of society, and the facts of the power world; second, to create a new ethics, a new body of moral rules of conduct that will be appropriate to the structure of power in our society.

/ / /

These, then, are great conceptual cues to understanding the foundations of education. With them I introduce my book. May I express the hope that the reader will join with me in challenging the students of education —

*Let your minds conclude what the
facts of life conclude.*

HAROLD RUGG

AT WOODSTOCK, NEW YORK
June 16, 1947

Part One

THE FOUR FOUNDATIONS
OF EDUCATION

CHAPTER I

The Educational Consensus

Enough Is Known

If the wealth of modern creative thought could be assembled and organized, man would command sufficient wisdom to guide the youth of the world. The School of Tomorrow could be brought to life today.

Enough is known of our culture to design the content of that education. Enough is known of man, his knowing and his behavior, to organize its teaching. Enough expressive experience has been lived to guarantee a high order of esthetics. Enough is known of the first principles of conduct to solve the problem of freedom and control. The four foundations of education — a Sociology, a Psychology, an Esthetics, and an Ethics — lie scattered in many places, the makings of a great education. But these makings have never been organized in a single statement and that is necessary if they are to be focused directly on the problems of man.



That some among us see the necessity of making such a synthesis and consensus now is shown by a dozen current educational documents. They present the philosophies and programs of four formative movements of education during the last fifty years:

- Public education — subject-centered
- Liberal education — two varieties, both subject-centered
- Progressive education — child-centered
- Social education — society-centered

Every one of these documents has a special importance. Each is the consensus of a distinguished sector of educational thought. Since they were all written either at the close of the Great Depression of the

THE FOUR FOUNDATIONS OF EDUCATION

Thirties or in the midst of World War II, they are marked by a sense of crisis and a spirit of inventory and appraisal. They breathe the mood of: This is the time to take stock. What have we learned? What can we count on? What do we value most?

For fifty years the leaders of these movements have fought each other on the educational scene. Each group has gone its own way, sure that it was right and that the others were wrong. Each has had part of the truth, but only part; no one of the groups has had all the makings of a good education. Each has made a definite contribution to American life and education. All must be used if a good school is to be created in the post-war world.

↑ ↑ ↑

I take these documents as the intellectual springboard for my book because in them can be found all the major issues of American education, all the obstacles of difference among us, and all the resources of union. On the positive side they reflect a reassuring unanimity of opinion concerning the conditions which we now confront, and the nature of the educational problem and of our goals. Such agreement was utterly lacking at the beginning of the Great Depression. This is a heartening sign — that the crisis in civilization is succeeding in making collaborators out of competitors. The documents reveal, however, that the deep-seated cleavage among them with respect to the subject matter and organization of the curriculum still remains. I shall define these agreements and differences to set the stage for our study.

SELECTED SOURCES: RECENT EDUCATIONAL THOUGHT

- The Harvard Report: *General Education in a Free Society* (1945). Also parallel reports from Columbia (*A College Program in Action*, 1946) and from Princeton, Yale, and Hopkins (see December 1945 issue of the *Association of American Colleges Bulletin*)
- The Educational Policies Commission of the NEA: *Education for All American Youth* (1944)
- The American Youth Commission: *Youth and the Future* (1940)
- The Progressive Education Association: *Thirty Schools Tell Their Story* (1943)
- The National Society for the Study of Education: *General Education in the American College* (1938)

THE IMPACT OF SOCIAL CHANGE
IN A PERIOD OF GREAT TRANSITION

A common social theme runs through all the documents — with the exception of those of the liberal arts scholastics. (Their theory and practice of education are discussed in Chapter XIX.) Messrs. Hutchins, Barr, and Van Doren maintain with Mr. Adler that “a good education” can be set up “in terms of what is good for men at any time and place because they are men.”

They refuse to grant that twentieth-century industrial culture is sufficiently different from earlier cultures to require us to study it directly and to devise new concepts in education with which to think about it. But all the others — the liberal arts men of Harvard, Columbia, Princeton, and Yale, as well as the professors of education and of sociology and the public school curriculum-makers — agree that in our times unprecedented changes have taken place in the culture and that these have created conditions that frame a new problem for education. There is a common affirmation that no design can be made for education in mid-century America apart from one based on a broad and deep appraisal of these profound changes in the society and the culture. The recent educational expansion and the consequent confusion are accepted as inevitable in a social revolution which, since the 1890's, has changed every aspect of our way of life. It is within these fifty years that our provincial “little” country of 1890 has been transformed into World Power No. 1. Every phase of the culture has been changed — production and exchange, population, government, manners and mores, beliefs and ideas, and education.

But some institutions, the economic ones particularly, have altered so much more than others that great stresses and strains have developed

SELECTED SOURCES — *Continued*

- The North Central Association of Colleges and Secondary Schools: *General Education in the American High School* (1941)
- The John Dewey Society for the Study of Education and Culture: *Democracy and the Curriculum* (1939)
- The American Council on Education: *Improvement of Teacher Education* (1946)
- The Department of Supervision and Curriculum Development of the NEA: *Toward a New Curriculum* (1944); and the former Society for Curriculum Study: *The Changing Curriculum* (1936)
- Education for Freedom, Inc., and related groups: *Liberal Education* (1945)

THE FOUR FOUNDATIONS OF EDUCATION

in the resultant society. Some among us — particularly the advocates of society-centered schools — now conclude that “a new social order” has already begun to emerge. Although the leaders of the older private colleges do not stress its revolutionary nature, they agree that we are passing through a period of swift transition from the first crude stage of industrialization into a second and much more efficient one. The students of society among us assert, moreover, that the depression and the World War have laid bare the unique task of the coming decades in which education must play a powerful role. We have now reached a point in human history, they warn, in which industrial national societies must be *designed* or they will not function. The era of unplanned preëmption and exploiting of continents and peoples is over; uncontrolled pecuniary rivalry is definitely finished. The second great stage of industrialization — designed reconstruction — is at hand. Certainly all those who accept the necessity of careful planning in a new and changing society agree.

This fact of social change is of crucial importance to educators, for in a democratic society education is a key institution. Our society today, far more than it was in 1890, is a self-conscious democracy; the fascist attack on freedom brought that about. The struggle of the past fifty years, especially of the thirty years of war, has taught us that the democratic way will function only when the people generally understand the nature of their social problems, make the policy upon which the collective life is to operate, and carry it out themselves. Many practical demonstrations on our domestic scene — the grass roots operation of the TVA is a convincing one — reveal that *the heart of the self-governing process is the group study of collective affairs*. In every one the people face their problems together, and from them build their twentieth-century aspiration. That goal is that Americans in a million neighborhoods will take thought together, and *study* and decide their problems together, rather than continue to settle them by the offense and defense of partisan politics. *In a truly democratic society government is the entire social process in so far as it bears on collective life, and the very essence of that process is education. Thus in our kind of society education is not a casual institution, it is crucial.*

I find no dissent from that generalization in the new educational documents.

CULTURAL CONFUSION AND THE SEARCH FOR A PRINCIPLE OF UNITY

The most heartening sign of consensus among the students is their centering of attention upon the cultural confusion that has been precipitated by the reagent of accelerating social change. All but the public school curriculum-makers, who do not seem to be concerned with philosophic roots, are vigorously searching for principles of order around which to rebuild our anarchic culture. Although I find no major dissent from Hutchins's denunciation of America's absorption in materialism and its ill effects on the higher learning, most of us would protest against his intemperate castigation of the Dewey-progressive movement as a "cult of presentism," "cult of immediacy," "cult of experience," "cult of activity," and against Isaac Kandell's "cult of uncertainty." And I doubt that the sociologists, pragmatic philosophers, and progressive educationists would agree with Hutchins that "the world is probably closer to disintegration now than at any time before the Roman Empire." But on the fact of widespread cultural confusion and the need for finding profound principles of order, they do agree. First principles . . . a Metaphysics . . . a Theology fit for the times, the Adler-Hutchins group demand in scholastic terms. First principles to guide a program that will "nurture our youth in wisdom" — upon that we all agree.

The Source of First Principles

But the four movements differ widely in answering the questions: What are the proper sources from which to build the new metaphysics, and what is the nature of the first principles?¹ The progressives, following Dewey, James, and the pragmatic philosophers of our day, join with the sociologists in finding the saving unity in the philosophy of experience, and in science and the experimental method; that is, in the habit of meeting problems "in a detached experimental observing spirit." They document their answer in a great library of the phi-

¹ I regret to report that I can find no fundamental analysis of the social and philosophical foundations in the reports and studies of the public school curriculum-makers and their professors of education. This constitutes a major gap in interest and program of our schools of education and teachers colleges. Here we are compelled to depend solely upon the documents of the private liberal arts groups, the educational sociologists, and the college followers of the Dewey-progressive tradition.

losophy of experience which has been building for four hundred years.¹

But the twentieth-century scholastics and the Adler-Hutchins group denounce this as "anarchic individualism" . . . "corrupt liberalism" . . . "the most vicious caricature of democracy." The theologians assert that only Christianity will give meaning and ultimate unity to the whole life of the schools and the colleges. Their more secular fellows — Mr. Adler particularly — have been swayed by the Thomist view. Pointing to the success of Thomas Aquinas's medieval synthesis in using theology as a unifying concept, Adler says: "A synthesis of faith, reason, religion and philosophy, supernatural and natural knowledge is necessary for a unified culture." From the study of their writings, we can only conclude that they would turn the hands of the history clock back several hundred years and get their first principles as well as their subject matter from the past.

*"A Sense of Heritage" —
The Great Tradition*

It is stirring to find the Harvard-Columbia-Princeton-Yale leadership of the liberal college tradition dissenting sharply from this scholastic reversion. The experiences of the depression and the war years have brought them much closer to the progressives and the sociologists,² and into much greater unity of thought among themselves. The saving unity that will quiet the tumult and the shouting they find in "a sense of heritage" that runs through our cultural confusion. "We are part of an organic process, which is the American and, more broadly, the Western evolution," say the Harvard Committee. To others this is the Great Tradition, a body of sensitive expression that arose in the eastern Mediterranean, and has sought for three thousand years to build the democratic society and the good life. The educational problem of our times can be understood and solved only in the clear orientation of this cultural heritage. A chorus of affirmation from our contemporary students agrees that the nub of our problem is "to study the American present . . . to discern . . . the aims and purposes of a free society animating its imperfections. To study the past is immensely to enrich the present and at the same time to clarify it by the simplifica-

¹ In Chapters II to XII of this book I present the high spots of that library of research and interpretation.

² I show how this has been brought about in Chapters XVI to XVIII particularly.

tion of the writing and the issues which have been winnowed from history.”¹

The new statements of the liberal colleges recognize that the problem is twofold, marked by two profound captions: Heritage — Change. The new sociology agrees: social evolution points the way to social reconstruction. The new history likewise: the conditions and problems of today precipitated by the deep-running trends of Western history; the alternative pathways to tomorrow plotted ahead from the well-trod paths of the past. Permanence and change — two foci of our cultural and educational reconstruction.

General Education the Major Problem

Directly from this consensus emerges another: the major problem before education in the post-war world is *general* education. Three of the dozen books before us bear the words “General Education” in their titles — those of the Harvard Committee, the North Central’s committee of administrators, and the National Society’s committee of education professors. The Harvard Report says general education “has somewhat the meaning of liberal education.” It is further defined as “that part of a student’s whole education which looks first of all to his life as a responsible human being and a citizen.” The aim is to reach all the people; the college analysis is made from the standpoint of the seven million in our high schools as well as the million in our colleges. Thus the traditional liberal education defined as that which “helps to make free men,” which formerly was meant to serve only the gentlemen of an elite, now has evolved into the concept of general education for all the people, and this is seen as the only valid route to “a free society.” College and secondary school can find a common ground of unity in this new pronouncement.

The classic connotation of liberal education, springing as it did from the philosophies of the Greek and other slave-owning societies, in which only the free men — the owners — had a liberal education, is not now acceptable. We inherit today vast advances toward a new democracy in which all men are free and all men must work to make their contribution to the social good. It is a day in which the Supreme Value of the Individual has been enormously clarified. These new liberal arts programs, as well as those that come from the professors of education and sociology, envisage a general education “equally the

¹ Report of the Harvard Committee: *General Education in a Free Society*, (page 45). Cambridge, Massachusetts: Harvard University Press (1946).

THE FOUR FOUNDATIONS OF EDUCATION

privilege of all . . . which trains the citizen for the good life." The liberated man is free only in so far as he can judge and plan for himself, govern himself, and with his neighbors govern society. We hold a common faith and a common objective in the liberated mind as one capable of self-criticism, "a citizen of the entire universe," "universal in his motives and sympathies," "a spectator of all time and all existence," for these are "the very aims of democracy itself." Freedom is based on self-thought. The self-examined life brings a twofold freedom — personal and social: an inner freedom based upon the self-criticism of "I," an outer freedom of "We" thinking and hence ruling together.

"UNITY CONDITIONED BY DIFFERENCE"

A principle of unity is not sufficient for a total program of education in a culture where a population of great heterogeneity holds high the Supreme Value of the Individual. It must be paralleled by a principle of diversity which is socially powerful enough to transform egocentric and competitive Individualists into mature and coöperative Persons. The current documents, whether from private colleges or public schools, drive this point home by their new data on the changing character of our school and college population. Between 1870 and 1940 the country's population tripled. But the college enrollment increased 30-fold, and that of the high school, 90 times!¹ This is only a prevision of what is ahead of us. In 1940 only three fifths of the expected age-group were in the tenth grade, less than half were in the senior year of high school, and only one fourteenth in the senior year of college. This is a drastic change from the conditions of 1890 when the mental ability and economic backgrounds of secondary and college youth were definitely homogeneous. There were few pupils of less than 110 IQ, and most of these came from a small sector of the population — the well-to-do upper middle economic class. But today the high school population includes many more of the lower reaches of intelligence and bids fair soon to include youth of the IQ range from

¹ ENROLLMENTS

	HIGH SCHOOL	COLLEGE
1870	80,000	60,000
1940	7,000,000	1,500,000 (plus another million in extension, part-time, and other courses)

more than 160 to 90 or 80 or less. Thus both the secondary school and the college are beginning to feel the lowering of the level of verbal intelligence in their student bodies.¹

Moreover, the problem of diversity in school population is more than a matter of difference in ability. New studies show that there are many young people of college caliber who are prevented by lack of parental income or interest from getting a college education. It can be estimated now that as provisions are made for the financial endowment of able but impecunious youth to remain in high school and college, at least another 100,000 will be added to the enrollments each year.

If, then, we are to build a general education for a free society, as most of the current documents advocate, it cannot be doubted that in the very near future our program must make definite provision for millions of young Americans of less than 100 IQ. This sets us a new problem in curriculum development for the high school. Soon the college designers will have to confront the same problem.

Novel Problems of General and Special Education

It is, therefore, a staggering problem that will confront educators during the remaining decades of our century — to build a new general education in a culture in which, as the Harvard Report says, “specialism is necessary.” Not only will they have to design a general education that will fit the diversity in ability, interest, and aptitude; they will in addition have to create new types of special education which will “look to the student’s competence in some occupation.” Moreover, the problem of special education must be solved *within a social order that has not yet solved the problem of socially useful work for its youth.*

Great strength comes from the fact that the teachers in the colleges stand foursquare with those of the high schools in designing a *new general education for a heterogeneous society that is determined to be free.* They agree now with the Harvard Report that we must “improve

¹ All but a few die-hards agree that every large elementary student population varies from low IQ’s of 70 or 80 to measures of talent of 150 to 160, with a vast mediocrity concentrated between 95 and 105. Even in the junior high school the spread of mental age in any chronological age-group will total six or seven years. It is common to find in any characteristic seventh-grade class that the lowest 5 per cent equal only the average 10-year-old in academic ability, while in the same group the highest 5 per cent are as able as the average 16-year-old.

THE FOUR FOUNDATIONS OF EDUCATION

the average and speed the able *while holding common goals before each.*" We must create an education for a great society of abundant life, in which all will hold common allegiances and in which each will be nourished to rise to his highest stature. Thus the problem is more than discovering a principle of unity; it is a "unity conditioned by difference." For we fear a society ruled by any specialism — either that of an elite of gentlemen or that of a scientific order of technicians. But the first hurdle of coöperative design has been passed: the sociologists and the educational progressives can accept, I am confident, the Harvard Committee's statement of the problem — to build together a general education "capable at once of taking on many different forms and yet of representing in all its forms the common knowledge and the common values on which a free society depends."

THE GREAT UNKNOWN:

THE SUBJECT MATTER OF EDUCATION

There is a second hurdle that must also be taken if the creative forces in education are to achieve a great consensus upon which they can rebuild American education together. This confronts us baldly when we ask the question that has baffled educators throughout the centuries: *What is the proper subject matter of education?* Discussing his program in the Laboratory School fifty years ago, Dewey said that it was the crucial problem: "We did not reach it; it has not been reached and in its fullness will never be reached." The fruition of fifty years of study, experimentation, and critique bears him out.

The current documents show little success in reaching the solution,¹ although provocative alternatives are available for study. No two of the four dominant groups of students agree on *what* to teach, although there are exciting agreements concerning the psychology of *how to organize and to teach*. One of the liberal arts groups — the Adler-Hutchins-St. John's — employs a "curriculum" which is little more than the 125 Great Books, meaning, as Hutchins puts it, "those books which have throughout the centuries attained to the dimensions of classics . . . [books that are] contemporary in every age." Thus it develops that most of their curriculum materials were made before 1800 A.D., and it is a fair conclusion that no student whose subject

¹ I document this point elaborately in Chapters XVI–XIX.

matter was restricted to these classics could possibly understand the unique conditions and problems of our culture and our times.

The Harvard Committee — and I find little disagreement in the Columbia, Princeton, and Yale reports — implements its magnificent statement of problems and principles with a disappointing reliance on the subjects of the academic curriculum. These have been splendidly reorganized and vitalized by better methods of study and presentation, but that is not enough. This liberal arts wing stands with the modern school curriculum-makers in building their proposed general education around a core of three areas of life — the physical world (science and mathematics), man's corporate life (the social studies), and his inner visions and standards (the humanities). Half of the high school student's time and energy is to be devoted to them — eight of the fifteen course-units of the four-year curriculum. But the vehicles for these splendid studies are the conventional subjects: three year-courses in English, three in mathematics and science, and three in social studies; for those not going to college (they still distinguish them somehow) the numbers are four, four, and three, a total of eleven.

Although the Harvard Committee is convinced that the course-unit system is a divisive force in American secondary and college education, they accept its outer framework and try to effect reforms within it. Both content and organization of the proposed courses reflect a breaking away from the ancient compartmentalization of the old subject-curriculum. The social studies at Harvard will be taught via a new, general *required* year-course, "Western Thought and Institutions," comparable, they say, to "the very successful introductory course, 'Contemporary Civilization,' which has been given at Columbia during the past twenty-six years;" another course, in "American Democracy," is also suggested. The humanities will be introduced with a general *required* year-course in "Great Texts of Literature," to be followed by other general courses. The sciences will have two general *required* year-courses, one in general biology and one in general physical science with a core of physics. Thus the "broad fields" movement in public secondary education to break down the barriers between the subjects, which began fifty years ago in mathematics and spread through general science and general social studies into the fine arts and literature, is at last being adopted in the older liberal arts colleges. The best of the "progressive" schools, either public or private, have succeeded in doing little more than that, as we shall show by the thirty schools of the Progressive Education Association's Eight-Year Study. There

THE FOUR FOUNDATIONS OF EDUCATION

is now, therefore, little cleavage between the vanguard of the colleges and the more progressive secondary schools as to the core of their general education content. Of the two, the colleges are making the change, I think, with much more profound scholarship and a more effective use of history; and *with greater attention to the heritage of the past than to the conditions and problems of the present*. But both are still working within the academic framework of the subjects-of-study.

The other three groups — the progressive schools, the public school curriculum-makers, and the educational sociologists — reverse the emphasis. *They make the present, which the modern scholastics scorn, the focus of curriculum and teaching*, but each one has its own peculiar interpretation of what is important in the present. The educational sociologists, thinking primarily of society, would rebuild the curriculum definitely around the conditions and problems of the culture of today, but with a rich use of history to interpret the social trends that produced our current issues and the optional ways out into the future. These workers stand closer than ever before to the more progressive liberal arts college workers, emphasizing more than the latter, perhaps, the intellectual roots of the social heritage.

The public school curriculum-makers — influenced profoundly by the fifty years of Dewey principles and of progressive experiments, and lacking historical training and interest — stand with the older progressive schools in focusing the curriculum on the present and its social demands. But to them “the present” now means the “areas of living,” “the problems of the young people,” not primarily the problems of society. Indeed, I find in the public schools throughout the country the same unwillingness that exists in the private progressive schools to confront the controversial issues of society; controversy is still taboo. These two groups are struggling with the most difficult task of all: that of building what they are now calling “an experience curriculum,” meaning the experience primarily of the children and youth and only secondarily of the society and the race.

Here, then, are the most vocal answers that are being given today to the question: What is proper subject matter of education? Certainly they leave much unsaid that needs to be said, especially on the social frontier. Our curriculum-makers, for example, have not yet found the way to incorporate the long-shunned areas and themes into the life and program of the school. To be specific, I list five, which I discuss in Chapter XX:

THE EDUCATIONAL CONSENSUS

- Real work, personally and socially useful
- Sex and home life
- Inferiority, and the intimate problems of personal living
- Insistent controversial issues of the social system – property and the struggle for power, race conflict, and the control of public opinion
- Religion

At some of these tabooed areas the professional curriculum-makers are definitely working. But the scholastics scorn them, and most of the progressives in school and college shy away from them. Only the educational sociologists deal with them head-on, as part of their stock in trade. Perhaps no adequate solution can be achieved until the people generally have carried the reconstruction of the social order to the point at which these subjects become indispensable materials of the curriculum.

A FAVORED MOMENT TO MAKE THE EDUCATIONAL CONSENSUS

When one measures the four main strands of education against the background of our changing world, it cannot be doubted that these post-war years constitute a strategic planning moment. We have fallen into the habit of saying, "We must build a new world." But before we can build a new world we must design one, and before we can design one we must take account of stock. We have just lived through a period of modern history in which every trait of society has changed. We have seen a thousand million people become industrial ... a thousand million people become literate ... a thousand million people wage global war. We have seen new ways of governing tried ... fail ... and succeed ... either be rejected or acclaimed. We have seen scores of educational innovations tried ... fail ... or succeed ... either be rejected or acclaimed. And we have seen a new orthodoxy rise scornfully to denounce them all. This, then, is a moment in which men of thought can take thought together, look upon our world and our times, appraise conditions and problems, and redesign our way of life. We have climbed up the steep slope of a dizzy new society. Now we can pause on a summit to look backward and forward, to appraise our passage and chart our next steps.

In the advance of civilization, as in personal growth, some mo-

THE FOUR FOUNDATIONS OF EDUCATION

ments are favored above others for action; some, indeed, are most favored of all, when the time is ripe for creative next steps. These present years constitute such a favored moment in which to strive for an educational consensus. The new documents remind us that each of the major movements of education is just now in the process of making its own synthesis and appraisal. But now we, as members of a profession, need to examine our new knowledge, decide what we can use in building a good education, and so arrive at a new synthesis—a new philosophy of foundations.

My Problem for the War Years

That was the task I set myself for the war years—to prepare an answer to the question: What have we learned from these vigorous educational movements of our times? More important, what have we learned about the foundations of education—the changing views of man, his nature and behavior, and his changing society? Are there concepts and generalizations so well established that educators can now say, “These things we know,” and use them as a basis for the life and program of their new school?

It was necessary to delimit the scope of the study and the time span it should cover. Many studies confirmed my earlier practice of taking the 1890's as the beginning of a marked period of transition between the first and second stages in the development of industrial civilization.¹ Here I merely digest the data.

It is fifty years:

- Since the Bureau of Census announced the passing of the last frontier.
- Since the Slavs, Italians, and Jews supplanted the Nordics on Europe's emigrant ships, changed the character of our Eastern port cities, and accentuated our racial conflict.
- Since the masters of capital set up the efficient corporate structure of power-machine mass production and drastically accelerated mass unemployment.
- Since the electrical discoveries and mathematical achievements of Heinrich Rudolph Hertz capitalized the gains of Michael Faraday and James Clerk-Maxwell.

¹ Chapters II to XIV inclusive will supply an impressive body of documentation to support this conclusion.

- Since Peirce, James, Dewey, and Veblen began to build the American philosophy of experience as a solid foundation for a new study of man and his changing society.
- Since Walt Whitman died and likewise, within three years of his passing, the cultivated spokesmen of the genteel — Lowell, Parkman, Whittier, and Holmes. But in the same years Stephen Crane was writing *Maggie*, Louis Sullivan and Frank Lloyd Wright were putting up their first American buildings — all “as necessity, not tradition, demanded”; and Isadora Duncan was dancing away the Victorian stays and apprehensions in a great search for the “single authentic gesture.”

It is fifty years:

- Since the crude structure of the American system of graded schools was finally hammered into place . . . and John Dewey foregathered with Colonel Parker at the Chicago Normal School . . . and the Deweys and their neighbors founded the Laboratory School at the University of Chicago.

Fifty years of the most drastic social changes in modern history . . . Fifty years of the most profound changes in thought and feeling. Our years . . . Our times.

“The Time of the Greatest Learning”

There is another reason for taking our half century as the time span for investigation: while unique in many ways, our years are special in what they have taught and are now teaching the people. To borrow a happy Chinese phrase, it has been “the time of the greatest learning.” Never before have civilized people been so favored as our people have been in learning to carry on a complex and *technically efficient social system*. We have just passed through the most transforming half-century of modern history, in which the sequence of world wars interrupted by the world’s great depression accelerated the trends and widened the gap between them. It is this phenomenon that serves our people educationally. So wide is the gap between productive power and social ingenuity, between physical inventiveness and ethical awareness of neighbor, that the nature of their complex society is dramatically revealed to the people. The upward-rising curve of their productivity is teaching them that modern men have learned to produce well from the land; but also that the ability to bring goods and

THE FOUR FOUNDATIONS OF EDUCATION

services to the people has lagged cumulatively behind the ability to produce them. The people have actually begun to sense the difference between a social system that strangles and withholds production and one that runs at full tilt and gives forth the abundant life to all; furthermore, that in an industrial society of vast power and technical efficiency, strong men of less than good will must be controlled by popular action.

On the world front the perspective of two generations lets us see thirty of the fifty years as a global war, its two bloody phases, 1914-18 and 1939-45, separated by a Long Armistice of undeclared warfare on civilization - another dreadful fascist interregnum in a thousand years of accumulating democracy. Modern man is learning the hard way: the way of mass torture and decimation of populations - witness six million Jews dead in Europe; the way of political indifference and of appeasement; the way of authoritarian seizure of power and world-wide threat to the liberty of the people. But he is learning. Concerning all these things men of thought forewarned; every one was predicted by the scholars and set forth in novel, essay, and verse, on the rostrum, even in the motion picture. Students of culture pleaded with the political maneuverers to install controls before it was too late. But they would not. Now the people are awakening to the fact of their true political power. An increasing number now know that crucial bits of national sovereignty must be given up to a strong world government if man's new-found atomic power is to be used for constructive life in a durable peace.

Moreover, the gains in the people's understanding are becoming as large in the spiritual as in the economic realms. The powerful system of communication has removed the last physical limitation on the building of popular understanding and government by the consent of the governed. Although race conflicts have been perpetuated, vast strides have been taken in focusing the public mind on the necessity of putting the doctrine of equality into actual practice. As for the creative act, the gains of our fifty years have been profound. The spokesmen of the genteel have passed from leadership, and unprecedented numbers of creative Americans have freed themselves from the slavish worship of alien and outworn styles. They have begun to build original houses and communities appropriate to the American land and to produce an imaginative and competent literature and an expressive theater, music, and dance. On the human frontier a generation of research has already supplanted a false mechanistic view

of man's nature and behavior with a powerful and soundly organic conception. Thus magnificent achievements lie just behind us. Perhaps they justify the dreadful costs of the past thirty years . . . perhaps! The balance sheet is not yet drawn.

/ / /

Enough factors have been enumerated to indicate why I limited the bulk of my study to the foundation building of the last half century.¹

THE PROGRESSIVE SCHOOLS REVISITED, 1942-1945

Nothing was more important in clinching my determination to devote the war years to a careful study of the foundations of education than my extended visits to the older progressive schools.² In them I could find concrete answers to my question: What have the progressives learned in a generation of continuous experimentation? What have they discarded and what have they kept from all their trial and error and success? I found my answers, and as a consequence of what I found was further convinced that the insistent prior need is a consensus on the great foundations.

From 1942 to 1945 I spent forty-odd days in a score of the older progressive schools, choosing principally those that had had the advantage of many years of uninterrupted experiment under fairly continuous administration. During the first year I confined myself to the old, original private schools, the progressive schools with which I had

¹ Since these startling current trends and intellectual movements were projections of crucial antecedents in earlier centuries, I found it necessary to present the longer backgrounds first in a separate chapter. This is Chapter II, a study of the two great shifts in modern thought.

² The Dewey Laboratory School (1896-1904) had been out of existence forty years; the University of Chicago Elementary School was not in any sense a continuation of the Dewey School. Mr. Charles H. Judd (Director of the School of Education from 1909), holding views of life and education very different from those of Mr. Dewey, had seen to that; to this I can testify from firsthand observation, for I was a member of Mr. Judd's staff from 1915 to 1920 and saw much of the School. But the F. W. Parker School of Chicago was still going strong and had been continuously under one Director, Miss Flora J. Cooke, most of the time. In Massachusetts, Katharine Taylor was still at Shady Hill, and John French at the Cambridge School in Kendall Green. In Vermont, Carmelita Hinton had had ten years of experience at Putney. In New York City, Lincoln and Horace Mann, now merged, and Ethical Culture, Little Red, and others could be visited.

THE FOUR FOUNDATIONS OF EDUCATION

been so familiar from 1915 to about 1930; it is well known that I have been one of their most devoted sponsors. In the later years of my study I included public schools in the survey.

Again I spent days in the classrooms, talking to the children and the teachers and parents, getting the longer and deeper story from the directors. My first reaction was: "This is a good school; far better than the mass schools of America or the schools of a generation ago." At first my attention was centered on the psychology of the school; it was only later that I came to study especially its sociology, esthetics, and ruling philosophy. At first glance its psychology seemed to be very good. I saw some good teachers in action — occasionally true artist-teachers — who respected their young people as Persons and carried on their groups as societies of equals. I saw them reflecting the American psychology of freedom and action — the young people free to move about and talk, and each one expected to speak of what he sees in his own unique way. It seemed to me that they had succeeded in putting into practice the American philosophy of experience which Charles Peirce, William James, John Dewey, and a score of their contemporaries have succeeded in stating in the past fifty years. Their climate of opinion was marked by a spirit of inquiry rather than of dogmatism; teachers sent young people to sources and put responsibility on them for organizing material and for facing issues. Thus the old dissectional atomism of the mechanical school had largely disappeared and young people were being offered a program in which total jobs, whole enterprises, could be confronted and to which each could bring as much of himself as possible. In psychological terms this was no mean achievement.



But after a few months of this revisitation, during which time I had made progress in forming a new synthesis of what we had learned on the social frontier, I became increasingly troubled. Something seemed to be missing in these schools. I noticed it first in their social studies. A strange aloofness from society seemed to mark them. Why? Of all times, in the critical period of the 1940's — why? My visits left me with the definite impression that the schools were doing little more than they had done in the 1920's; they were still "describing" the community, the nation, and the modern world. They seemed afraid of forthright realistic dealing with the actual conditions of their local communities; certainly they dodged most of the major controver-

sial issues of the day. American society and culture had changed drastically, but it seemed that these progressive schools had not changed with it. After fifty years of creative study and innovation our people had found no effective way to incorporate youth into the actual design and operation of society; they are still regarded as onlookers, as observers — and unofficial, at that.

This revealed itself clearly in the inability of the schools — except in two of those I have seen, where an excellent program is under way — *to engage the young people in socially useful work which is significant in their personal lives.* In one of the oldest and richest schools I visited, the truly *educational* facilities were actually being withheld from the children. Everything in their school life seemed to be *done for them.* Housed in a luxurious building, located in beautiful surroundings, with an abundant library, creative studios, and laboratories, the young people *were doing almost no socially useful work.* This school and most of the others seemed to me to be missing the chance to build their education out of active participation and application in their own home community.

/ / /

Coming closer to the intimate lives of the young people, these schools have been known for a quarter of a century as “child-centered.” I expected, therefore, to find in them a vital interest in the actual personal problems of the children and youth. Moreover, during the past fifty years there has developed a thoroughly new psychology of personality and a modern movement for guidance and mental hygiene. I could see its effect on the progressive schools in that they were “doing something” about guidance, but in most of them the guidance officers functioned primarily in the giving and interpreting of tests. There was all too little exploration of the actual personal problems of the young people, their egocentric nature, their sense of inferiority and defense, the emotional disturbances in their homes, their anxieties, fears, and frustrations, their manifold unanswered questions concerning themselves.

/ / /

I was not prepared to find a decline in attention to the esthetic development of the young people. We have been living through the most creative half century in modern history, and a profound body of

THE FOUR FOUNDATIONS OF EDUCATION

understanding of the esthetic act has emerged from the great expressional developments of our times. But in these 1940's I found less interest in the creative and appreciative act in the progressive schools than in 1927, when I was writing *The Child-Centered School*. In the elementary years almost all schools provide for a considerable amount of casual improvisation in the arts; *but only in rare instances does it mature into designed expression* and then only for a few youths of unusual talent. It seemed to me that a great opportunity was being lost. Again there were a few exceptions where the school staff included a creative artist practicing in some specific medium.



Most disconcerting of all was the mismanagement of the age-long problem of freedom and control. Recurringly, in our time, the progressive schools have been denounced as noisy, garrulous, disorderly, undisciplined. In avoiding rigid authoritarian control they have moved, it has been said, to the opposite extreme and have defined freedom as license. So I went back to the schools eager to see what they had learned during fifty years. In two schools I was thrilled by what I saw. They seemed really to have solved the problem, for they had achieved a fine balance between provision for individual initiative and imposed control. But in the larger cities I found a condition in which it seemed to me that self-discipline had been built with very little success. I came away from "progressive" schools in one city shocked at the chaotic character of the climate of opinion among the young people. In group after group I saw lack of self-control, little respect for teachers or fellow students, and little sensitivity to the necessities of coöperation if people are to live and grow together. In spite of the presence of fine teachers, the mood of the young people was destroying the possibility of a good education. I am inclined to agree with those who insist that the real cause is the disintegration of family life. It is revealed in the growing tendency of parents to shirk the responsibility of maintaining the family as the center of order and happiness in the juvenile and adult life of the community. Under such conditions reconstruction must come in the social foundations before it can succeed in the school; it may be that the school confronts a task which, under the urban conditions of our society, is impossible to accomplish.

The Lack of Design

These were my reactions to the older progressive schools in 1942 and 1943¹ which, up to that time, I regarded as the best of our schools. But aside from the general spirit of active freedom, what I had seen was far from satisfying; measured in terms of what we had learned of the foundations of education, it was downright discouraging. As I became more critical in my visits to the schools, I kept asking, "*Why don't these 'activity programs' mature into an advancing study of our society?*" Why is there so little creative work going on? Why this noise and intellectual disorder?"

Gradually my concern centered on one thing: *These schools have not really been designed. I searched in vain for definite foundations, "first principles," which would guide the building of the life and program of the school.* It seemed to me that in each one of these schools the teachers and directors, with the best of intentions, were so overwhelmed by the administrative and teaching tasks of running the school that they tended to give little time and energy to the conscious building of a theory and a total design. I found many sporadic instances of the planning of selected portions of the program but no deep, ever present concern with the theory of the total school.² I began to see, for example, that one reason why the young people are not brought face-to-face with the actual conditions and problems of our culture is that the directors and teachers themselves have no "sociology." I found an utterly inadequate understanding of the new study of society which Veblen, Turner, Boas, Robinson, Thomas, Beard, and others have produced since 1890. *And I found no study of that new sociology going on among the faculties of the schools.*

Similarly with the dearth of creative expression. I was forced to the conclusion that there was no clear esthetics in even the best of our schools. Much random improvising activity there was — but no study of the *first principles of esthetics and design.*

Measured on a yardstick of the new psychology, the schools appeared to better advantage. They gave evidence of having absorbed

¹The conditions are considered more fully in Chapter XVII.

²Somewhat later, checking the history of the schools carefully, I came to the conclusion that the Dewey Laboratory School at Chicago, from 1896 to 1904, was the only school that has really ever been *designed on a theory* that is both child-centered and society-centered, although even in it no systematic sociology was developed.

THE FOUR FOUNDATIONS OF EDUCATION

the concepts of active response, the integration principle of the biopsychology, the problem-solving theory of Dewey. But even judged by psychological criteria, they were far from mature. I found no single faculty consciously building a developmental program from the nursery school to adulthood on a psychology of the Person. *And no faculty systematically studying the new psychology today.*

Similarly, the disorder in the schools appeared to be directly traceable to the lack of a philosophy of freedom and discipline. To educate in a new society in which the fundamental meanings of democracy have changed, and new concepts of freedom, equality, and expression have emerged, requires a new consciously designed philosophy of freedom and order. A new morals and the vague structure of a new ethics have been evolving in our society, but still are not being utilized in even the best of our schools.

THE NEED: A SYNTHESIS OF THE FOUNDATIONS OF EDUCATION

These findings concerning the lack of design within our best schools, and the lack of deep concern with the foundational sociology, psychology, esthetics, and ethics among our curriculum-designers, confirmed me in my decision to give the war years to the latter study. For some time my own study had convinced me that a school fit for a great society could now be built in America. But it could be done only by constructing its program directly out of a great synthesis of those foundational concepts of man and his culture which the students had been laying bare on several frontiers of scholarship.

Five American Frontiers of the Imagination

It has frequently been said that in our times there are no more frontiers. Those who say that mean by it that the "geographic" frontier has disappeared, that the "free land" has all been taken up. But this is a very limited conception. In our times more Americans than ever before have been moving out onto new frontiers, but they are frontiers of the mind and of the imagination. In two generations they have blazed new trails in hitherto unexplored frontiers of government and they have cleared the wilderness of the production of physical goods in a vast technological revolution. The philosophers and social scientists among them have stated a new empirical and organic interpretation of the social order; the physiologists and psychologists have

created an organic view of the living creature; and the expressive artists have "stated" the individual American living in that social order. On no less than five distinct frontiers of thought and feeling creative Americans have been adventuring with new ideas, and already each has changed for the better some important phase of the people's living:

1. *The Human Frontier*: The physiological and psychological study of man, his nature and conduct — all as a part of the expanding study of the organic life of the living creature — his health and its betterment through a better agriculture, medicine, hygiene, sanitation, and diet.
2. *The Social Frontier*: The study of man and his society, the foundations of every aspect of the culture — its economics, its geography, its anthropology, its sociology, its politics.
3. *The Frontier of the Expressive Arts*: The study of man's esthetic statement of his view of life, and his attempt to portray it through every conceivable medium of expression.
4. *The Frontier in Philosophy and Religion*: The study of man's objects of allegiance, his methods of inquiry and ways of working — the Great Tradition.
5. *The Educational Frontier*: The application of the foregoing in the conscious design and construction of a better education.

A longer history of expressive America would picture these men and their satellites working on a dozen frontiers. But for the purposes of clarifying the foundations of the new education, I shall here confine my preface to these five.

As a student of education, I had long known that in spite of limitations of experience and training, my colleagues in education and I had to become students on these frontiers of American scholarship. As best we could, resorting to the documentation of the most profound technical students, we must find answers to the question: *What have we learned from fifty years of catastrophic social change and of the parallel emergence on all the creative frontiers?* If it be objected that this is too ambitious an undertaking, that mere educators cannot command the necessary range of competence, I reply: "Then there can be no proper design of education." If educators are to take account of stock, the inventory must be of the entire culture. An appraisal of fifty years of American education would not be worth the paper it is

THE FOUR FOUNDATIONS OF EDUCATION

written on if it ignored the cultural revolution of our times. If the school is to be of real value to the people, it must be fashioned directly from their culture. If it is to help them understand their economic system and their government, it must tell them fully, clearly, what they are; it must lay bare, frankly and incisively, the functioning as well as the structure of that social system. Hence the educator who would inventory the school and design the reconstruction of the education of the future is obligated to understand these foundations of education.

ON THE MAKING OF THE GREAT CONSENSUS

It is this conviction that has finally made of this book a much more ambitious undertaking than I had earlier anticipated. At first I had expected to prepare four preliminary chapters, one for each "foundation" of education — sociology, biopsychology, esthetics, and ethics. The concepts of each of these would serve as the intellectual framework of the school program. Equipped with these as a yardstick, I meant to go back and measure the schools of the past fifty years. As I worked, however, the deep significance of the concepts convinced me that they should not be used merely for appraisal; I came to see in them the true basis for the redesign of the school of tomorrow.

Above all else, the situation demanded a consensus of expert judgment concerning many things: the shape of the curves of Western culture ... the central concepts of our governing philosophy ... the role of the factors of the economic system ... the human act of knowing ... the psychology of communication and understanding, of the person and personality ... the constituents of the esthetic act ... the fusion of freedom and control in the act of disciplined initiative — to name only a few important ones. Of the hundreds of American men of thought in modern history, whose expert judgments should be pooled? No question has been more baffling than this one.

It is the major thesis of this book that in our times two scores of creative workers built the main structure of *a new American philosophy of experience and implemented it in a Sociology, a Psychology, an Esthetics, and an Ethics*. Each of these was a profound synthesis of the concepts that are the cues to understanding an important phase of our culture. Consider the making of the new sociology, as a single example. (I use this compact term throughout the book instead of

the more cumbersome enumeration of history, economics, political science, geography, and the other social sciences.) In a dynamic society it is the social trends themselves that provide the indispensable material from which the people and their men of thought arrive at a consensus and institute new courses of action. During the past fifty years hundreds of trained students have definitely documented the characteristics of these trends. As a consequence, there is available for our critical study today a mountainous library of documentation of discernible and measurable changes, such as the trends:

- in the productivity of workers in the quantity-production industries.
- of population — its total growth, its concentration, diffusion, and mobility, its age-ness, immigration and emigration, its racial and national background, its marriage rate, size of families, and the like.
- of social life — literacy, amounts and kinds of education, crime, delinquency, cultural institutions, and the like.
- of government — its history, changing structure, personnel, and functioning; the acts of its executive, legislative, and judiciary.
- of esthetic expressions that are matters of record and appraisal — an expressional architecture and land reconstruction, an expressional theater and dance, music and poetry, an expressional graphic and plastic art.

From the *generalized shape* of these trends in the many phases of our present culture we can say with assurance, "These things we know." Both the people and their scientific students generalize the trends — the people intuitively, the scholars checking their primal awareness by the reports of the separate senses.¹ But both contribute to the consensus, because the social trends becoming clear in our times have brought about popular understanding as well as critical generalization.

The Men of the Consensus

It is the culture trends and their interpretation by the students that will serve as the material from which each educational designer can compose his own consensus. For a quarter of a century this

¹ See Chapter VII.

THE FOUR FOUNDATIONS OF EDUCATION

pioneer work has stimulated and guided me in my building of *Man and His Changing Society* and the adult books that accompanied it.¹ My criteria for their selection were these:

Assuming in all true scholarship and skill in documentation, I saw these men of the consensus as over-view minds, doggedly striving to see life whole, to grasp the totality of industrializing human culture. In the technical sense, because they dealt with the roots, they were the only true "radicals." They were students of the foundations. None was less than a man of talent, and the leaders among them — especially Peirce, James, Dewey, and Veblen — were men of genius; genius, which, as Lowell once said, is something in the grip of which you are — not talent, which is something that you have. They were original men of the frontiers who went forth first where none had trod before.

Men of integrity they were, brave men ignoring danger to their personal fortunes, cutting through to the "dangerous thoughts" of the great areas of controversy that are chronically shunned by timid men. Force men, all — not a Thing man among them — digging beneath the surface pathology of the current of events, searching for deep-running trends, traits, and causes. Not content merely to photograph the superficial contours, they laid bare the pushes and pulls of life. They were men of thought, critics of validity, rather than political strategists and tacticians. During fifty years there was not a party man among them, for adherence to the party line warps thinking of foundations.

Because they were men of encyclopedic ranges of interest and knowledge, they could not be catalogued in any single learned discipline; all strode across scholastic boundaries. They were students of the relationships which can be generalized only in the borderlands between academic fields of knowledge and which frequently throw the greatest light on human affairs.

All were devotees of the philosophy of experience — not an authoritarian among them. Hence they were minds and spirits oriented primarily on the present, concerned with the lives and needs of our people here and now, although they saw them always in the enlightening history of the past. They were, in fact, historians all, sure that the conditions and problems of today are precipitated by the trends of

¹ A fourteen-volume series for schools and colleges issued experimentally, 1922–1929, as *The Social Science Pamphlets*; commercially by Ginn and Company, 1929–1940's. The history of this work is given in *That Men May Understand* and in *Culture and Education in America*.

yesterday and that the latter are the only data by which we can plot alternative pathways into tomorrow.

And always they worked in the focus of the function concept. Always they asked of every structure under construction: What is it for? Of what use is it to people? All were men of Democracy — for the people . . . “the superb masses” . . . not the classes. Humanitarians all, defending the right to life as prior to the right to property . . . protagonists of “the social,” wherever the interests of the Individual and of Society clashed. Men of the Great Tradition, adamant against the Exploitive Tradition in all its reaches. And men of the Human Race, not of any single partisan race or nation. Seers of the ever beckoning, ever expanding future; driven by the insatiable spirit of man.

They were . . . they are . . . America. In fifty years they hewed out the materials for a good school: four great foundations — a Sociology, a Psychology, an Esthetics, an Ethics.

Their Bias of Personal Frames of Reference

There will be some who will say, “Great though they are, every one of your men of the consensus is biased.” That is true, in the sense that no interpretation of human life is ever free of the bias of the critic’s own frame of reference. My own final drawing up of the consensus stated in this book reflects my personal frame of reference. What I take from the trends and the scholars’ interpretations must, in the last analysis, rest on *my* judgment. “These things we know” becomes “these are the things Harold Rugg concludes that we know.” While it must of necessity be mine, I have gone to great lengths to safeguard its consensus character.

Bias is inescapable, in an era of swift change, even among the scholars. The very movement of social change divides its students into opposed camps of differing backgrounds, interests, and orientations. The swift transformation in our culture has precipitated a bitter struggle for power in every modern country. In the United States it has caused a cleavage in every sector of the culture, and on crucial issues American scholarship, like American public opinion, is a house divided against itself. If we took a random sample of the members of the seven learned societies in the social sciences we should find their positions on social, economic, political, and moral issues scattered over a wide-ranging scale from an extreme die-hard Right to an equally extreme die-hard Left. Divided at the middle of the road, their biases

THE FOUR FOUNDATIONS OF EDUCATION

form a clear dichotomy of opposed philosophies of life. This is due to several factors: their differing temperamental traits, ranging from cautious conservatism to adventurous experimentalism . . . their entrenched economic stakes, varying from the riches of inherited wealth to the poverty of the poorest common man . . . their differing interpretations of the documented facts of social change . . . their differing interpretations of the possibility of objectivity among human beings and hence of the role of the scholar. Label the two sides of the dichotomy what you will — Conservatives *vs.* Progressives, or Center-to-Right *vs.* Center-to-Left — the fact remains that on crucial issues the scholars as well as the people are not agreed.¹

THE MEN OF THE CONSENSUS HOLD THE PHILOSOPHY OF EXPERIENCE

It is a thesis of this book that the present split is merely the continuation of the cleavage between two philosophies of life — the philosophy of authority and the philosophy of experience² — that has steadily widened for three centuries. Both philosophies grant the existence of vast individual differences among men but draw very different conclusions about them. The irreducible concept of the philosophy of experience is, "I can and shall think things out for myself." That of the philosophy of authority is, "The greatest thinking has already been done. You lack the capacity to think; I shall therefore guide you in mastering the thinking of the past." The philosophy of experience insists that the most precious thing in life is the opportunity to choose for one's self. It grants that you and I are different, but the experience of each one is unique. It assumes that all people

¹ The consequences of this cleavage in a time of deep national crisis are shown in Chapter IX.

² While a dichotomy on the order of mine is favored by many students of education, including Dr. Dewey, some of my colleagues prefer a more elaborate categorizing. My friend Dr. Theodore Brameld favors a fourfold division:

- 1. The Perennialists, a name Dr. M. J. Adler suggests be given to the Scholastics of the Chicago-St. John's group.
- 2. The Essentialists, a self-styled group, including such professors of education as Messrs. Bagley, Kandel, and Breed.
- 3. The Progressives, in both public and private schools.
- 4. The Reconstructionists, a term Dr. Brameld applies to such advocates of a society-centered and child-centered education as members of the Social Frontier.

have the capacity of infinite growth and says: The collective life of the people will, in the long run, be happier, more creative and progressive if every individual in the population is left free to become a person and to fulfill his own highest potentialities. The philosophy of authority denies the capacity for growth in all people, and postulates the necessity for an elite, an aristocracy which, having inherited the endowment of the ruling class, will rule.

Recognizing that the present split among our scholars is basically a continuation of the ancient dichotomy between the two competing philosophies, and that every man of the consensus will have the bias of his personal frame of reference, *I have chosen the very men who, since 1880, have developed the American philosophy of experience and applied it in a Sociology, a Psychology, an Esthetics, and an Ethics.* Four of the most profound minds of the North American continent since the Civil War were Charles Peirce, William James, John Dewey, and Thorstein Veblen. They and the thirty others I have chosen from the four frontiers for my men of the consensus all have the bias of the philosophy of experience; there is not an authoritarian among them. The concept of the experience of the people rings out as the basic theme of contemporary psychology and philosophy, of the forty years of land reconstruction culminating in the great coöperation of the TVA, in Mr. Justice Holmes's fifty years of Supreme Court decisions, in a generation of progressive education, throughout the age of creative expression, and in our stumbling efforts to reconcile the demands of personal freedom with the needs of social discipline.

That is the bias of the men of the consensus and that is the bias of this book. If the validity of the philosophy of experience can be disproved, the accumulating decisions of all democratic peoples will have been shown to be wrong, the horrible blood-letting of the past thirty years to have been in vain, and mankind will set off on another authoritarian tangent from the main line of human progress. But aside from the modern scholastics, not one in a hundred of today's students of education would predict such a dark future.

CHAPTER II

Education and the Great Shift in Thought

Within the three centuries that have passed since Galileo dropped the unequal weights from Pisa's leaning tower and loosened Aristotle's grip on the minds of Europe's thinking men, two major alterations in thought have come about. To reduce them to sharply contrasted phrases:

First: the shift from the Philosophy of Authority to the Philosophy of Experience.

Second: the shift from Mechanism to Organism — in every realm of thought and inquiry — physical, biological, psychological, social, esthetic, ethical; that is, from mechanical to organic explanations of man and the universe; from "things" to "energy-force-relations."

These deep alterations in thought are the cues to the rethinking of the intellectual revolution of modern times. Taken together, they lead us directly to the concepts of the new study of man and his culture, of human behavior, esthetic expression, and ethics. And these are the keys that unlock the doors to the great foundations of education.

/ / /

From time to time in human history discernible shifts occur in the mood and outlook of the people. Most of these are minor in depth and scope, but at rare intervals they develop into deeper and broader trends. At such moments a favored concurrence of factors starts man-

kind off on a new tangent — a tangent which eventually becomes his main line of cultural advance.

The history of industrial-democratic culture and thought suggests that this is what has happened in modern times. After 1500 A.D. the surge and resurgence of waves of social advance and retrogression finally established a rhythm of movement that produced in the last century a social revolution that has already affected every phase of the culture. It transformed the production and distribution of goods and services, concentrated the people in cities, broke down the isolation of communities and nations, altered the nature of family life, put government into the social system, changed the interpretation of law, and called into question the established objects of allegiance. As a consequence we are living today in a critical period, in one of the greatest cultural shifts that mankind has experienced in recorded history.

The immediate progenitor of the present transformation was what every social studies textbook now calls the "Industrial Revolution." Rising in the fourteenth and fifteenth centuries, it passed through several phases — scientific, commercial, and technological. Since the graduates of any really progressive high school can fill in their details, I shall not delay us here beyond the recall of the principal captions. Suffice it to remind ourselves that by our own times the First Technological Revolution had put three key ideas to work:

First: Power-driven machine technology. Giant and efficient generators were invented and installed in central stations, transmitting power over long distances. Machines of great force and intricate cleverness of manipulation, huge and precise machine tools, and incredibly accurate measuring instruments were perfected and put to work.

Second: The modern corporation was quickly set up, concentrating gigantic amounts of capital and putting into a few hands the control of necessary natural resources, industries, banking, and marketing enterprises. This, in turn, made possible scientific planning and efficient operation.

Third: The mass application of the idea of Freedom as absence of restraint. Generalized and rationalized by the theorists of the eighteenth century as *laissez faire*, this rationalized the human motive power which Europeanized the earth in the following two hundred years.

By our times, these three ideas were at work throughout the Western world, and the social revolution was well under way.

THE FOUR FOUNDATIONS OF EDUCATION

THE INTELLECTUAL ROOTS OF THE SOCIAL TRANSFORMATION

Europe Had Created Instruments of Precise Thinking

It is in the *intellectual* roots of the modern social transformation that educators will find the great concepts of man and culture upon which they shall build an education fit for the free society. The profound shift in thought that came after 1500 A.D. could not have come about had not several effective instruments of precise thought been created. The foundational ones, of course, were the modern Indo-European languages, all of which were constituted to expedite the achievement of *relational thinking*. I refer to the obvious fact of these modern languages because without them the methods of science, of machine technology, of corporate business organization, and of social cooperation could not have come into existence. Through these multi-word and multi-meaning languages (each one composed of thirty-odd thousand words with the capacity of conveying millions of meanings) the Europeans created subtle instruments of analytic thought and organization.

On this foundation, in the fourteenth and fifteenth centuries they devised new measuring instruments and the concepts of scale, equal unit, zero point, rank-order, frequency distribution. With the new instruments, intrepid explorers mapped and sounded the seas and plotted the land masses in the following centuries, and on the new concepts invented incredibly powerful engines and clever manipulative machines. The physical achievements are obvious, but I recall them because of their significance in the understanding and control of environment. The invention and use of the instruments piled up mountains of "measured facts," created an insistent need for organizing these data, and this led to the clarification of new concepts that deal with *relationship*, and hence with order.

But it was in the perfection of the higher mathematics that the modern Europeans succeeded in inventing the most powerful instrument for the detection and the statement of relationship and hence for the discovery of order as shown by scientific law. In a "century of genius," a galaxy of mathematicians — Galileo, Newton, Descartes, and Huygens, to name the most famous quadrumvirate — produced the astounding mathematical instrument of thinking: the algebra; the algebraic, trigonometrical, and logarithmic functions; the analytic ge-

THE GREAT SHIFT IN THOUGHT

ometry; and the calculus. The invention of these first made it possible to sort out the chaotic tangle of observations of the physical world into clear, ordered generalizations. Hence *the psychological importance of this creative achievement: here was a tool of clear meaning and understanding.*

The search for order resulted eventually in a synthesis of ways of observing and of treating observations, of thinking and of the accompanying attitudes that, taken together, have come to be known among the scientists as the scientific method — and among the pragmatic philosophers, who made the most profound verbal descriptions of it, as the experimental mode of inquiry.

Thus, out of the creative ordeal we have inherited *five instruments of precise thought* by which we can produce a degree of order in our disorganized world:

- languages of great complexity and subtle power of meaning,
- concepts and instruments of more precise measurement,
- mathematical methods of detecting and stating relationships,
- the concept and process of scientific method, inquiry, and work,
- institutions for creative research and the dissemination of ideas.

THE FIRST SHIFT: FROM THE PHILOSOPHY OF AUTHORITY TO THE PHILOSOPHY OF EXPERIENCE

Two Philosophies, Two Social Orders, Two Traditions

Throughout all his sophisticated history, man has succeeded in devising only two basic philosophies of thought and action: The Philosophy of Authority . . . The Philosophy of Experience. Corresponding to these two philosophies he has arranged social and political affairs in two kinds of social order: The Authoritarian Society . . . The Democratic Society. Hence his collective history has advanced century after century through two traditions: The Exploitive Tradition . . . The Great Tradition.

Juxtaposed, these great opponents state their rival positions:

— *The Philosophy and Social Order of Authority and the Exploitive Tradition* say:

“You and I are different. Each is an Individual. I am Superior. You are Inferior. So, I shall dictate to you. The greatest thinking has already been done and has been

THE FOUR FOUNDATIONS OF EDUCATION

passed on in the Word. I shall interpret the Word of that thinking for you. And I shall rule you." Thus through most of recorded history the strong and ambitious have ruled the docile and the less aggressive.

— *The Philosophy of Experience, the Social Order of Democracy and the Great Tradition* say:

"You and I are different, yet we must live together. Each of us is a Person. I am a Supreme . . . but you are a Supreme also. Each has a unique experience and some original power of thought. Together we can distill judgment and decision out of human experience. So we shall rule together."

✓ ✓ ✓

THE PHILOSOPHY OF AUTHORITY WAS LONG IN THE SADDLE

We see, then, that the Exploitive Tradition does not believe in the supreme value of the individual. It denies that most men have the capacity for taking thought and for self-rule. It builds authoritarian political orders and its spokesmen phrase its philosophical norms. Generation after generation the authoritarian leaders dilute and pass on the Word, creating for it such prestige that the ninety and nine among the people worshipfully recite its categories and shape their lives in accordance with precedent. Authority becomes the all-pervasive measure of the social order — the basis for the upbringing of children in home and school, and for the administration of business and industry as well as of public affairs. Authority in the form of precedent becomes the chief criterion of the judges who interpret the law. Thus the interpretation of the Word dominates the method of thought itself, and even among the professed philosophers the method of authority becomes the mode. Only a minority among them, and fewer still among the passing population, achieve independence of thought and urge the method of experience.

I am not indulging in academic theorizing. I am generalizing from the documented story of what happened. Aristotle, an Athenian Greek, standing on the intellectual shoulders of Thales, Epicurus, Democritus, Plato, and doubtless of many earlier men, wrote down such a convincing and systematic description of the universe and the physical world, of man within it, and of his nature, knowledge, and behavior, that later men felt and thought with his system for a long,

THE GREAT SHIFT IN THOUGHT

long time. He created the Word so far as it dealt with man and his three-dimensional world. We are prone to call him the first "scientist." He took the whole universe as his problem, and in a lifetime of astounding creative production wrote a great library about it. The whole range — nature, God, and man — was covered. Out of this tremendous system came *the philosophy of things as substances* — natural, supernatural, human. *At its intellectual center was the doctrine that the content and form of things are given; it is man's task to grasp them and to fashion his life accordingly.*

From the fourth century B.C. to the seventeenth century A.D., the intellectual Western world wore the blinders of this Aristotelian "thing" interpretation of the natural world, and of man, his nature and behavior. Such philosophy as could be said to exist was nothing but an acquiescence in the authority of the Word, as passed down from century to century via the conflicting doctrines of the Greek philosophers and the Church fathers. Great advances in science and mathematics and other intellectual arts of observing, measuring, and recording man and nature had developed around the eastern and southern shores of the Mediterranean Sea during that time. But for many centuries the "educated" Western world thought with Aristotle about man and natural things, and with the Christian Church about supernatural things. Actually, the growing body of Church doctrine concerning the natural and supernatural realms of existence caused increasing conflict between secular philosophy and theology. In the thirteenth century that conflict was resolved by the synthesis of Thomas Aquinas — a body of doctrine that governed the thinking of many men of thought for the next four hundred years, took new life from generation to generation, and perpetuated itself in recurring human crises. *Whenever original thought appeared to be dangerous and the advancing democratic thought became precarious, timorous, and insecure, men ran to the safe cover of authority.*¹ Until the astonishing advances of the sixteenth and seventeenth centuries there was *no recourse to human experience*. There was *no collection of factual evidence by observation: our current criterion of tested consequences was utterly lacking*. There was only the "reason" of faith.

¹ This has been true even to our own day of the 1940's; witness the nationwide retreat *from* reason of our "liberal" fraternity since 1935, and the incredible retrogression *to* the Scholastic Reason, led by Mortimer J. Adler and his confreres in the pseudo-Thomist counterrevolution of today!

THE FOUR FOUNDATIONS OF EDUCATION

PIONEERS OF THE INTELLECTUAL REVOLUTION

Then, in the fifteenth and sixteenth centuries seminal minds appeared in western Europe that launched a tremendous break-through in the medieval conception. Since it is impossible to undertake in the brief space of this chapter any extended history of the intellectual revolution, I shall briefly recall its chief personalities and concepts in three periods. First a succinct outline:

First: the 1600's to the 1840's:

- The initiating period of the new naturalism and science of Galileo, Newton, and Descartes. Hobbes, Locke, Berkeley, Hume get pioneer glimpses of the philosophy of experience, challenging Aristotelian-Thomist authority. The world still viewed by the best of the pioneers via mechanical concepts.

Second: the 1840's to 1890's: the preorganic period. The Philosophy of Experience emerging in a new psychology and sociology.

- Michael Faraday (1791–1867), James Clerk-Maxwell (1831–1879), and Heinrich Rudolph Hertz (1857–1894), accumulating material which led to field concepts in physics.
- Auguste Comte, Herbert Spencer, and Lester Frank Ward predict a science of culture and society.
- Charles Darwin, Francis Galton, Alfred Wallace, Thomas Huxley, and the evolutionary hypothesis.
- Weber, Fechner, Helmholtz, and Wundt found psychophysics and scientific psychology, although with complete adherence to mechanical explanations.
- Claude Bernard and the pioneer investigations of the organismic role of the endocrine glands.
- Charles Peirce, Chauncey Wright, and the founding of the “operational” psychology of meaning.

Third: the 1890's to the 1940's – Our Times.

- This is the period of the completion of the phrasing of the Philosophy of Experience, the definite documentation of the organic-field-force-energy concepts, and the shift from mechanism to organism becomes complete.

Experience Challenges Authority: Pioneers

While Galileo and Newton were setting men on the trail of the modern science of motion, a dozen "philosophers" were completing the destruction of the rule of authority in the psychological realm. Ten were British:

Thomas Hobbes (1588-1679 ... English)
 John Locke (1632-1704 ... English)
 George Berkeley (1685-1753 ... Irish)
 David Hume (1711-1776 ... Scotch)
 Thomas Brown (1788-1820 ... Scotch)
 Sir William Hamilton (1788-1856 ... Scotch)
 James Mill (1773-1836 ... English)
 John Stuart Mill (1806-1873 ... English)
 Herbert Spencer (1820-1903 ... English)
 Alexander Bain (1818-1903 ... Scotch)

And two were German:

Immanuel Kant (1724-1804)
 Johann Friedrich Herbart (1776-1841)

Studying "the conduct of the understanding," as Locke put it, they slowly laid the foundations for *a philosophy and psychology of human experience*. The outcome of the British effort, by the nineteenth century, was *the groundwork for the first modern psychology*, the first phase of which has long been known as "Associationism." The chief result of the German effort was the great philosophic analysis of Kant and what American students of education and psychology knew forty years ago as "Herbartianism." While both the British and the German efforts were oriented by several false ideas, the two together broke the trail that after 1870 became the basis of much of the work being done in the psychology of today.

Associationism is important to us because of one achievement: its builders were the first to view mental activity as *a process carried on by a human being through his own experience*. Teachers in our time feel indebted to William James for founding American psychology on experience and are prone to give John Dewey credit for pioneering with the concept, "education as experience." Actually, James and Dewey succeeded in stating clearly for our times what Hobbes, Locke, Berkeley, Kant, and Herbart had brought forth from behind the clouds of false medieval thought by insisting upon *the central role*

THE FOUR FOUNDATIONS OF EDUCATION

of human experience, and in it, of man-made ideas. The fact that the Europeans were utterly wrong in their atomistic and mechanistic analysis and interpretation of human activity must not detract from their achievement in giving us the first true philosophy and psychology of experience.

Between them, Hobbes, Locke, and Berkeley built the initial solid plank in the foundation of modern thought: there are no innate ideas; there is no depository in human nature of abstract ideas. *Knowledge is derived from experience by the mental activity of the self; not by appeal to authority, but by human derivation of psychological principles.* Hobbes contributed the notion that mental experience is a succession of associated ideas. John Locke's twenty-year-long inquiry into the nature of human understanding¹ gave a powerful impetus to the idea that *knowledge is derived from experience.* Bishop Berkeley in his *New Theory of Vision* (1709) turned associationism directly into the study of a *psychological* problem. He started the modern study of "sense perception," which has dominated nineteenth- and even twentieth-century scientific psychology right down to the work of the Gestalt psychologists today. Thus the associationists' contribution was positive in centering attention on human experience, negative in denying the rule of authority and the existence of innate and abstract ideas; and both constituted a vast stride forward toward the competence of the modern mind.

Into the scene of enlightened Europe of the eighteenth century came the great ordering mind of Immanuel Kant with his classic work of 1781, *The Critique of Pure Reason*. Kant built upon the British philosopher-associationists but also corrected many of their errors. The medieval rational "psychology" had insisted that it knew the soul directly. Kant, building upon the associationists' concept of human experience, said that was impossible; we can no more know the soul directly than we can know the world directly. There is no such thing as "true metaphysical knowledge; there is only *empirical* knowledge." The material world acts upon the human senses and sets the machinery of experience in motion. Its content and organization are molded by the mind. Hence, we know the world only as it exists in our ways of knowing. Here then in Kant, and out of the associationists, is a prevision of the mature ideas of the individual and the culture which the social psychologists of today are documenting.

¹ See his essay on the *Conduct of Understanding*.

THE REVOLUTIONARY ROLE OF
BRITISH EVOLUTIONARY BIOLOGY

It was British evolutionary biology, more than any other single factor, that created the dynamic milieu in which the American philosophy and psychology of experience was really born after 1890. What came in the '90's to be called the Darwinian view of man was simply made-to-order for the creative Americans. An overpowering belief in the *supreme value of the individual* had marked American life throughout its frontier history. After 1890 it left its deep impress on American sociology, psychology, and education. The focusing and clarification of the concept was made possible by the work of Charles Darwin (1809-1882) and his half-cousin, Sir Francis Galton (1822-1911). Their grandfather, Erasmus Darwin, had written before 1800: "The world has been evolved. It has risen little by little from small beginnings." Indeed, for more than two centuries European intellectuals had steadily anticipated the evolutionary theme. With the publication of Charles Darwin's *The Origin of Species* in the historic year of 1859, the central hypotheses of evolution became more than the undocumented guessing of the eighteenth-century philosophers. Slowly, out of the stormy decades of controversy that followed Darwin's book, an increasing body of students of the organic world and of economic and political society came to embrace the new notions of (1) geometric multiplication of offspring, (2) variation in structure and capability, (3) competition for the means of existence, (4) the survival of the fittest. The concept of the growth of the living creature and his progressive success in adapting himself to a hostile environment oriented the new interpretation of individual and social living. *Societies as well as individuals came to be understood as growing and adjusting organisms.*

It was the Darwinian cue that, after 1870, started many of the physiologists, psychologists, philosophers, and social scientists off on their search for the concepts underlying every aspect of the new industrial-democratic culture. After 1900 it became the cue around which the educationists reconstructed their ideas concerning child development and the program of the school. The *new* schools and colleges, as they developed under the drive of the functional psychologists and the new social and natural sciences, were thoroughly Darwinian. Their psychology was built on the concept of the dynamic, growing

THE FOUR FOUNDATIONS OF EDUCATION

individual adapting himself to his environment and progressively mastering it. It was founded on the democratic belief in the Supreme Value of the Individual; on the belief that he is not the instrument of the State, but that, on the contrary, individuals together create the State. For two generations after the publication of Charles Darwin's *Origin of Species* the chief intellectual influence prodding the development of this concept and attitude was British evolutionary biology. Darwin's immediate effect upon American psychology came from his important but less-discussed book, *Expression of Emotion in Man and Animals* (1872). Out of the discussion of evolution the concept of continuity between man and the other animals as well as between different animal forms eventually developed, and with it, an "animal psychology."¹

But it was primarily Sir Francis Galton² who was the forerunner of modern psychology in Britain and influenced one strand particularly of the new American Psychology. He was a man of independent means, an original, versatile scholar, whose intense intellectual curiosity drove him on throughout a long lifetime to open up many new fields of research. He invented various scientific and practical instruments, and was one of the earliest to devise the mental test and the question blank, and to use the statistical method. It was due to Galton's influence that James McKeen Cattell developed his interest in these concepts and his competence in these techniques. Cattell passed them on to Thorndike, who introduced them to the professional educationists after 1900.

Galton's *Inquiries into Human Faculty and Its Development*, one of the original stimuli to the scientific study of individual psychology, had a tremendous influence on the leaders of thought on both sides of the Atlantic. The book was a description of the mental faculties of individual man, developed the Darwinian concept of variation, and emphasized individual differences and the role of the intelligent selec-

¹ Largely under English leadership through the work of such men as George John Romanes (1848-1894), author of *Animal Intelligence* (1881), *Mental Evolution in Animals* (1883), and *Mental Evolution in Man* (1888); also of C. Lloyd Morgan (1852-1936), who published *Animal Life and Intelligence* (1890-1891) and *Introduction to Comparative Psychology* (1901).

² Estimated by Terman and others to have an IQ of 200 and to be classed as "genius" with John Stuart Mill, Goethe, and Leibnitz. Galton was author of epoch-marking books: *Hereditary Genius* (1869), *English Men of Science* (1874), *Inquiries into Human Faculty and Its Development* (1883), *Natural Inheritance* (1889).

THE GREAT SHIFT IN THOUGHT

tion of the more fit — Galton's proposed "eugenics." Thus, largely out of Darwin and Galton came the new American sociology and psychology of the Individual and Society, the study of individual differences, and the development of a generation of absorption in mental and educational testing.

THE IDEA OF DEMOCRACY CENTRAL IN THE EMERGING PHILOSOPHY OF EXPERIENCE

This expanding awareness of their creative powers by modern men expressed itself in other ways than in the building of a sounder psychology of how men know. In a thousand years of social-economic struggle the doctrine of the role of human experience helped to produce the various brands of democracy that are extant today. Slowly Western men got recognition for perhaps the greatest single human idea — the Supreme Value of the Individual. In doing so they created a new interpretation of the great constellation of ideas that constitutes its intellectual nucleus: freedom and control . . . the delimitation of equality . . . expression and form . . . work and the ownership and control of property . . . and communal relationships.

Seen in long-term development, Western society emerged from the struggle of two competing views of life: the Exploitive Tradition and the Great Tradition. The Exploitive Tradition was the practical current of individualistic exploitation that built the physical structure of our Western civilization and various brands of dictatorship government. The Great Tradition was the sensitive and creative body of thought and feeling that sought to implement the good life and to build the democratic society. Through thirty generations of Europe-building, these rivals of mood and philosophy fought for each man's mind and soul and for domination over each group culture. The vigorous drive of the one, fused with the thought and feeling of the other, produced the brilliant invention of instruments of thought, the daring exploration of seas and continents, the clearance and settlement of land, and the building of systems of agriculture, industry, trade, government, education, and social organization. By the end of the nineteenth century they had Europeanized the earth.

Through it all coursed man's unending conflict over property and government: government by Autocracy; that is, by One Man or a Few Men, against the various forms of Democracy — government by Many Men. This practical, building, organizational stream of life, with its

THE FOUR FOUNDATIONS OF EDUCATION

emphasis upon preëmption and competitive private ownership, was Individualism on the march – rugged as well as ragged individualism. “I” – the Individual – was in the center of every episode of the struggle. . . . “We” – the good of the greater group – was pushed into the background. Measured by the numbers that were conquered, “I” and the Exploitive Tradition, with its lure of comfort and power and glory, won out. Most men were captured by the practical tasks of farming, building, producing, merchandising, governing. In spite of its dominance, a few men of the Great Tradition succeeded in building the magnificent physical structure of modern civilization – a powerful producing system – and occasional beautiful communities in Euro-American villages, towns, and cities. But the Exploitive Tradition brought on the earth corresponding horrid slums, stalled factories, and destitute farms. Both ruggedly strong and beautiful and raggedly anemic and ugly stands the product today.

I And We: The Perennial Problem of Control

Centuries passed, but the issue of the conflict was never resolved. Even today it is the nub of the current struggle between America, Russia, and Britain, as it was, in another form, of that between the Allied and Fascist armies in World War II. In every industrial country it is the subtle problem focusing the struggle for power between ownership and labor. It is the basic issue of authoritarian *vs.* democratic education. Conflict in every phase of the culture centers on it today. I shall make it, the problem of I and We, a central theme of this book.

It can be expressed in many forms:

- Freedom and control
- the Individual and the Culture
- the Private and the Public
- the Individual and the Social
- Private Enterprise and Government Enterprise
- National Sovereignty and World Sovereignty

But, no matter what data of human life are taken for illustration, there is but one basic social problem – that of I and We – how to organize things so that each of the multitude of individuals that constitute modern societies can make his own life statement and yet not encroach upon the others around him, how to encourage each individual to develop his capacities to their uttermost limits, but without

blighting those of his neighbors. Every man wants to create his view of life, to make his gesture or statement, to put down in some objective material what he is, what he feels and thinks. But every man must recognize that in our kind of world this drive for expression must not be permitted to intrude upon the well-being of society.

Viewed in long terms and with the eye alert to every aspect of the culture, this is still the baffling problem of all Western societies today. As the Second Technological Revolution¹ has emerged in the twentieth century, the crucial nature of the problem of I and We stands out boldly. It can be grasped by bringing all the impinging factors together:

- *The Chief Culture-Pattern: Competitive Individualism . . . Laissez faire.* We all tend to be individualists competing with one another for security and power and glory. Our society took its present form in large part because these competitive drives were rationalized in a self-conscious climate of opinion of every-man-for-himself which pervaded the entire Western world.
- *The "law of individual differences."* Natural science has documented what every astute psychologist always knew — namely, that the multitude of egocentric competing individualists vary enormously in energy, intelligence, ambition, and social sensitivity. The competition is between the long and the short, the strong and the weak, the domineering and the submissive, the adventurous and the timid, with a numerous unimaginative and docile mediocrity bulking large between the extremes.
- *The Strong Individuals conquer The Weak Individuals.* In every epoch of history in which men are left free to preëempt and exploit either land or other men, the consequence is always the same: the strong, the ambitious, the ruthless win the race of exploitation, getting a stranglehold over the weak, the docile, and the socially sensitive.
- *Social Control follows, hence the lesson of industrial-democratic society: in any social order in which man's inhumanity to man is allowed free rein and the many are exploited by the few, the only recourse is to social control. The many who in-*

¹ Because the epoch-marking discoveries of Oersted, Faraday, Maxwell, and Hertz between the 1840's and 1890's were put to tremendous practical use in our times, I urge that we teach our young people that the period of engineering creativeness since the 1890's is the beginning of a Second Technological Revolution.

THE FOUR FOUNDATIONS OF EDUCATION

dividually are weak form a more perfect union to bargain with the few who are strong. Consequently we have increasing social control and more government rather than less government in business and the social system.

— But, under the Great Tradition of democracy, it is *social control imposed by the coöperative decision of the group.*

These, as compactly and fully as I can state them in a page, are the factors involved in the problem of social control, of I and We. This is the Crux, the clearest revelation of the deep-running shift in thought from the philosophy of authority to the philosophy of experience.

THE ADVANCING PHILOSOPHY OF EXPERIENCE FOUNDS THE NEW PSYCHOLOGY, SOCIOLOGY, ESTHETICS, AND ETHICS

This must conclude our brief sketch of the original pioneering with the concept of experience. By the early 1800's *liberal* thinking men of the West had weaned themselves from the slavish worship of the past. The Aristotelian-Thomist grip had been broken. By that time, too, the foundations of the physical sciences had definitely been laid. But no human sciences had emerged.

Then, between the 1830's and the 1890's, all of our four foundations of education began to take shape — the new Biopsychology, Sociology, Esthetics, and Ethics. One of these — Psychology — was well on the way to becoming a science. Of the Science of Culture and Society, all we can say is that by 1890 it was definitely "predicted." I shall round out our sketch of the new development of the concept of experience, therefore, with a brief outline of the founding of the new psychology and sociology.

I. THE FOUNDING OF THE NEW PSYCHOLOGY

In the nineteenth century a score of creative Europeans turned the empirical philosophical speculations of the associationists into a recognizably scientific psychology. They were aided by several scores of others, but a few did the really creative trail blazing:

— One group — the German line — led straight down to us today: from Weber to Fechner, Fechner to Wundt, from Wundt to one group of Americans — Hall, Cattell, Baldwin, and Judd.

THE GREAT SHIFT IN THOUGHT

- A. second — the British line — led from Darwin and Galton to another group of Americans — Peirce, James, and Dewey.
- A third — the French line — led from Pinel, Charcot, and Janet to Ribot, and to Freud, Adler, Jung and Rank and Lewin, and so to American psychoanalysis, and to the "field-energy" concept.
- Several of them, especially the Germans and the Russians, led to Köhler and the German Gestaltists and to Watson and the later American behaviorists.

To understand the ideas and the mood that their joint parentage has generated in our day, we should have at least a skeleton of their genealogy. So on adjacent pages I have charted the thirty leading pioneers and their conspicuous contributions.

THREE GENERATIONS OF STUDENTS OF PSYCHOLOGY

THE FIRST GENERATION

GERMAN —

Ernst Heinrich Weber (1795–1878)	Physiologists and physicists, documenting a dozen "senses" ... elaborate minutiae of sense-perceptions ... establishing "laws" of specific mental functions reducing complex human behavior to "fixed, identifiable, quantitative units."
Gustav Theodor Fechner (1801–1887)	
Hermann von Helmholtz (1821–1894)	

FRENCH —

Philippe Pinel (1745–1826)	First "naturalistic" studies of insanity.
Jean Martin Charcot (1825–1893)	First scientific studies of hysteria and other psychopathological investigations ... use of hypnotic suggestion.

THE SECOND GENERATION: 1860's–1890's

GERMAN —

Wilhelm Max Wundt (1832–1920)	Continued Elementarism of First Generation ... pioneer "social" psychological studies.
-------------------------------	--

(Continued on page 48)

THE FOUR FOUNDATIONS OF EDUCATION

THREE GENERATIONS OF STUDENTS — *Continued*

GERMAN —

Franz Brentano	(1838-1917)	Developed the "Act" psychology ... explored higher thought processes, functions, motor-set, emotions, nature and role of Self, role of "seeing relations."
Carl Stumpf	(1848-1936)	
Hermann Ebbinghaus	(1850-1909)	
Theodor Lipps	(1851-1914)	

BRITISH —

Charles Darwin	(1809-1882)	Evolutionary views of man, his nature, variations, capacity for adaptation, the supreme value of the individual, study of individual differences ... development of mental tests, statistical methods.
Francis Galton	(1822-1911)	

FRENCH —

Pierre M. F. Janet	(1859 —)	Psychopathology, abnormal psychology, hypnosis, somatic psychiatry, trend toward psychology of neuroses, anticipates much of Freud.
Théodule Armand Ribot	(1839-1916)	

AMERICAN —

Charles Sanders Peirce	(1839-1914)	Founding of "pragmatism" and of the "operational" psychology.
William James	(1842-1910)	Human experience as source of psychology ... first synthesis of organic-functional psychology ... self as motivating agent ... stress on action, thought, feeling as body-response of relations.
J. McKeen Cattell	(1860-1943)	Psychology of individual differences ... laboratory and statistical methods.

THE THIRD GENERATION: 1890

AMERICAN —

John Dewey	(1859 —)	Mature functional organic and operational psychology of
------------	----------	---

THE GREAT SHIFT IN THOUGHT

The Act ... self as directive motivating agent ... scientific method of inquiry — the problem and thinking central ... growth basic characteristic of life ... human response essentially social.

E. L. Thorndike (1874 —) Documentation of connectionism and the conditioned response ... the psychology of habit ... the learning curve.
 John B. Watson (1878 —)

GERMAN —

1. Gestalt psychology

Max Wertheimer (— —) The emergence of "field" (of force).

Wolfgang Köhler (1887 —) Psychologies ... configurationism ... part-whole relation
 Kurt Koffka (1886-1941) fundamental ... organization central ... organismic psychology ... definite use of topological, mathematical theory (field) in setting psychological experiments ...
 Kurt Lewin (1890-1947) psychic tensions, emotions, will, action.

2. Psychoanalytic Groups

Sigmund Freud (1856-1939) "Depth psychology" ... three "pillars": repressed-infantile-sexuality ... therapeutics via the standardized catharsis of past experience ... the role of the subconscious and the unconscious ... inferiority and the defense mechanisms of behavior ... emphasis on conflict ... postulates fundamental irrationality.¹
 Alfred Adler (1870-1937)
 Carl Gustav Jung (1875 —)
 Otto Rank (1884-1939)

¹ One could name fifty more who have made definite contributions; for example, Boring, Terman, Whipple, Pillsbury, Strong, Pintner, and younger men of today, such as the social psychologists Kimball Young, George Hartmann, G. B. Watson, Gordon and Floyd Allport, Gardner Murphy. But all these I speak of are important and will serve as illustrative sources for what we "know" today in psychology.

The First Generation

Three physiologists — Weber, Fechner, and Helmholtz — created the first structure. Today we pass over Weber, remembered for his contributions on the sense of touch, as the first but minor figure in the line of psychological succession which led on to Fechner and Helmholtz and then to Wundt, the great leader of the second generation. Fechner seized upon Weber's perceptual discovery, confirmed it by the accumulated evidence of many years, named it Weber's Law, and devoted himself from the period of about 1850 until his death in 1889 to an encyclopedic range of research on the borderline between the physical and the mental realms. He published his results in 1860 in *Elements of Psychophysics*. That is regarded today as one of the great dates in the early history of psychology. Hermann von Helmholtz also did prodigious work in the new psychophysics. He wrote two distinguished books: one, *A Handbook of Physiological Optics*, the other, *Sensations of Tone*; a tremendous physical achievement, based on an analysis of all the existing knowledge with the additional accumulation of a vast body of experimental evidence. Other investigators, notably the Dutch physiologist and oculist, Frans Donders, developed the reaction-time experiments and extended our ability to measure discrimination, choice, and simple reactions. Physiology was splitting off from biology, and a physiology of the nervous system was developing: witness the discoveries by Bell, distinguishing the sensory from the motor nerves . . . the additions to the knowledge of the functions of the brain by Flourens . . . the discovery of the action of the reflexes — unconscious motor response — by Marshall Hall and Johannes Müller, the work of Müller on the specific energies of nerves and his physiological theory of mental qualities. From having been the handmaiden of philosophy, the emerging psychology was becoming the handmaiden of physiology and physics.

When the work was over, Helmholtz had shown that experimental methods in physiology could be applied to psychology; sensation and perception could be studied experimentally. There was intense interest in the attempt to reduce the complex behavior of the human being to "fixed, identifiable, quantitative units," to get "measurable, psychological constants." Many scientists had been led to believe that these were the true materials of the psychic life. *By 1890 the new science of psychology was being poured into a rigid mold of mechanical ele-*

mentarism that has required fifty years of our own study and controversy to blast away.

The Second Generation: Wilhelm Max Wundt and the "First" Psychological Laboratory, 1879

If Fechner was the founder of psychology, Wundt ruled it in papal grandeur for a generation after 1870. The conditions and the men were ripe for each other; he was the one man qualified for the "founding" of the new science. The conditions of 1870 called for an enormous capacity for sustained work and the encyclopedic ability to assimilate and organize the great accumulation of facts of mental life, absolute intellectual integrity, and a capacity for clear verbal expression. A synthesis of the knowledge of the day was needed. In a prodigious work which stretched uninterruptedly over the sixty years from 1860 to 1920, Wundt produced the synthesis. He developed the astronomers' work on the personal equation, gathered together the physiologists' contributions on the nervous system, optics, and acoustics and other sense perceptions, integrated Weber's and Fechner's original work in physiological psychology with those of later students, and published the synthesis as his distinguished *Physiological Psychology*, which went through six editions between 1870 and 1911.

To Wundt and his laboratory, established in 1879, recognized generally as the "first" in the world,¹ came pouring the students who in the next fifty years were to take leading positions in the development of psychology; most of the young Americans of 1880 to 1900 studied in Wundt's laboratory and seminar—to name five, G. Stanley Hall, Cattell, Baldwin, Judd, and Pintner. The work of Wundt and his associates became the orthodox psychology of the smaller colleges and university departments in America after 1880 and was given nationwide circulation by Edward Bradford Titchener at Cornell from 1892 to 1927. James studied it and quoted it occasionally but rejected most of it, gibing at its "microscopic style" and finding too little of the "grand style about these new prism, pendulum, and chronograph philosophers." But in the small colleges, and after 1900 in the multiplying teachers colleges, the new professors of "psychology" were caught in the grip of the Wundtian micropsychology, dissecting the

¹ Although, during the period of 1875 to 1880, William James had a room at Harvard University in the United States in which illustrative "psychological" demonstrations were given occasionally to his medical students in anatomy.

THE FOUR FOUNDATIONS OF EDUCATION

elements of mental life, conducting thousands of studies of mental minutiae, measuring reaction time, association time, measuring and plotting pulse rates, breathing rates, speed and control of tapping, and the like.¹ As Boring says:

“It was as if the physiologists had discovered associationism. It required but a step for the psychophysical parallelists to argue that the mind is composed of a myriad of ideas, connected for the purposes of sensation, perception, movement, memory, and thought by innumerable associations. Had it not been for physiology, we might never have had psychological elementalism in a serious form to combat.”²

II. THE FOUNDING OF THE NEW SOCIAL SCIENCES

THE FIRST GENERATION: THE PREDICTION OF A SCIENCE OF CULTURE AND SOCIETY

“*Anthropo-geography*”

At the very moment that Fechner, Helmholtz, and Wundt were creating the first outlines of a scientific psychology, that Darwin, Galton, and Bernard were founding the new biology, and that Faraday and Maxwell established the new physics, the prescientific materials for a new body of social sciences were being fashioned. First in point of time was a mixture of “human” geography and anthropology. Karl Ritter (1779–1859), first “professor of geography” (University of Berlin, 1820–1859), produced his mammoth *History of Mankind* in twenty-one volumes (1822–1859). Although he was utterly prescientific — he made no firsthand investigations himself — Ritter launched a century of study of the impact of the physical environment on man and his society. In 1850 Adolf Bastian (1826–1905), another German “geographer-anthropologist,” began the first of what turned out to be nine journeys through the Americas, India, China and Eastern Asia, the islands of the South Seas, and Africa. From these he presented his reports and theories of levels of cultural development and the effect of geographic conditions. Friedrich Ratzel’s widely discussed two-volume *Anthropo-geographie* (1882) outlined the general orientation and structure of human geography and laid the groundwork for the study

¹ As late as 1911 I assisted Dr. Guy M. Whipple in the revision of the three hundred specific instruments of his *Manual of Physical and Mental Tests*, and found great difficulty in resisting the attraction to give myself to mental chronometry.

² E. J. Boring: *History of Experimental Psychology*.

THREE GENERATIONS OF STUDENTS
OF CULTURE AND SOCIETY

THE FIRST GENERATION: 1830's-1890's

The Prediction of the Social Sciences

Auguste Comte	(1798-1857)	Friedrich Ratzel	(1884-1904)
Herbert Spencer	(1820-1903)	Francis Parkman	(1823-1893)
Lester Frank Ward	(1841-1913)	George Bancroft	(1800-1891)
Karl Ritter	(1779-1859)	Many lesser men	
Edward B. Tylor	(1832-1917)		

THE SECOND GENERATION: 1890's-1920's

The Direct Study of Behavior in American Industrializing Society

Thorstein Veblen	(1857-1929)	James Harvey Robinson	(1863-1936)
Frederick J. Turner	(1861-1932)	Charles A. Beard	(1874 —)
William I. Thomas	(1863-1946)	Charles H. Cooley	(1864-1929)
J. Mark Baldwin	(1861-1934)	Simon N. Patten	(1852-1922)
Franz Boas	(1858-1944)	Many others	

THE THIRD GENERATION: 1920's-

A Science of Man and Culture Emerging

Scores of workers on the social frontier; to name a few conspicuous ones:

William I. Thomas	(1863-1946)	Ruth Benedict	(1887 —)
Alvin H. Hansen	(1887 —)	Arthur Schlesinger	(1888 —)
Robert S. Lynd	(1892 —)	Bassett Jones	(1877 —)
Ralph Linton	(1893 —)	Many others	
Charles E. Merriam	(1874 —)		

of "the history of culture." Jean Bruhnes,¹ a distinguished twentieth-century geographer, says that Ratzel created "human geography"; the anthropologists also claim him because he was concerned with the origins of human society. Thus, by the time Veblen and his contemporaries were studying and working at the university centers, in the 1880's and 1890's, the scientific and factual foundation for human geography and anthropology had been laid.

A NEW SOCIOLOGY WAS BEING PREDICTED

BY COMTE, SPENCER, AND WARD

Three pioneers — the French Auguste Comte (1798-1857), the British Herbert Spencer (1820-1903), and the American Lester Frank

¹ See especially his *Human Geography*.

THE FOUR FOUNDATIONS OF EDUCATION

Ward (1841-1913) — launched the study of society that came to be named "Sociology."¹ Professor Giddings said, looking back at it, "Comte predicted sociology; he did not himself create it." It remained for Spencer and Ward to do that; yet even their efforts left it in merely a prescientific stage. Up to the twentieth century, as Professor Hankins² says, sociology was not much more than "a philosophy and a faith — a cosmogony, a theology, and a religion"; the first attempts were "mixtures of philosophy and history, social philosophy, pseudo-science and science."

Today, having at hand the amazing library of the new social sciences written after 1890, we can see what the intellectual world needed even before that time, and what Comte, Spencer, and Ward were unable to produce in their books. More than all else there was needed *direct firsthand studies of men at work and at play in the new industrial society; men building homes, producing and buying and selling goods and services, fighting each other in the competitive markets of industrial and financial ware and on the battlefields of military war; men out of work, struggling to get enough money to buy the necessities of life; workers organizing to get sufficient collective power to bargain successfully with organized owners.* It was studies of men behaving and studies of why men behaved as they did, that the world of thought needed.

But Veblen, Turner, and the other young students of "sociology" in the 1870's and 1880's could have got no more from the forerunners than encyclopedic descriptive accounts of social practices in various stages of societal development and speculations concerning origins. From Comte they got his famous "law of the three stages" of social advance: *first*, the Military-Theological stage — *fetishism*, later gen-

¹ The birth years of Veblen, Dewey, Turner, Robinson, and other later American students of society — the 1850's and 1860's — were years of detonating concepts. Darwin's *Origin of Species* was published in 1859. Comte's sociological *Politique Positive* was published in four volumes between 1851 and 1854 (having been preceded by his famous six-volume *Cours de Philosophie Positive* (1830-1842)). *Social Statics*, the first of Spencer's sociological volumes of the *Synthctic Philosophy*, was published in 1850. His three-volume *Principles of Sociology* came much later — between 1876 and 1896 — and his *Man versus State* in 1884. Ward's books were written between 1883 and 1908 — the *Dynamic Sociology* (two volumes, 1883), the *Psychic Factors of Civilization* (1893), *The Pure Sociology* (1903), and the *Applied Sociology* (1908).

² H. E. Barnes (Editor): *History and Prospects of the Social Sciences*, page 291.

erally called *animism*, in which men conceived that their lives were regulated by gods and spirits which they tried to control by sacrifice, prayers, and incantations . . . *second*, the Critical-Metaphysical stage, in which the human world was thought to be controlled by "natural forces," "vital forces," "essences" . . . *third*, the Scientific-Industrial stage, in which a "pattern of events" oust the "vital forces" as the former had ousted the gods. At best, Comte was "social philosophy," not "positive science," a broad synthesis with some recourse to factual observation.

Spencer followed the same general approach, although he went much further, perhaps because he built his whole sociology on his *First Principles*. In fact, the young students of the 1880's got a more developed "philosophy" of evolution from Spencer than from Darwin; Spencer's was comprehensive enough to include societies of men. At least, the students got a vast intellectual structure showing man in the universe creating societies, the whole process caught up in a deep evolutionary trend. The liberals of the second generation were not influenced much by Spencer's "mechanism" nor by his arrant philosophy of individualism. He was a "social physicist" who made the good of the individual the supreme test of social policy. All social history to the contrary, the function concept — "for the use of the people" — was completely alien to his thought.

From Ward, especially from his *Dynamic Sociology*, published when the young sociologists were students (1883), these latter got an evolutionary conception of the development of society, but with man's intelligence playing a much more controlling role. Ward, the American, brought up in a climate of Manifest Destiny, emphasized much more than did the British Spencer that man was captain of his soul. While in his later volumes — especially in the *Psychic Factors of Civilization* (1893) — he saw man's behavior motivated by his desires and his emotions, yet he spent his life evolving a grand theoretical plan in which the course of social development would be finally guided by man's intelligence. This plan, with "education" used as the method of picking out genius from the vast mediocrity of the general population and developing it to control the "improvement of society," came out in its fullness in the *Applied Sociology* (1908). By that time Veblen, Robinson, and the other "social scientists" had their own thinking well developed and many volumes published. Yet Ward's early books must have given them heart to believe in social progress through conscious human design and control.

THE FOUR FOUNDATIONS OF EDUCATION

In Comte, Spencer, and Ward, therefore, the young students of industrial society saw the *last prescientific attempts* of the groping philosophy of experience to found a realistic study of society. They got grand plans, mechanical and atomistic conceptions of social groups, idealistic theories, and guesses as to the stages of social development, instead of firsthand eyewitness accounts of men living together under modern industrial conditions. And unless they went to London to work with Karl Pearson in the Galton Laboratory or to Cattell at Pennsylvania, they got no contact with quantitative methods.

The New Anthropology

Meanwhile they were probably getting more stimulation from the "evolutionary anthropologists" — certainly from Sir Edward B. Tylor, generally called the father of that discipline. Tylor published the results of his extensive firsthand studies of primitive societies in two classic books: his *Researches into the Early History of Mankind* (1865) and his *Primitive Culture* (1871), primarily a record of the development of animism. He too accepted the Darwinian evolutionary idea of the survival of the fittest — "leftovers from a preceding cultural stage" — but he indulged in no grand speculations as to the "stages" of development. Instead, he gave the young students of society direct eyewitness records of primitive human behavior in many places and of many types. He helped to develop the idea held today, that a prevision of social reconstruction can be developed only out of a documented knowledge of the conditions and achievements of social evolution. Although Tylor was inclined to the theory that human cultures had originated independently in various regions of the earth, he stressed the basic unity of the human mind.¹

Prescientific "Universal History"

Meanwhile, the long-standing Christian interpretation of history was giving way to prescientific writing of universal history which

¹ Most important of all, Tylor gave a growing group of scientific anthropologists a point of view and an ideology that soon resulted in an accumulating library of research records; to name only a few: (1) Sir James G. Frazer's monumental *The Golden Bough*; (2) Andrew Lang's *Custom and Myth*; (3) Lewis H. Morgan's *Ancient Society*; (4) Wilhelm Wundt's ten-volume *Völkerpsychologie*; (5) Sir (George) Laurence Gomme's *Folklore as an Historical Science*; (6) Frank B. Jevons's *An Introduction to the History of Religions*; and (7) Emile Durkheim's *Elementary Forms of the Religious Life*.

THE GREAT SHIFT IN THOUGHT

included the peoples of Asia and America with those of Europe and Africa and the general history of human culture.¹ In the United States between 1820 and the Civil War five literary historians of eminence appeared. Prescott published his *History of the Reign of Ferdinand and Isabella* in 1838 and his *History of the Reign of Philip the Second* between 1856 and 1858. Motley's *Rise of the Dutch Republic* came in 1856. Parkman's forty-year-long written record of the struggle for the control of the New World of French (Latin)-Catholic civilization with Anglo-Saxon Protestant culture was published between 1849 and 1892.² The first volume of George Bancroft's "scientific" *History of the United States* appeared in 1834 (the tenth volume forty years later). By the time Turner and Robinson were graduate students, the foundations for the new study of history had been laid in America; at that very moment, 1883-1885, the last revision of Bancroft's six volumes was being published.

Yet it was a warped perspective that got into most of these histories and especially into the textbooks written from them by the lesser professors for use in the colleges and schools. James Harvey Robinson documented their nature in his essay on "The New History" in 1900. Their emphasis, he said, was upon relatively unimportant "great men," reciting the rise and fall of kings, the doings of courts and courtiers — especially of their marital affairs. The books stressed political and military minutiae, gave a multitude of trifling details of dynasties, and the history of unimportant conquests. They played up the personally sensational and "the gruesome":

... "romantic marriages and tragic deaths; the doings of poisoners, adulterers, and lunatics; the cases of those who have swallowed needles to find them coming out at unexpected places years after; who have taken laudanum for paregoric, or been run over by beer wagons."

¹ The conspicuous nineteenth-century European pioneer publications were: Leopold von Ranke's *Zür Kritik Neuerer Geschichteschreiber* (1824); Grote's *History of Greece* (1846-1856); Buckle's *History of Civilization in England* (1857-1861); Jakob Burckhardt's intellectual history, *Die Kultur der Renaissance in Italien* (1860).

² Parkman (1823-1893): *California and the Oregon Trail* (1849); *The Conspiracy of Pontiac* (1851); *Pioneers of France in the New World* (1865); *The Jesuits in North America* (1867); *La Salle and the Discovery of the Great West* (1869); *The Old Régime in Canada* (1874); *Count Frontenac and New France under Louis XIV* (1877); *Montcalm and Wolfe* (1884); and *A Half-Century of Conflict* (1892).

THE FOUR FOUNDATIONS OF EDUCATION

Historical writers "skipped lightly from one commotion to another," noting their partiality for "certain classes of historical facts" and their false interpretation of "mankind as in a periodic state of turmoil."

Increasingly came the demand for history to be written "from the life of the people." While Robinson and Frederick J. Turner were students, books leaning that way began to appear: witness Henry Cabot Lodge's *Short History of the English Colonies in America* in 1881 and John Bach McMaster's famous *History of the People of the United States . . . to the Civil War* (first volume, 1883; last one, 1913), packed with a vast body of detached facts of the lives of the common people. Perhaps the most important one of all was Henry Adams's nine-volume *History of the United States from 1801 to 1817* (1889-1890). In 1893 James Ford Rhodes began publishing his *History of the United States from the Compromise of 1850*, and finished it in 1906.

/ / /

Certainly by 1890 the ground had been cleared for a new "science of society." A large library was available of anthropological studies of primitive cultures, theoretical "sociologies" of the development of human societies, compendiums of the folklore and religions of peoples, general or universal histories of mankind, human geographies, studies of the struggle between the European Latin-Catholic and Nordic-Protestant cultures, preliminary critiques of current theories of society, and incisive previsions of the impending economic analysis. Here were the antecedents of a modern social science, but not the social science itself. *What was still lacking was the direct study of the emerging industrial society*; that was not forthcoming until the turn into the twentieth century.¹

Summing Up

These, in briefest outline, are the chief steps in the long process by which the hold of Aristotelian and theological authority was loosened and the doctrine of creative expression based on personal experience was established. By 1890 the foundations had been laid for

¹ That is the story of Veblen and the second generation, which is told in Chapter VIII. .

THE GREAT SHIFT IN THOUGHT

all the sciences. Men of creative thought had taken *one of the two great steps* necessary to understand and cope with their environment — be it physical or human. *They knew that whatever was to be done must be done by the experience and capacities of men, and that each generation had to do it for itself.* In the chapters of Parts II and III I shall show how, after 1890, original Americans phrased that concept of experience in a new psychology and sociology.

THE SECOND SHIFT IN THOUGHT: FROM MECHANISM TO ORGANISM

From our position today, three hundred years after Galileo and Newton, we can see with what incredible slowness the second shift in modern thought was made. This was the trend away from mechanical explanations of men and nature to organic, or “field-force-energy,” explanations. Even by the 1890’s the organic idea was only dimly perceived, and then by only a few brilliant forerunners. It was left to the third period — the 1890’s to the 1940’s — and to the creative effect of the science, technology, and art of the entire Western world to bring the concept of organism through adolescence to its young maturity of today. Now that it has been accomplished, however, we can see that its creative importance is second only to that of the concept of experience.

UNTIL OUR TIMES, MEN OF SCIENCE STILL SAW THE UNIVERSE AND MAN AS “THINGS”

Three hundred years after Galileo most scientists were still thinking about the physical universe and man and his culture in terms of ideas that were not valid. They were partly untrue because many scientific men, even down to our own day, confused their explanations of physical phenomena with an archaic animistic theology. But I am speaking here of men who had freed themselves from this confusion. Even the brilliant thinkers of the seventeenth century could not evade the grip of the additive concepts. Descartes explained organic bodily movements, and Hobbes expressed his “law” of association on materialistic and mechanical principles. John Locke held to the atomistic view that explained mind as aggregations and combinations of mental units. Atomism and mechanical principles domineered over the interpretations of Berkeley, Hume, and Kant. Hartley and James Mill later

THE FOUR FOUNDATIONS OF EDUCATION

carried the linkage idea to its utter limits, insisting that there was a law of association by which ideas correspond precisely to sensations which have been experienced together. Even such a modern "educational" psychologist as Herbart near the middle of the nineteenth century developed his apperceptive concept into a kind of mental mechanics in which mental laws were stated in mathematical terms.

It was the spectacular success of the physical scientists and the engineers of the First Technological Revolution, as much as any other factor, *that prevented them from stumbling onto the true cues to creative thought beyond mechanics*. Mechanics is the study of things, their properties and what they do and how they can be used. For two centuries after Newton the center of thought was things, and most European philosophy was nominalistic — that is, philosophizing about the existence of *particulars*.

Albert Einstein, who made the greatest single theoretical contribution to twentieth-century physics, says of the grip of mechanism on the physical sciences:

"The old mechanical view attempted to reduce all events in nature to forces acting between material particles. Upon this mechanical view was based the first naïve theory of the electric fluids. The field did not exist for the physicist of the early years of the nineteenth century. For him only substance and its changes were real. He tried to describe the action of two electric charges only by concepts referring directly to the two charges."¹

I. THE RISE OF THE FIELD-FORCE-ENERGY CONCEPT IN PHYSICS

PREMONITIONS OF THE ORGANIC IDEA EVEN IN THE PHYSICAL SCIENCES

In the nineteenth century three great steps were taken at intervals of a generation toward the understanding of the *organic* nature of even the physical world:

— *First*, Faraday's experimental discovery of induced currents (1831) and Oersted's studies of the deflection of the magnetic needle (1820).

¹ Albert Einstein and Leopold Infeld: *The Evolution of Physics*, page 157.

THE GREAT SHIFT IN THOUGHT

- *Second*, Maxwell's formulation of the equations which stated the structure of the electromagnetic field (1873).
- *Third*, Hertz's demonstration of electromagnetic waves and that their velocity equaled that of light (1885–1889).

Showing the profound significance of the first step, Einstein and Infeld say that Oersted's and Faraday's discoveries constituted "the two most important pillars of support for the theory of the electric and magnetic field."

This was the first step which enabled physics to give up mechanical explanations in terms of particles of matter and to grasp that a magnetic field is a "field of force" and a "store of energy." In a sense this was a confirmation of the pioneer theory advanced by Huygens, a contemporary of Newton — namely, that "light is a wave, a transference of energy and not of substance"; but two hundred years passed before experimental demonstration of Huygens' theory was achieved. Throughout all that time a "wave" concept was employed, but it also was mechanical — "reduced to the motion of the particles." Many attempts were made during the two centuries to create new concepts which would account *mechanically* for the optical and electrical phenomena that were being investigated; for example, the ideas of the ether as corpuscles and the idea of electric "fluids" as "things." But experiments in magnetism, electricity, and optics presented data which could not be explained satisfactorily; for example, those concerning the action of moving charges upon magnetic needles. Slowly physical scientists were compelled to discard the corpuscular theory and accept an intermediate concept of "waves spreading in a medium consisting of particles, with mechanical forces acting between them." But this concept was still "mechanical."

It was the formulation of Maxwell's equations in the 1870's which made the electromagnetic field "real" to the modern physicist. "*Maxwell's equations are laws representing the structure of the field.*" ... "In Maxwell's theory there are *no material actors.*" ... "The equations allow us to predict what will happen a little further in space and a little later in time, if we know what happens here and now."¹

Another generation passed in which the significance of Maxwell's law was only slowly grasped. Then in the early 1890's Hertz established experimentally the existence of electromagnetic waves, their

¹ *Ibid.*, pages 149–153. [My italics.]

THE FOUR FOUNDATIONS OF EDUCATION

velocity being equal to that of light. Today any elementary school child who has a radio can make a practical demonstration of the validity of Hertz's finding.

But what the student of education must grasp even if his elementary school pupil cannot is that the century of imaginative research since Oersted and Faraday has produced *a new picture of reality*. When Hertz topped Maxwell and the former two, it "was realized that something of great importance had happened in physics. *A new reality was created, a new concept for which there was no place in the mechanical description. . . .* The electromagnetic field is, for the modern physicist, as real as the chair on which he sits."¹

/ / /

These are the three great high spots in the half-century-long achievement that led to the concept "the field" which Mr. Einstein has called "the most important invention since Newton's time." It was from the theory and experimental confirmation of the field concept that his own theory of relativity developed in our own time.

/ / /

The American pioneers, Peirce, James, Dewey, and Veblen, were producing their mature statements in the years when the field concept was first being sensed; yet it is doubtful if any one of them other than Peirce, who was world-renowned in mathematics and physics, was aware of these revolutionary developments in the physical sciences. Nevertheless, the notion that the basic constitution of man and other living creatures and their relations with environment were not mechanical was the new idea in the air breathed by the men of curiosity and imagination. Curious medical men and students of animal and human physiologies had become skeptical of mechanical explanations of human behavior long before 1890. To John Dewey it was very clear by the time he wrote his famous "reflex-arc" article in 1896 (see Chapter IV). That European men of art as well as some psychologists had grasped the organic idea even earlier, I show in Chapter VII. Certainly Veblen and Thomas and Dewey's other colleagues at Chicago felt it. In every medium of expression it was being sensed in the late decades of the nineteenth century.

¹ *Ibid.*, pages 157-158. [My italics.]

II. THE SLOW DEVELOPMENT OF THE ORGANIC
IDEA IN THE NATURAL SCIENCES

Nevertheless, most students of the human sciences were mechanists well down into the twentieth century. Joseph Needham, the distinguished Cambridge biochemist, one of the outstanding organicists among the biologists today, says in his exciting book of essays, *Time: The Refreshing River*: "Certainly during the present century (the 1900's) the vast majority of biologists and biochemists have been 'mechanists.'" In mid-nineteenth century the best ones were saying — witness T. H. Huxley in his *Science Gossip* (1867) — that physiology

"regards animal bodies as machines impelled by certain forces and performing an amount of work which can be expressed in terms of the ordinary forces of nature. The final object . . . is to deduce the facts . . . from the laws of the molecular forces of matter."¹

Throughout the nineteenth century, in fact until about 1920, the biologists were divided into three groups — the vitalists and neo-vitalists represented by J. S. Haldane and E. S. Russell, and the mechanists represented by Jacques Loeb, H. S. Jennings, and Judson Herrick. The former two wanted to leave

"elements of mystery in the universe, and hence they fought decade after decade a stubborn withdrawing action against the ever fresh shock-troops of the mechanists."²

Evidence from Endocrinology and Brain Psychology

Looking back upon it, one is a bit astonished that the biologists were influenced so little by the evidence that accumulated after 1850 in the new study of the endocrine glands. This was a cue to the general effects on the whole organism of changes brought about in the thyroid and parathyroid, the adrenal, pituitary, pineal, and reproductive glands. A half century before that time, between 1775 and 1800, physiologists had discovered the significance of the cell as the unit of structure of the body tissue, had located the thyroid and the adrenal glands, and had recognized differences in nature and function

¹ Joseph Needham: *Time: The Refreshing River*, page 181.

² *Ibid.*, page 179.

THE FOUR FOUNDATIONS OF EDUCATION

between the duct and the ductless glands. But of their "generalizing" function they were unaware.

Then, in the very years we have been discussing, appeared one pioneer of physiology after another. About 1850 the French Claude Bernard and Brown-Sequard, the British Thomas Addison, Schiff, and after 1900 Sherrington, the Russians Bechterev and Pavlov, and the Americans Cannon, Franz, Coghill, Lashley, and others since that time, contributed scientific data to establish the integrative principle. This principle was that the organism tends to respond as a unitary whole in every human act. Steadily one bit of evidence after another documented the *organic nature of the action of all living creatures and equally of the interaction of the organism and its environment*. By successfully transplanting reproductive glands under the skin of animals, it was proved that these had definite powers over the body as a whole. They established equally definite relations between the conditions of the thyroid, pituitary, and other glands and the emotional and physical health of individuals.

In 1902 the Russian physiologist Pavlov conducted his famous experiment in the "sham" feeding of dogs, in which he showed the secretion of gastric juices is a true *psychic* function. Professor Cannon and his research associates at Harvard conducted a generation of researches into the relation between emotion and physical conditions. They showed that pain and intense emotions in animals and in human beings generally evoked increased adrenal secretion and a marked increase in the sugar content of the blood. Injecting adrenalin into the blood stream restored an individual's fatigued muscles. In 1906, Sir Charles S. Sherrington, in a famous monograph, *The Integrative Action of the Nervous System*, scientifically documented William James's hypothesis that "reservoirs of power are developed by emotion."

In the 1920's, Coghill's investigations into the early behavior in amblystoma and man established that the initial movement of the embryo is a mass movement of the organism as a whole. In the same years Lashley conducted revealing experiments on the behavior of rats and monkeys. By destroying various areas in the animal's cortex he disproved accepted theories of localization of function and the (Thorndike) synapse theory of learning, and contributed important support for the mass-action view.

Thus the chorus of emphasis from physiologists, brain psychologists, and everyday observation as to the "wholeness" of an organism's

response has increased steadily during the past two generations. The point of view can be summed up in J. B. S. Haldane's description of metabolic activity as a whole process: "Such processes as secretion, absorption, growth, nervous excitation, muscular contraction, were treated formerly as if each was an isolable physical or chemical process, instead of being what it is, one side of a many-sided metabolic activity of which the different sides are indissolubly associated." Other physiologists and physiological psychologists have made "integration," or "organization," the very crux of their interpretation of behavior; witness the psychobiologist, who treats the individual as a "whole personality." Even the behaviorist John B. Watson acclaimed the "integration and total activities of the individual."

By 1929 the British biologist, J. H. Woodger, was insisting that if we used the term "vitalism," we should have it mean "the living being consists of an X in addition to carbon, hydrogen, oxygen, nitrogen, etc., plus organizing relations."¹ This, said Needham, was "one of the first clear statements of the objectivity and importance of *organizing relations* in the living system." He drove home his point:

"*Organizing relations*, then, were to become the object of scientific study, not the home of an inscrutable vital principle, nor the axiom from which all biology must proceed." . . . "Organicism, if not obscurantist, was bound to be the death of 'vitalism' as well as of 'mechanism.'"² [My italics.]

Needham himself recognizes *the concept of organization as the basic principle of all human development*. "The fundamental thread that seems to run through the history of our world is a *continuous rise in level of organization*." He shows that the organic conception of the world "involves *succession* in time and *envelopes* in space . . . it is obvious that the different levels of organization, for such we must call them, occur one within the other." Moreover, the "organic view of the world has considerable historical and social significance." Developments in the economic and political structure of society go hand in hand with those in the sciences. Note the parallelisms: that between the age of Newton and Descartes and the rise of economic individualism to power over government . . . that between the rediscovery of atomism in the physical sciences and the freeing of commer-

¹ *Ibid.*, pages 182-183.

² *Ibid.*, pages 183-184.

THE FOUR FOUNDATIONS OF EDUCATION

cial enterprise in the seventeenth century. Today we have a similar parallelism — a tremendous rediscovery of the organic interpretation of the world at the very moment when society is moving into a new era of vast amounts of social control and organization. Needham speculates: it may be

“that we are on the threshold of a long period, lasting perhaps for several centuries, in which the organic conception of the world will transform society, giving it a unity more comradely and equal than feudalism, but less chaotic and self-contradictory than the centuries of capitalist atomism.”¹

Alfred North Whitehead, perhaps the greatest living organicist, agrees:

“Science is taking on a new aspect which is neither purely physical nor purely biological. It is becoming the study of organisms. Biology is the study of the larger organisms, whereas physics is the study of the smaller organisms.”²

“There are also organisms of organisms. Suppose, for the moment and for the sake of simplicity, we assume, without any evidence, that electrons and hydrogen nuclei are such basic organisms. Then the atoms and the molecules are organisms of a higher type, which also represent a compact definite organic unity. When we come to the larger aggregations of matter, the organic unity fades into the background. It appears to be but faint and elementary, it is there, but the pattern is vague and indecisive. It is a mere aggregation of effects. When we come to living beings, the definiteness of pattern is recovered and the organic again rises into prominence.”³

III. JUST BEFORE 1890 FORERUNNING ARTISTS SENSED THE ORGANIC IDEA

Meanwhile the reign of mechanism was as rigid in the arts as it was in the sciences and technologies. Most architects, painters, sculptors, playwrights, poets, and musicians were “thing” artists. Almost throughout the nineteenth century expression was representative and photographic imitation of the standard styles of the past. Houses

¹ *Ibid.*, page 186.

² A. N. Whitehead: *Science and the Modern World*, page 150.

³ *Ibid.*, page 161.

THE GREAT SHIFT IN THOUGHT

were eclectic assemblies of Greek columns and capitals, Roman domes and arches, Gothic roofs and windows, Byzantine turrets and Georgian façades. The measure of the worth of painting and sculpture was likeness — surface resemblance to the thing itself. A play was a mosaic assembled by several individualistic competing prima donnas — playwright, stage designer, producer, director, actor, lighting and costume specialists. Until our times both popular taste and esthetic production were at a low ebb, stunted by a false atomistic and mechanistic interpretation of the world of living beings.

But the new inter-Atlantic mood had given birth to a few great mutants of expression who felt the organic idea. These original spirits succeeded in throwing off the hold of mechanism even before our times. It was they who ushered in an era of creative statement that we can now see is the most expressive period in modern history.¹ In the eighties it was definitely revealed in the painting of the French Paul Cézanne and of the German expressionists. In America an organic architecture was born as Louis Henry Sullivan, standing on the shoulders of Henry H. Richardson, began designing houses that were not mere assemblies of sticks and stones, but were true organisms of land, site, material, community and regional relationships, functional to the life to be lived in them. The new spirit was in Walt Whitman's *Leaves of Grass*, great dynamic poem of America and the Americans. It was in Gordon Craig's production of true theater when the competing individualists were replaced by the organic unity of the artist-director. All of this was going on at one and the same time. Sullivan was building his new buildings at the very moment that Cézanne was painting his new "astigmatic" paintings, and Appia, Copeau, and the *Nouvelle Revue Française* were organizing the creative revolution in the French theater. While Craig was creating the modern theater and the Webbs, Hobson, Tawney, Shaw, *et al.* were building a new school of economics and political science in Britain, Reinhardt and the first "expressionist" painters were at work in Germany, the Moscow Art Theater was active in Russia, and modern music was being heard across Europe. The whole mood was "modern" — meaning dynamic, indigenous, and organic, each expression fitting its own community and national life . . . the Social *We* taking its place beside the individual *I*.

¹ The fuller story of our Age of Expression is given in Chapter XIII.

THE FOUR FOUNDATIONS OF EDUCATION

THE GREAT DICHOTOMY

These brief examples must serve to define this deep-seated shift in mood and thought from mechanism to organism. Throughout this book I shall attempt to show its effect on every aspect of the culture. By our times the change had already shaken leaders in various professions into a great dichotomy. For clearness and in spite of the danger of oversimplification (I hope that the remainder of the book will rectify that) I shall call them **THE THING PEOPLE AND THE FORCE PEOPLE**. The scholars in our universities, the artists in our studios, the politicians and statesmen in our government, the judges of our courts, to cite outstanding examples, have divided themselves during our times in that way. The characteristics of their outlook and production reflect two sharply different attitudes toward life. One is superficial, centered on things; the other is profound, focused on forces or relationships. The former cannot see below the *shapes* of the surface contours of life; the other feels the depths. The measure of the first is *Likeness*, conformity to pattern; that of the latter is *Form* — which is organic expression produced by the Person.

I am convinced that enough is known of the traits of these two kinds of people to juxtapose them succinctly. In order that they may be made useful as a yardstick I present them in tabular form on the opposite page.

BY THE 1890'S THE STUDY OF HUMAN BEHAVIOR HAD BECOME THE CENTER OF ATTENTION

At the turn into our own century, a huge body of biological, psychological, and sociological data and interpretation had been piled up in the technical libraries, ready for the work of great integrating empirics. *At that very moment several Americans were engaged in its organization and appraisal.* They had at their command the makings of two human sciences:

- The “Science” of Man, his nature and behavior — the new Psychology; its physiological foundations and the related psychiatry and mental hygiene.
- The “Science” of Society and Culture. For brevity I shall refer to this as “Sociology”; it is intended to include the entire range of what we call today the “Social Sciences.”

THE GREAT SHIFT IN THOUGHT

THE GREAT DICHOTOMY

THE THING PEOPLE

- Define the world in terms of Substance – the thing.
- Deny change, insist on status quo.
- Are oriented in the historical past; force the present into its matrix.
- See the living creature as additive mechanism.
- Express the surface shapes and contours of the things themselves. This is mechanism in human science; representation and photographic reproduction in the arts; memory, obedience, and giving-back-what-was-set-out-to-be-learned in education.
- Think by comparing with norms – the averages of frequencies – in terms of rank-order of size.
- Psychology, sociology, esthetics, and ethics – all mechanistic, additive.
- Find causes of behavior in neural connections, associations.

THE FORCE PEOPLE

- Define the world in terms of function – the relations between things.
- Accept the concept of change as fact; let their minds conclude what the facts of change conclude.
- Are oriented in the present situation, interpret the present as the product of the past.
- See the living creature as integrated organism.
- Express the forces, tensions, push-and-pull in the world; in painting, poetry, dance, theater, education, as well as in science and technology, these are relationships.
- Think in terms of thorough study of integration of forces in an actual situation.
- Psychology, sociology, esthetics, and ethics – all organic, integrative.
- Find causes of behavior in psychic forces, energies.

THE FOUR FOUNDATIONS OF EDUCATION

Human experience was their chief concern, and the key to it was the behavior of men. The result was that by the 1890's, in America as well as in Europe, thinking men gave themselves more and more to the study of psychology. The study of *being* declined . . . the study of *behaving and knowing* advanced. *As thinking minds have turned from authority to experience, psychology has become the key body of concepts.* Throughout this book I shall document that generalization. We shall see that it is impossible to state the new sociology except in psychological terms. Economic problems, problems of government, of communication and consent, of esthetic expression, morals, ethics, and discipline — all are psychological. But it is equally impossible to state the new psychology except in sociological terms. *The terms of human behavior are social. Thus our study is above all a social psychology of man and his changing society.*

On this, buttressed by the new knowledge on the frontiers of esthetics and ethics, we can build an education fit for a free society.

In the next ten chapters I shall give my answer to the question: What have we in education learned from the new psychology and sociology that we can now use in building a good school?

Part Two

THE HUMAN FRONTIER: A NEW PSYCHOLOGY FOR A NEW EDUCATION

The New Statement Is Thoroughly American

Although the Americans of the 1890's were too humble in the presence of Europe to have much prevision of their own destiny, their culture was to become within the next half century the chief sustaining soil for the Great Tradition and the instatement of the philosophy of experience. Even then Europe was breaking up. The disintegration of the unified culture of medieval Europe was almost complete. Industrialization of the continent had already built thirty little countries with thirty competing, suspicious nationalisms, in one of the world's garden spots where one unified European people should have been cultivating a great society of economic and spiritual abundance. But the competitive conditions of its settlement and the conflicts carried on by its Exploitive Tradition were, even at the turn into the twentieth century, transforming it into six armed camps leagued against each other — three against three. Within the next generation they well-nigh destroyed it in a Thirty Years War. The seeds of the destruction grew into the foul plants of Nazism that strangled the flower of creative Europe. Most of the men of the Great Tradition fled to America; a few stayed and were killed. The creative potential in the youth of Europe was directed into evil channels and stunted so greatly that only time can tell how soon it can rediscover itself.

Partly, therefore, because Europe was becoming impotent, partly because the strong seed of the productive and democratic spirit had

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

been sowed in North America, and partly because the conditions here were most favorable for its growth, *the philosophy and psychology of experience that matured in the twentieth century were thoroughly American*. American teachers must understand this tremendous fact, for they now have laid upon them both a magnificent opportunity and a sobering responsibility. I assert the American contribution in no chauvinistic mood; rather in the spirit of grateful humility at the opportunity now presented to our people.

Creative Americans documented this concept of experience on four creative frontiers — the psychological . . . the social . . . the esthetic . . . the ethical. As a consequence we not only know infinitely more about the operation of our social system than we did in 1890; in addition we can found the school today on a documented body of knowledge and a workable social theory of man and his changing society. Note the twofold concept: Man . . . His Changing Society. Our knowledge of the two has widened to embrace two foci — a new biopsychology and a new sociology. A single body of students, imbued with the philosophy of experience, renovated our understanding of both; they formulated a new science of society and a new psychology at the same moment. One wing — Peirce, James, Dewey, and their associates — formulated the *psychology*; the other group laid the foundation for a new science of society and culture. In Part II — Chapters III to VII — I shall make a synthesis of the great concepts that have emerged on this psychological frontier.

CHAPTER III

The American Psychology of Experience Founded: Peirce and James

THE CENTERS OF CREATIVE CONTAGION

While scores of imaginative men contributed to the new psychology of experience, a dozen led the way. In several centers of contagion they gathered, cross-fertilizing one another so vitally that it is difficult to trace the ancestry of their concepts to any one of them. But the history is clear that in some half dozen places the most profound and original thought took place.

First and foremost was Harvard University in Cambridge, Massachusetts, where first-rank minds worked together periodically from the 1860's to the present day. In the '60's the stimulating center was the famous little Metaphysical Club that Charles Peirce had organized around Chauncey Wright and himself.¹ At the turn of the century it was the stellar Harvard group in philosophy around William James. At various times since it has been other groups, such as the physiologists around Walter Cannon and the men in the Law School.

The second center of thought was the group that gathered at the new Johns Hopkins University (1876), especially in the 1880's and 1890's. There Daniel Coit Gilman gathered a score of men who were to discover the new concepts on several frontiers. There Peirce taught Dewey, Veblen, and others in the early 1880's, and there came Remsen and Sylvester, Rowland and Michaelson, in the physical sciences.

The third was the new University of Chicago, especially in the decade of 1894 to 1904, when Dewey, Veblen, Mead, Thomas, Angell,

¹ Although most of the members were graduates of Harvard, none was then a member of the Harvard faculty.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

Caldwell, and Starr were founding the functional and social psychology of human behavior, and the Deweys their great laboratory school.

The fourth was Columbia, from the 1890's to the present day. J. McKeen Cattell and James Harvey Robinson were there, and John Dewey, Franz Boas, Charles A. Beard, Robert S. Woodworth, and Edward L. Thorndike and our contemporaries in Teachers College down to *The Social Frontier* group of the 1930's and 1940's.

And there were others. James Allen Smith and Vernon L. Parrington at the University of Washington . . . Frederick Jackson Turner and Edward A. Ross, Robert Ely and John R. Commons at the University of Wisconsin . . . Charles Horton Cooley at the University of Michigan . . . and Simon Nelson Patten at the University of Pennsylvania.

And in a dozen places isolated free lances were building new foundations alone. From 1882 to 1932 in two Supreme Courts — first in Massachusetts and then in the highest court of the land — Oliver Wendell Holmes, Jr., reinterpreted the law in the light of the philosophy of experience that he had first glimpsed from Peirce and Wright in the Metaphysical Club in the 1860's. In Chicago, Louis H. Sullivan and his young assistant Frank Lloyd Wright were building indigenous American houses and discovering the foundational concepts of creative architecture. In Europe, the self-exiled Isadora Duncan was teaching Americans to throw off the false artificial bonds of the classic ballet dance and to use the body as the primary instrument of expression. In New York, the expressive movement in the graphic arts blazed up around Alfred Stieglitz, Robert Henri, Arthur Davies, and "The Eight." And American novel, essay, and verse of high order were beginning to come out of the precipitating influence of Walt Whitman.

Taken all together, the combined contributions of some thirty first-rank personalities created an original philosophy of experience, the concepts of which have become the intellectual underpinning of the new sociology, psychology, esthetics, and ethics.

But Four Original Minds Led Them All

- Charles Sanders Peirce, mathematician and logician; the founder of the current operational psychology and the primitive form of the philosophy known variously as "pragmatism" or "experimentalism."

- William James, author of the first fully integrative psychology of experience.
- John Dewey, first to make a full statement of the organic, experimental, and functional psychology and the first to found a laboratory elementary school on a consistent theory in psychology.
- Thorstein Veblen, America's first social psychologist and pioneer student of the economic system.

The choice of these four alone will perhaps induce a storm of additional nominations from my readers; many others were vastly important contributors, but as we shall see, Peirce, James, Dewey, and Veblen really led the way. I center attention on them not only because they made original contributions; in addition they personally "taught" the others. James, Veblen, Dewey, and a host of lesser figures stem directly from Charles Peirce. Veblen gave hundreds of analysts of Western culture the foundational concepts of a functional social system. Dewey carried the concepts into psychology, philosophy, and education. It is no exaggeration to say that the new functional psychology and the new schools owe more to him than to any other single figure in modern American history.

In the next five chapters we shall see how the definite connections between these men built the new functional and organic orientation toward life and education. Peirce and Veblen were encyclopedic minds embracing fields of study of vast scope. James was the great psychological synthesizer of our times. Dewey, more than any other, phrased the scientific method of inquiry. All four grew up in the midst of the new scientific and Darwinian climate; they associated with each other and with the world's leading students of the newer psychology and the social sciences. *In a sense sociology and psychology became one under these innovators, for the sociology was permeated with psychology and the new psychology became increasingly social.*

But Charles Peirce taught them all.¹

¹ If my readers, delving into Peirce's contributions, encounter his name stated as Charles Santiago Sanders Peirce, they will know that (about 1889, I think) he added the name "Santiago" (Spanish for St. James) because of his great admiration and love for his friend William James. This was, of course, long before the estrangement, caused about 1898, by James's "misinterpretation" of Peirce's "pragmatic" account of the meaning of a concept.

I. THE OPERATIONAL CONCEPT OF MEANING

I. CHARLES SANDERS PEIRCE: THE GREAT FORERUNNER

"The most profound mind on the North American Continent." So Josiah Royce once spoke of Charles Sanders Peirce.¹ Dr. Christine Ladd-Franklin, one of his Hopkins students, called him "one of the creators of the world's store of thought." The passage of forty years has justified the appraisal. Peirce saw and stated the conceptual foundations of the functional psychology ten years before William James's *Principles* made the first popular synthesis of the philosophy of experience and nearly twenty years before Dewey's "Reflex-arc-concept" article. Generally appraised as the pioneer logician of America, he was *the true founder of the new operational psychology of meaning, the first to point out the relation between thought and action.*¹ This concept was all laid down in a series of six now famous

¹ An indispensable account of "The Logical Development of Peirce's Thought" can be found in the first two chapters of James Feibleman's *An Introduction to Peirce's Philosophy*.

SELECTED SOURCES: THE CONTRIBUTION OF PEIRCE, JAMES,
AND DEWEY TO THE PSYCHOLOGY OF EXPERIENCE

Although I shall refer constantly to the writings of the three leaders, I shall assemble next a short list of the specific ones upon which our consensus rests.

1. The Contribution of Peirce:

- For the most compact assembly of the original material on the operational principle of meaning, see his *Chance, Love and Logic*, edited by Morris Cohen, with an Appendix by Dewey.
- For much personal material on Peirce, Wright, James, and Peirce's students, see *Journal of Philosophy, Psychology, and Scientific Methods*, 1916, Vol. 13.
- For the fullest published statement of his logic, scientific metaphysics, principles of philosophy, and "pragmatism and pragmatism," see his six-volume *Collected Papers*, Harvard University Press; an equal amount of material still remains unpublished.
- The best statement of Peirce's philosophy conceived as a system, in my judgment, is James Feibleman's *An Introduction to Peirce's Philosophy*.
- A short statement of his work on "signs" appears in the Appendix to Ogden and Richards' *Meaning of Meaning*.
- The first suggestion that Peirce's concepts were the pioneer foundation of our own active educational psychology in progressive education was perhaps published in my *Culture and Education in America* (1931); see Chapter VI.

articles in the *Popular Science Monthly* in 1877–1878, and expounded in lectures at the Johns Hopkins University between 1880 and 1884. In these groups were such persons as John Dewey, Thorstein Veblen, James Mark Baldwin, Christine Ladd-Franklin, Joseph Jastrow, E. C. Sanford, and W. H. Burnham — all of whom occupied posts of creative leadership in the building of the American psychology and philosophy in the next fifty years.

Peirce's Famous Metaphysical Club

Peirce traces the emergence of his ideas concerning the psychology of meaning to his friendship and stimulating discussions with Chaun-

SELECTED SOURCES — *Continued*

- Recent documentation of the formation and contribution of the Metaphysical Club can be found in the *Journal of the History of Ideas*; see particularly Philip Wiener's definitive article in the April, 1946, issue, pages 218–233.
- 2. The Contribution of James:
 - The classic and indispensable source is James's *Principles of Psychology* (2 vols.).
 - For the personal relations between the leaders who first built the modern psychology of experience see *The Letters of William James*, edited by Henry James (1920) . . . *The Thought and Character of William James*; edited by R. B. Perry (1935).
 - For an excellent brief selection from James's writings, see Horace Kallen's *The Philosophy of William James*.
- 3. The Contribution of Dewey:
 - For the psychological theory of the Dewey Laboratory School, see K. C. Mayhew and A. C. Edwards: *The Dewey School* (1936). Mr. Dewey wrote about seventy-five pages of this book; see especially the two Appendices.
 - For his analysis of The Act, including the "act of thought," see: *Psychological Review*, July, 1896 . . . *Philosophy and Civilization* (1931), Chapter on "The Unit of Behavior" . . . *How We Think* (1910).
 - For his fundamental educational theory (in addition to *The Dewey School*) see *Democracy and Education* (1916) . . . *School and Society* (1899) . . . *Child and Curriculum* (1902) . . . *Interest and Effort in Education* (1913).
 - For his "social psychology," in addition to the foregoing, *Human Nature and Conduct* (1922).
 - For his old-age reappraisal of the development and contribution of "progressive" schools, see his *Experience and Education* (1938).

cey Wright in Cambridge, Massachusetts. In a letter to Mrs. Christine Ladd-Franklin he describes the manner in which such theories as the meaning of a concept, which he named "pragmatism," grew out of his talks with Wright and the little Metaphysical Club which he started in Cambridge in the late 1860's and early 1870's.

"It must have been about 1857 when I first made the acquaintance of Chauncey Wright, a mind about on the level of J. S. Mill. He was a thorough mathematician of the species that flourished at that time, when dynamics was regarded (in America) as the top of mathematics. He had a most penetrating intellect. There were a lot of superior men in Cambridge at that time. I doubt if they could have been matched in any other society as small that existed at that time anywhere in the world. Wright, whose acquaintance I made at the house of Mrs. Lowell, . . . and I used to have long and very lively and *close* disputations lasting two or three hours daily for many years. In the sixties¹ I started a little club called the Metaphysical Club. It seldom if ever had more than a half dozen present. Wright was the strongest member and probably I was next. Nicholas St. John Green was a marvelously strong intelligence. Then there were Frank Abbott, William James, and others."²

In the Collected Papers (5.12) he says:

"It was in the earliest seventies³ that a knot of us young men in Old Cambridge, calling ourselves, half-ironically, half-defiantly, 'The Metaphysical Club,'—for agnosticism was then riding its high horse, and was frowning superbly upon all metaphysics—used to meet, sometimes in my study, sometimes in that of William James. It may be that some of our old-time confederates would today not care to have such wild-oats-sowings made public, though there was nothing but boiled oats, milk, and sugar in the mess. Mr. Justice Holmes, however, will not, I believe, take it ill that we are proud to remember his membership; nor will Joseph Warner, Esq. Nicholas St. John Green was one of the most interested fellows, a skillful lawyer and a learned one, a disciple of Jeremy Bentham. His extraordinary power of dis-

¹The dates are elusive; Professor Wiener's exhaustive study places them just before and after 1870.

²*Journal of Philosophy, Psychology, and Scientific Methods*, Vol. 13, No. 26, 1916; pages 719-720.

³To judge from the *Letters of William James*, Vol. 2, page 233, there was a meeting of this club in the autumn of 1874.

robing warm and breathing truth of the draperies of long-worn formulas was what attracted attention to him everywhere. In particular, he often urged the importance of applying Bain's definition of belief, as 'that upon which a man is prepared to act.' From this definition, pragmatism is scarce more than a corollary; so that I am disposed to think of him as the grandfather of pragmatism. Chauncey Wright, something of a philosophical celebrity in those days, was never absent from our meetings. I was about to call him our corypheus; but he will better be described as our boxing-master whom we — I particularly — used to face to be severely pummelled. He had abandoned a former attachment to Hamiltonianism to take up with the doctrines of Mill, to which and to its cognate agnosticism he was trying to weld the really incongruous ideas of Darwin. John Fiske and, more rarely, Francis Ellingwood Abbot, were sometimes present, lending their countenances to the spirit of our endeavours, while holding aloof from any assent to their success. Wright, James, and I were men of science, rather scrutinizing the doctrines of the metaphysicians on their scientific side than regarding them as very momentous spiritually. The type of our thought was decidedly British. I, alone of our number, had come upon the threshing-floor of philosophy through the doorway of Kant, and even my ideas were acquiring the English accent."

And in 5.467:

"I understand pragmatism to be a method of ascertaining the meanings, not of all ideas, but only of what I call 'intellectual concepts,' that is to say, of those upon the structure of which, arguments concerning objective fact may hinge."

/ / /

The influence of the little Metaphysical Club is only now, after eighty years, coming to be appreciated. Until recently Wright has been lost sight of.¹ (I propose to bring him out of oblivion in my forthcoming *Creative America*.) Only casual mention is made of the manner in which several of the men took part in it; for example, Mr. Justice Oliver Wendell Holmes, Jr., is not mentioned at all, yet

¹ The student should not miss the studies of Chauncey Wright now being published in the *Journal of the History of Ideas*, especially the work of Professor Philip Wiener, in January, 1945. See Chapter XV for a more extended reference to the influence of Peirce and Wright or Justice Holmes and his reformulation of the interpretation of the law in our times.

Holmes was a frequent attendant and a close disputant with Peirce.¹

The influence of the disputations of the Metaphysical Club was far-reaching; there the philosophy of experience got its twentieth-century epistemology — a *psychology and theory of knowing* of epoch-marking significance. Peirce first called it pragmatism, but after 1898, when James gave that title to his own philosophy of *Truth*, Peirce disagreed with him violently and renamed it “pragmaticism,” a title “ugly enough to escape the kidnaper.” *But out of it emerged a psychology, a “behavior” psychology linking thought and action.* In his 1902 letter, thirty years after the Metaphysical Club arguments, Peirce said of his theory in order to distinguish it from James’s:

“Although James calls himself a pragmatist and no doubt he derived his ideas on the subject from me, yet there is a most essential difference between his pragmatism and mine. My point is that the meaning of a concept . . . lies in the manner in which it could conceivably modify purposive action, and in this alone. James, on the contrary, whose natural turn of mind is away from generals . . . in defining pragmatism, speaks of it as referring ideas to experiences, meaning evidently the sensational side of experience, while I regard concepts as affairs of habit or disposition, and of how we should react.”

PEIRCE FIRST STATED THE OPERATIONAL
INTERPRETATION OF MEANING

In the original six articles in the *Popular Science Monthly*, “How to Make Our Ideas Clear,” Peirce said:

“The whole function of thought is to produce habits of action. . . . What a thing means is simply what habits it involves. . . . What the habit is depends on when and how it causes us to act . . . there is no distinction of meaning so fine as to consist in anything but a possible difference in practice.

“Let us illustrate this rule by some examples; and, to begin with the simplest one possible, let us ask what we mean by calling a thing *hard*. Evidently that it will not be scratched by many other substances. The whole conception of this quality, as of every other, lies in its conceived effects. There is absolutely no difference between a hard thing and a soft thing so long as they are not brought to the test.

¹ See Chapter XV for a more extended reference to the influence of Peirce and Wright on Justice Holmes and his reformulation of the interpretation of the law in our times.

"Let us next seek a clear idea of Weight. This is another very easy case. To say that a body is heavy means simply that, in the absence of opposing force, it will fall. This (neglecting certain specifications of how it will fall, etc., which exist in the mind of the physicist who uses the word) is evidently the whole conception of weight. It is a fair question whether some particular facts may not *account* for gravity; but what we mean by the force itself is completely involved in its effects."¹

In his first article he formulated the device for making ideas clear:

"Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object."

This is what came to be known as "The Principle of Peirce," and in our own day as "the operational conception of meaning." It was a principle of method and not a proposition in metaphysics, as most of his skeptical philosopher contemporaries insisted.² John Dewey, in an interpretive article in honor of Peirce,³ quotes James as saying in his California Union address in 1898, in general what I have said in the foregoing paragraphs about his priority in the building up of the meaning of the concept. Dewey paraphrased Peirce as follows:

"He framed the theory that a conception, that is the rational purport of a word or other expression, lies exclusively in its bearing upon the conduct of life; so that, since obviously nothing that might not result from experiment can have any direct bearing

¹ Peirce: *Chance, Love and Logic*, pages 43-48.

² See *Studies in Logic*, by members of the Johns Hopkins University, 1883; evidently written by Mrs. Ladd-Franklin and three others, Allan Marquard, C. H. Mitchell, and B. I. Gilman, in addition to Peirce himself. There is just now a rising vogue for the study of Charles Peirce. Six volumes of the tremendous body of unpublished papers left at his death were purchased from his wife by Harvard University and were published by the Harvard University Press in 1930, under the editorship of Charles Hartshorne and Paul Weiss. During the past few years many articles have appeared in philosophic magazines about Peirce. One of the most important elucidators and clarifiers of the Peirce point of view is James Feibleman of New Orleans, who, in writing an original book, with J. F. Friend, entitled *The Unlimited Community* (Allen Unwin; London, 1936), had arrived independently at basic concepts stated a half century earlier by Peirce. Harpers published Feibleman's critical book, *Introduction to Peirce's Philosophy*, in 1946.

³ *Journal of Philosophy*, 1916 (Volume 13, pages 709-715), the article reprinted as the Appendix to *Chance, Love and Logic*.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

upon conduct, if one can define accurately all the conceivable experimental phenomena which the affirmation or denial of a concept could imply, one will have therein a complete definition of the concept, and there is absolutely nothing more in it. For this doctrine, he invented the name pragmatism."

Morris Cohen¹ interprets a passage from Peirce in which the latter gives great credit for the "doctrine of pragmatism" to Chauncey Wright; and then adds a very illuminating comment on the role of concepts in finding meaning:

"Wright insists, therefore, that the principles of modern mathematical and physical science are the means through which nature is discovered, that scientific laws are the finders rather than merely the summaries of factual truths."

Cohen adds:

"This conception of the experimental scientist as translating general propositions into prescriptions for attaining new experimental truths is the starting point of Peirce's pragmatism. The latter is embodied in the principle that the meaning of a concept is to be found in 'all the conceivable experimental phenomena which the affirmation or denial of the concept could imply.'"²

Hence the meaning of an idea is "found not by an intuition of it, but by working out its implications." Peirce is interested "in the function of ideas as guides of action." Constantly he emphasizes the "consequences for meaning that follow from the acceptance or rejection of an idea." This far-reaching pragmatic test of meaning — "What difference will it make if we act upon it?" — has become a shibboleth of the educational philosophers of today. And every now and then in the writings of Peirce came another provocative idea that has been overlooked to this moment; namely, that "*generals*" (*generalizations*) are the cues to meaning. I shall make definite use of that concept in Chapter VII.

Peirce regarded himself as a logician because he was a worker in the laboratory where facts emerged in action. He was contemptuous of professors of logic who did not actually build their concepts out of experimental data. He said, for example, in Baldwin's Dictionary, in an article on Method:

¹ Introduction to *Chance, Love and Logic*.

² Quoted in *Chance, Love and Logic*, from *The Monist*, Vol. 15, page 180.

"for the last three centuries, thought has been conducted in laboratories, in the field, or otherwise in the face of facts, while chairs of logic have been filled by men who breathe the air of the seminary."¹

THE MAKINGS OF A FEELING-BODY-RESPONSE
PSYCHOLOGY IN PEIRCE

In coming to Peirce's other major contribution to the psychological foundations of education I pause for a brief but necessary prefatory note. My studies of Peirce, James, and Dewey² are convincing

¹ BRIDGMAN REDISCOVERS "OPERATIONAL" THINKING

Thus it was really two mathematical physicists, both Harvard men and both interested in psychological problems, who have done much to state for us the basic law of the meaning of a concept. The first was Peirce; the second was P. W. Bridgman, Professor of Mathematics and Natural Philosophy at Harvard since 1926.

Writing fifty years after Peirce, Professor Bridgman reasserted in his *Logic of Modern Physics* (1927) and *The Intelligent Individual and Society* (1938, page 54) his principle and renamed it the "operational" test of meaning. Discussing at great length the epoch-marking influence of Einstein on "what the concepts useful in physics are and should be," he shows that *the role of the concept is in finding the new relation* (another epoch-marking statement of Wright and Peirce) and says there is a new attitude toward concepts:

"We may illustrate by considering the concept of length. . . . We evidently know what we mean by length if we can tell what the length of any and every object is, and for the physicist nothing more is required. To find the length of an object, we have to perform certain physical operations. The concept of length is therefore fixed when the operations by which length is measured are fixed: that is, the concept of length involves as much as and nothing more than the act of operations by which length is determined. In general, we mean by any concept nothing more than a set of operations; *the concept is synonymous with the corresponding set of operations.*"

"It is evident that if we adopt this point of view toward concepts, namely that the proper definition of a concept is not in terms of its properties but *in terms of actual operations*, we need run no danger of having to revise our attitude toward nature. *The true meaning of a term is to be found by observing what a man does with it, not by what he says about it.*"

In all of Bridgman's writings which I have searched, I have been unable to find any reference to Peirce. I suggest that the study of the recent writings of the new physicists will reveal a marked swing in the same direction as Peirce and Bridgman. Witness: Sir James Jeans: *Physics and Philosophy* . . . Max Planck: *The Philosophy of Physics* . . . Arthur S. Eddington: *The Mathematical Theory of Relativity*. All are writing primarily as "psychologists interested in 'how men know.'"

² Carried on continuously since 1926, when I began the writing of *Culture and Education in America*.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

that by 1890 the combined efforts of Peirce and James had laid a fairly complete and adequate psychological foundation for the new education.¹ Three concepts, stated in the order in which Peirce presented them, constituted the core of their psychology of the act:

First — feeling

Second — the active response of the body

Third — thought . . . the concept

After 1895, John Dewey, whose writings came to be taken as the Bible of the progressive educators of the country, especially after World War I, developed his intriguing "experimental" theory around the second and third of these concepts — active response and thought, particularly problem-solving thought — neglecting, or at least failing to emphasize, throughout his fifty years of writing the concept that Peirce and James had regarded as prior — namely, Feeling. *So influential have been Dewey's pronouncements, with the parallel neglect of Peirce and James by students of education, that this has led to the acceptance in colleges and schools of a thoroughly intellectual, problem-solving psychology. It has emphasized thinking, and thinking of only one type, at the expense of feeling and body response, and has greatly warped the curriculum and psychological emphasis of the progressive schools.*

The full explanation of how this came about is not at all clear. Some phases of it may never be clear, for only Mr. Dewey knows why he became such a devotee of "the problem" and he has long been loath to indulge in autobiographical writing, or conversation.

But the evidence is now clear that Charles Peirce, and after him William James, saw the conceptual processes, thinking, reasoning, definitely in a setting created by feeling and the active responses of the body.² I document the importance that Peirce attached to this

¹ It still lacked, however, the "depth" concepts of the personality which Freud and his associates made available after 1890; see Chapter VI.

² Only careful research will clear up the influence of Peirce and James on the development of the psychological thought among the progressives. Because of the renewed interest in the role of Charles Peirce, new evidence is coming to light constantly these days. We know now, for example, that Mr. Dewey, along with other leaders, was a student of Peirce's at Hopkins in 1882 and 1883. Although there have been constant denials of this by the followers of Dewey, the current study of Mr. Ronald Levy, my assistant and doctoral candidate in Teachers College, establishes through copies of the official register of Johns Hopkins University for 1882 and 1883 that Mr. Dewey was registered in two of Peirce's courses.

triad by quoting very briefly from both the ontological and the psychological parts of his writing.

As the six volumes of the *Collected Papers* establish, Peirce built his psychology on a twofold foundation: (1) a logic, which is the "science of signs," called semiotic . . . and (2) an ontology. Underpinning these basic elements of his theory are the three concepts already named — Feeling . . . Reaction, or Body Response . . . and Concept.¹

"Category the First is the idea of that which is such as it is, regardless of anything else. That is to say, it is a Quality of Feeling." (5.66)

"The first proper significate effect of a sign is a feeling produced by it." (5.475)

"Consciousness alone — that is, feeling — is the only distinctive of mind." (5.492)

"The whole content of consciousness is made up of qualities of feeling, as truly as the whole of space is made up of points of a whole of time of instants." (1.317)

"Contemplate anything by itself — anything whatever that can be so contemplated. Attend to the whole and drop the parts out of attention altogether. One can approximate nearly enough to the accomplishment of that to see that the result of its perfect accomplishment would be that one would have in his consciousness at the moment nothing but a quality of feeling . . . *to be conscious is nothing else than to feel.*" (1.318) [My italics.]

In Volumes I and V of the *Collected Papers* there are many pages of exposition of the importance, in fact the priority, of Category the First, — feeling.

/ / /

That there is a given order in Peirce's conception of the act of response is shown also by his Category the Second; this he names "Reaction." (5.66)

¹The beginning student will be greatly aided in obtaining a grasp of Peirce's whole structure from James Feibleman's *An Introduction to Peirce's Philosophy*, and will be saved a bewildered and baffled search entailed by going through the *Collected Papers*. See especially Feibleman's Chapters IV and VI.

In my quotations from Peirce I shall follow the standard practice of citation; for example, 5.66 means Volume 5, paragraph 66.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

"Besides Feelings, we have Sensations of reaction; as when ... we make a muscular effort" ...

"The sense of effort ... seems to be a sensation which somehow arises when striped muscles are under tension." (5.539)

"The sense of action and reaction, or the polar sense ... is plainly connected with the discharge of nervous energy through the nerve fibers." (1.386)

✓ ✓ ✓

Third, in the sequence of elements of the act, is Concept; I quote several excerpts from the *Collected Papers*, especially from Volume VI.

"Very different from both feelings and from reaction-sensations or disturbances of feeling are general conceptions." (6.20)

Here Peirce means ideas, judgment, reasoning, thought, cognition — in short, "general conceptions." But even these are rooted in the body and its responses. Note:

"The cloudiness of psychological notions may be corrected by connecting them with physiological conceptions." (6.22)

"General conceptions arise upon the formation of habits in the nerve-matter, which are molecular changes consequent upon its activity and probably connected with its nutrition." (6.22)

"Intellectual power is nothing but facility in taking habits and in following them in cases essentially analogous to, but in non-essentials widely remote from, the normal cases of connections of feelings under which those habits were formed." (6.20)

"The one primary and fundamental law of mental action consists in a tendency to generalization. Feeling tends to spread; connections between feelings awaken feelings; neighboring feelings become assimilated; ideas are apt to reproduce themselves ... feelings, by being excited, become more easily excited, especially in the ways in which they have previously been excited. The consciousness of such a habit constitutes a general conception." (6.21)

But Peirce makes equally clear that while he emphasizes the response of the body in determining the nature of the act and its meaning, he provides a definite place for psychological explanations. He says, for example:

"The starting point of all our reasoning is not in sense impressions, but in our percepts. When we first wake up to the fact that we are thinking beings and can exercise some control over our

reasonings, we have to set out upon our intellectual travels from the home where we already find ourselves. Now, this home is the parish of percepts." (4.6111)

These quotations from Peirce's ontological and psychological pages, brief and overly compact though they are, establish very clearly the role of feeling and the active response of the body in his theory of the human act. How much this view influenced William James in writing the great *Principles of Psychology* we cannot be sure. It seems likely that these ideas, as well as the "operational" interpretation of meaning, must have been vigorously discussed in the meetings of the Metaphysical Club. In any event, whether the original stimulation in the development of James's views came from Peirce or whether it came more directly from James's years of study and experience in physiology, we know now that he came to lay great stress upon the priority of feeling and body-response in his discussion of the psychology of the act. Since the whole problem is discussed much more clearly in the following section on James, I shall make no more reference to it at this time.

Charles Peirce worked alone for thirty years after he lectured to the youngsters at Hopkins in the 1880's. Alone — except for the ever present faithful protection of his second wife¹ — in the garret writing room in his eastern Pennsylvania house, to which, we are told, he used to retire, pulling the ladder up after him to maintain his privacy; poverty-stricken, alone, and neglected, writing what proved to be *the most profound, if also the most abstruse, psychology of ideas the world has ever known*. But out in the world of action, on both sides of the Atlantic there were shaping intellectual forces to which his ideas would soon contribute and begin to form a dynamic and practical psychology, sociology, and esthetics.

Thirty years passed after the exciting discussions of the Metaphysical Club. It was the period of the improvisation of the great industrial expansion; but it was also the most fertile intellectual generation America had yet produced.

¹ See her obituary by Joseph Jastrow, *Science*, November 16, 1934.

II. THE PSYCHOLOGY OF EXPERIENCE
STATED IN A GREAT AMERICAN SYNTHESIS

William James's Principles of Psychology

In 1878, the persuasive Henry Holt got William James, a professor in the Harvard Medical School, to sign a contract to write a "Psychology." Twelve years later, 1890, Holt published James's two-volume *Principles of Psychology*. In spite of its two thousand footnotes, its long technical quotations, and an insistent habit of facing all the "hard irreducible facts," it was a literary as well as a scientific event. The book was read and acclaimed by cultivated leaders on both sides of the Atlantic. It was also an intellectual event of the first magnitude, for it laid the groundwork of the psychology that in the next fifty years became the basis of progressive American education. Today, as in 1890, a thoroughly good school could be built upon it. If it is viewed in relation to the work of James's younger contemporaries — Dewey, Mead, Veblen, Thomas, Angell — it stands out as the great initiating synthesis of the American view of human nature and behavior.

The timing of its completion and publication was fortunate, for in 1890 America stood at a verge. A new world lay ahead, old objects of allegiance were being questioned, new ones were building. The insistent need was for synthesis, for an inventory of the intellectual stock of the pioneering and controversial half century that had just passed. Great empirics were called for, interpreters with insatiable curiosity and powers of literary expression. On the human frontier, William James emerged as the first of these. James brought together most of the ideas and techniques that had been emerging in the stimulating European scientific movements and set forth most of the really basic concepts upon which American psychology was to work for the next fifty years. He embraced the Darwinian cue and became one of the chief interpreters to America of British evolutionary biology. *This concept of the growth of the living creature, learning by his own efforts to cope with his world, to become master of his own destiny, fitted perfectly into the characteristic belief of the American in himself and in his people.* James wrote at the very moment when the Americans were entering their great transitional age. The struggle of "I" and "We" was just moving into a new phase. The democratic idea of the Supreme Value of the Individual was beginning to be written into

governmental and popular practice. James was ideally fitted to write the first over-all interpretation. He built a new and unified psychology out of countless results of observing concrete behavior, out of his own introspection and experience, out of the digesting of an astounding encyclopedic assembly of "studies." He studied all the schools — German mechanism with its introspective method, British associationism, Darwinian and Galtonian evolutionary biology, and French psychiatry. He took over many of the concepts but wove each one into his own outlook and scheme of thought. He himself said it was empirical, although *he insisted that unlike the Germans and the British-American Wundtian, Titchener, he was trying to create a psychology — not a science.*

The *Principles* was a profound study of the American in action. James felt and expressed the spirit of vigorous action and confident mastery of the period of great industrial expansion in which he grew up. He saw men all around him climbing to success through brilliant physical invention and practical business achievement. He saw success measured in cash values, and the vocabulary of his philosophic statements was filled with such practical measures. Growing up in such a climate and endowed with a talent for vivid expression, he gave the infant psychology a pragmatic and functional — what the new physicists soon called an "operational" — direction. Reading James one gets a feeling of a sensitive cultivated, but very practical American, looking over the human continent, sympathetically watching his neighbors on the street, listening to his learned colleagues appraise human nature and behavior, nodding occasional agreement while discounting their myopias, regarding or looking with introspection on his own behavior, feelings, ideas, taking apart and scrutinizing the theories of most of the world's frontiersmen of the mind.

Not only was he molded by the building, expansive economic climate of opinion which to some extent gripped every American. In addition, he was directly influenced by intimate contact with several of the most profound minds of the America of the 1870's — minds which originated much of the foundation of the new American psychology and philosophy. As we have seen, Charles Peirce was his constant friend and stimulating guide in the years of the 1860's when both were young men under thirty. From records that have been left in his *Letters*,¹ and from various other sources, we have evidence of

¹ *The Thought and Character of William James*, edited by R. B. Perry, 1935, and *The Letters of William James*, edited by Henry James, 1920.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

his obligation to the stimulating discussions of Peirce and Wright and the Metaphysical Club.

A quarter of a century later he had surrounded himself in Harvard's Department of Philosophy by what was probably the most profound group of philosophic thinkers in America — Josiah Royce, George Santayana, Hugo Münsterberg, and George Palmer.¹ But Eliot would never let him add Peirce to his group, although James asked for Peirce repeatedly.

HUMAN EXPERIENCE AS THE VALID SOURCE OF PSYCHOLOGY

The starting point for the study of psychology was to be "experience as it is immediately given, the stream of consciousness as it flows before perception, not the simple sensation." Sensations and perceptions are merely human abstractions obtained by analysis. The thinking human being is "concerned with the practical business of reacting to his environment." Here is a new conception of the psychology of human behavior. With the higher learning in America, via the professors of "natural philosophy," still honeycombed with a false theological tradition, the *Psychology* heartened thousands of the younger men to resist the rule of authority and to embrace the scientific method of inquiry. Looking at the animistic theology in the colleges, James said, "Look at the world of hard, irreducible facts" and draw your own conclusions — and don't draw too many; keep an open mind. Thus the *Principles* was a great resource for the younger Americans who were groping toward a new science of psychology founded on the conception that *ideas are formulated by a human being undergoing experience*. No single concept rings out more powerfully in the Americans following James than that of *experience*. Dewey carried it as the central note of his writing for fifty years, building his educational reconstruction upon it. Led by Dewey, out of James and the modern naturalism, the progressives have rebuilt their new schools around the rock-bottom concept of the active experience of human beings. Today, only the scholastic perpetualists of the Great Books and a pseudo-"liberal" education hold out against it.

¹ G. Stanley Hall had been one of his students, and James R. Angell studied with him soon after the publication of the *Principles*.

THE CENTRAL NOTION OF THE SELF IN ACTION

The *Principles* prepared the way for Dewey and his associates at Chicago to achieve a definitive statement of the action-concept. That James had absorbed much of what the Germans had been doing we know from his many references to them, and his introspections led him to great emphasis on the active participation of the individual; witness the practical advice he gives to educators in his later *Talks to Teachers*: "Experience is never yours merely as it comes to you, facts are never mere data, they are data to which you *respond*, your experience is constantly transformed by your deeds."

The result is a "psychology" of activities of living organisms — activities, moreover, that made a difference in the lives of the organisms. It was based upon the observation and introspection of immediate experience, and not on the speculative contemplation of mind. Its publication marked the launching of a truly pragmatic American psychology; a psychology based upon the fact that human beings are essentially creatures of action and feeling and purpose, and only secondarily of intellect and reason. Discarding all orthodox Soul-theories, all "spiritualistic" theories of scholasticism and common sense" and all theories of the absolute existence of "faculties," he builds a psychology of an organism (the body its basis) that "works under conditions, and the quest of the conditions" becomes the job of psychology (Vol. I, page 3). Throughout the two volumes *the experiences of the body are regarded as one of "the conditions."* Chapters on the functions of the "brain" and the "general conditions of brain-activity" lead to the classic chapter on "Habit." Life is seen as the constant accumulation of the habitual *behavior* of the organism ... "walking bundles of habits." *Day by day we are "habitually fashioning our characters."*

The center of his psychology is the stream of conscious thought,¹ described as a continuous, on-moving current, which has definite characteristics: It is personal; the Self is there from the beginning: "every thought tends to be a part of personal consciousness." At the power center of the portrait of human beings in action is the Self, basically physical, but dynamically social and spiritual. This is the "empirical"

¹ Excluding metaphysics and the rule of authority, he accepted the stream of consciousness and thought as the chief subject matter of psychology. "The existence of states of consciousness has not been doubted by any critic." This was twenty years before John B. Watson began his attack on the use of such concepts as consciousness, mind, meaning, memory.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

self, the self known to experience — although the “Ego” must be assayed also, with the result that most of philosophic and theological Europe is discarded.

The Self is Focal. Ideas are formed by the Self from the standpoint of purpose. Reasoning is undertaken by the Self for the sake of action. Beliefs are determined by the Self's wish and will as much as by reasoning and evidence. Thinking is done by a Self which is pursuing practical and limited programs of action.

The stream of thought is always changing; we never have the same idea or mood, the same sensation or perception, meaning or concept, twice. The stream of thought is sensibly continuous; there are no breaks in the stream of consciousness, only a felt, experienced continuity. Using his doctrine of the fringe, James explains general and abstract ideas, and the experience of time, and how the course of human thought zigzags, moves about, how free association takes place, how new directions appear, different parts of the stream moving at different rates. The stream of thought always consists of *choosing*, even the sense organs are *selective* apparatus; perception is *selective*.

AN IMPORTANT BUT LONG-NEGLECTED CONCEPT

I come now to one of James's most important contributions, but one which I think has been too much neglected by the psychological and educational world. I refer to his constant stress on the psychological importance of the response of the body. James was a physiologist, at one time a teacher of anatomy in the Harvard Medical School. As he turned to psychology, in the late 1870's and 1880's, he developed his interpretation of human behavior on a thoroughgoing physiological foundation. Among nineteenth-century psychologists, especially the Europeans, this was the rule rather than the exception; most of the mid-nineteenth-century psychologists were indeed trained physiologists. But as scientific psychology developed in America, training in physiology tended to be neglected; certainly the neglect of it is evident in the work of Cattell, Dewey, Angell, Judd, Thorndike, and Watson, to name but a few leaders.

Now James's *Principles of Psychology* gave these young leaders a dramatic introduction to a half-dozen important concepts which they developed in their later work: the role of human experience, the Self, the activities of living organisms, the wholeness character of human response, the importance of habit, the concept of selective choice and reflective thought, and the growth of the living being learning by his

own efforts to cope with his world. All of these ideas Dewey and the others built into their psychology, and we shall see in the next two chapters the magnificent contribution that they made with them.

But James also gave the students who came after him another tremendous concept — one which, however, they did not take. Out of scores of references to it in the *Principles*, I have built a summary statement of it:

- the moving body is a sounding board responding to the world as feelings.
- knowledge about a thing is feeling of its relations.
- the felt-relations of the body are central in every human response.

From my study of the half century of research in psychology and education since James, I am convinced that in his concept of the role of body-response he gave us one of the half-dozen profound and indispensable ideas upon which an adequate program of education can be built. The course of psychology and education during the last half-century would have been different and more effective if Mr. Dewey and his younger students had devoted themselves to the Body-Response concept as thoroughly as they did to the concept of The Problem and Problem-solving Thinking; and while we are on the subject of neglected concepts I must add — if they had also developed the Wright-Peirce idea that concepts are the finders of laws and not their summarizers. I shall develop both of these arguments in Chapter XII and following; here it is necessary to document James's contributions to the concept of the felt-relations of body-response by excerpts from the *Principles of Psychology*.

THE PRIMARY ROLE OF THE BODY AND SELF-FEELINGS

On the first two pages of Volume I, James begins to emphasize *the felt experience of the body* and never ceases for fifteen hundred pages. I cite a few representative paragraphs:¹

“Now, let us try to settle for ourselves as definitely as we can, just how this central nucleus of the Self may *feel*, no matter whether it be a spiritual substance or only a delusive word.”

“For this central part of the Self is *felt* . . . when it is found, it is felt; just as the body is felt, the feeling of which is also an abstraction, because never is the body felt all alone, but always

¹ From *The Principles of Psychology*, Vol. I, pages 291–305, 309–317, 400–401.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

together with other things. *Now can we tell more precisely in what the feeling of this central active self consists, — not necessarily as yet what the active self is, as a being or principle, but what we feel when we become aware of its existence? ...*"

"But when I forsake such general descriptions and grapple with particulars, coming to the closest possible quarters with the facts, *it is difficult for me to detect in the activity of any purely spiritual element at all. Whenever my introspective glance succeeds in turning round quickly enough to catch one of these manifestations of spontaneity in the act, all it can ever feel distinctly is some bodily process, for the most part taking place within the head.*" [My italics.]

"In the first place, the acts of attending, assenting, negating, making an effort, are *felt as movements* of something in the head."

CONSTANT EMPHASIS ON "RELATIONS AS FEELINGS"

His sound pioneering for an organic psychology is shown by James's selection of the concept of "felt-relations" as the nub of his theory. For thirty years,¹ since my first work in mathematics, I personally have stressed it as one of the chief psychological concepts. I am amazed to see, on rereading James after many years, the way in which it bulks up in his great statement; there are hundreds of repetitions of the concept. I cite a few illustrations. Discussing the psychology of the *feeling of relationship* as the focus of the actual stuff of experience, he says:

"If there be such things as feelings at all, *then so surely as relations between objects exist in rerum naturâ, so surely, and more surely, do feelings exist to which these relations are known.* There is not a conjunction or a preposition, and hardly an adverbial phrase, syntactic form, or inflexion of voice, in human speech, that does not express some shading or other of relation which we at some moment actually feel to exist between the larger objects of our thought. If we speak objectively, it is *the real relations* that appear revealed; if we speak subjectively, it is the stream of consciousness that matches each of them by an inward coloring of its own. In either case the relations are numberless, and no existing language is capable of doing justice to all their shades.

"We ought to say a feeling of *and*, a feeling of *if*, a feeling of *but*, and a feeling of *by*, quite as readily as we say a feeling of

¹ Since the publication of my first book, *Fundamentals of High School Mathematics*, in collaboration with John Roscoe Clark. World Book Company, 1918.

blue or a feeling of *cold*. Yet we do not: so inveterate has our habit become of recognizing the existence of the substantive parts alone, that *language almost refuses to lend itself to any other use.*"¹

"Most 'relations' are feelings," he says. Discussing feelings of tendency, he says: "The feeling of an absence . . . is an intense feeling." (Vol. I, 252.) He interprets the meaning conveyed in such phrases as "naught but" . . . and "although it is, nevertheless" . . . as "felt meanings." (Vol. I, 252.)

"'tendencies' are not only descriptions from without, but that they are among the *objects* of the stream, which is thus aware of them from within, and must be described as in very large measure constituted of *feelings of tendency*, often so vague that we are unable to name them at all." (Vol. I, 254.)

"Knowledge about a thing is knowledge of its relations." (Vol. I, 259.) In the chapter on "The Perception of Time" he speaks of the "feeling" or "intuition of time." Discussing memory, it is "the feeling of belief in a peculiar complex object." (Vol. I, 652.) The perception of space is interpreted in terms of "feelings of motion" . . . "the feeling of crude extensity." A "line is a relation; feel it and you feel the relation." (Vol. II, 149-150.) . . . His analysis of comparison and discrimination utilizes the concept of "felt differences." "Feelings of movement in joints." (Vol. II, 189.) "Feelings of muscular contraction." (Vol. II, 197.) "Feelings of convergence of the eyeballs." (Vol. II, 234.) "Feelings of accommodation." (Vol. II, 235.) Belief, which is the "sense of reality," "is a sort of feeling more allied to the emotions than to anything else." (Vol. II, 283.) *He distinguishes feelings from emotions.*

ANTICIPATION OF THE PROFOUND ROLE OF MOVEMENT

In a remarkable chapter on "The Production of Movement":

"The reader will not have forgotten, in the jungle of purely inward processes and products through which the last chapters have borne him, that the final result of them all must be some form of bodily activity due to the escape of the central excitement through outgoing nerves."²

The relation of the feelings to the body and to the entire organism is constantly stressed; for example (Vol. II, 372), he insists "that every

¹ *Principles of Psychology*, Vol. I, pages 245-246.

² *Principles of Psychology*, Vol. II, page 372.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

possible feeling produces a movement [I am inclined to say, with Leo Stein,¹ that it is the movement experienced] and that the movement is a movement of the entire organism, and of each and all its parts." Using the known scientific studies, he analyzes the effect of stimuli upon the circulation of the blood, upon respiration, upon the sweat glands, the abdominal viscera, and the voluntary muscles.

We see his emphasis on the body as a sounding board, the Self responding to the world through its feelings, in the famous chapter in which he presented his theory of the emotions. Quoting Lange's physiological evidence concerning grief, Darwin's on fear, Mante-gazza's on hatred, he says in a boldfaced heading:

EMOTION FOLLOWS UPON THE BODILY EXPRESSION IN THE COARSER EMOTIONS AT LEAST.

But the educational world spent years arguing over his and Lange's theories of the nature of emotion and neglected the educationally far more important concept of the role of feeling.²



With James came the first emphatic assertion on the role of non-intellectual factors in human behavior. He was against the over-intellectualism of the German psychology, insisting that much of man's activity is non-rational. The intellectual activities have total biological utility; witness how our conceptions are the creations of living creatures who are dealing with certain enterprises and aims. These are fashioned out of the flow of experience, in terms of purposes and needs. They are ways of dealing with experience. The intellect fixes them, constitutes them as "the keel and backbone" of our thinking. The concept is of the essence of the active experience.

Like conception and reason, belief was more akin to emotion, also determined by non-rational factors. The conditions of belief all hinge upon the relation of the thing believed to the Self. It must produce action in the Self. Credulity, James says, is our primary response to our own perceptions and thoughts. There are many candidates for belief — *we choose one as real* and disregard the others. He discriminates several orders of reality in which these beliefs have their play: the world of sense — or physical things as we see them ... the

¹ See his *ABC of Aesthetics*, and my Chapter XIV.

² *Principles of Psychology*, Vol. II, pages 449-450.

world of science — in which such things as colors, sounds, and temperatures are excluded ... the world of abstract relations — logic and mathematics ... various supernatural worlds — heaven, hell, and mythology ... the world of intentional fiction ... the worlds of individual opinion ... and the world of madness, which may have its own reality.

/ / /

All too briefly assembled, this is to me the essence, for our stock-taking today, of William James's great *Psychology*. After a half century it is still a classic. It should be *required study* every five years for every teacher in America. I have not tried to summarize it. I have picked only what seems to me to be the essentials that it gives us to understand the consensus of what was learned in the fifty years that followed its publication; *to understand, moreover, the side tangents on which too much of our psychology has wasted its effort and to bring us back to the main line of advance into the post-war world.* For much of that main line is in James.

LOOKING BACK AT THE TRAIL BREAKERS IN PSYCHOLOGY

This must conclude our appraisal of the beginnings of the functional psychology in the pioneering work of Peirce and James. From their intellectual trail blazings we can see emerging the chief concepts of our psychology of man and his behavior. One thing, beyond all question, they succeeded in doing. They completed the demolishing of the philosophy of authority which had governed men's minds through all Western history. In its place they got a general adherence to the philosophy of experience. Building on three centuries of earlier work, they laid the foundation for a behavior psychology and for an organic conception of behavior, both individual and social.

Peirce and James (and, as we shall see in the next chapter, Dewey) share in the credit of being the founders of the new psychology. Peirce cleared the ground first with his great operational principle:

- "that beliefs were nothing more than rules of action."
- "the whole function of thought is to produce habits of action."
- "differences in meaning are but differences in practice."
- "our conception of an object" consists of the ... "practical effects ... we conceive the object to have."

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

And both Peirce and Wright gave us a profound cue to *the true role of concepts; namely that they are the finders of laws, not merely their summarizers.*

But a clear prevision of many of the basic ideas that we use today — and some that we have not begun to capitalize upon — was in James:

- human experience is the only valid source of psychology.
- psychology deals with the activities of living organisms; the total organism acts.
- the Self is the focal agent, driving, directing, inhibiting behavior.
- the moving body is a sounding board responding to the world as “feelings.”
- knowledge about a thing is knowledge of its relations.
- the felt-relations of the body are central in every human response; that is, the relations are felt by body movement.
- the growth of the living creature, learning by his own efforts to cope with and to control his world, is central.
- the day-by-day life of a man “habitually fashions his own character” . . . the concept of habit.
- the functions of the organism are *selective*; the stream of thought chooses.

These were the makings for a functional psychology of mind in use. James, as physiologist and as artist, dramatized all of them and documented some, especially those that had a physiological basis. It was James’s *Psychology* that gave the third generation of psychologists their orientation. It took our minds off the physical structure and centered them on the behavior of human beings. It was an inclusive portrait of the living human creature in action. It recognized fully the intellectual processes of thought, but it put them *in the framework of the body as the primary instrument of response.* It made *generalization* centrally important and body movement — *called feeling* — the instrument. In short, James gave the psychologists and educators of our times a broad base upon which to build a documented psychology and education.

CHAPTER IV

Dewey and the Psychology of the Act

THE CHICAGO GROUP BUILDS A NEW FUNCTIONAL "BEHAVIORISM" — MIND IN USE: 1894-1904

Shortly after 1890 the focus of the psychological scene shifted from the Eastern seaboard to the Middle West — from Harvard, Hopkins, Clark, and Yale to Chicago, Michigan, Wisconsin, and Missouri. The new University of Chicago — "Founded 1893 by John D. Rockefeller," its letterheads announced as late as 1915 when I went there to work with Judd's team in the School of Education — was the most vigorous center. There, in John Dewey's ten years — 1894 to 1904 — the cue concepts of the American psychology of today were stated and tried out in eight years of experimental practice in his laboratory school. A dozen thinking men of the human frontier were engaged in it, but Dewey was the most original, prolific, and persistent — fortunate in physical endowment of health and energy.¹

Dewey was head of three combined departments in the university — philosophy, psychology, and education. Immediately associated with him were several men who were to make distinguished contributions to the building of the new American psychology. There was James Rowland Angell, assistant professor of psychology at the age of twenty-five (Dewey was only thirty-five) and director of the psychological laboratory.² In the department of philosophy were George

¹ I never cease to marvel at his capacity for sustained work. On his eighty-fifth birthday he smilingly told a *New York Times* reporter that he expected in two or three years to be at work on another "serious book." Before his eighty-seventh year he published it — *The Problems of Men*.

² Angell (1869-) had received the A.M. degree in psychology with James at Harvard in 1892, had studied at Vienna, Paris, and Leipzig in 1893, and had been an instructor in psychology at the University of Minnesota.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

H. Mead, most of whose writings were published posthumously,¹ and James H. Tufts, who later was to write *The Ethics* with Dewey as co-author. Near by, on the campus, although listed in the separate department of political economy and acting as managing editor of the *Journal of Political Economy*, was Thorstein Veblen, who had been at Hopkins with Peirce. Even closer to Dewey was William I. Thomas of the department of sociology. In the department of political economy besides Veblen, there was William Caldwell, who also was very much interested in the new psychological developments. Frederick Starr was in the university's department of anthropology, and near by, in the Field Museum, Franz Boas was curator of anthropology.

THE MOLDING INFLUENCE OF THE FUNCTIONAL CLIMATE OF OPINION — "OF WHAT USE IS IT TO THE PEOPLE?"

By the 1890's the social and intellectual forces reviewed in Chapter II had begun to create a dynamic climate of opinion around the Chicago group. I recall these forces briefly:

First: The tremendous molding power of the social and functional climate of opinion of the American people.

Second: The growing acceptance of Darwin's and Galton's evolutionary views of man, his nature, variations, and capacity of adaptation.

Third: The shift from mechanistic to organismic views throughout much of the intellectual culture.

Fourth: The influence of the newer developments in European psychology, especially French psychopathology, Freudian psychoanalysis, and modern psychiatry, German Gestalt psychology, and the British statistical methods.

Fifth: An inter-Atlantic mood of indigenous creative expression that gripped the arts and technologies.

Of these five factors, none was more important than the first.

There was an infectious spirit in the expanding atmosphere of America after the Civil War. Peirce, James, Veblen, Dewey, *et al.*

¹ G. H. Mead: I, *Mind, Self and Society* (1934); II, *Movements of Thought in the Nineteenth Century* (1936); and III, *The Philosophy of the Act* (1938). University of Chicago Press. Organized and edited by Charles W. Morris, of the university's department of philosophy.

DEWEY AND THE PSYCHOLOGY OF THE ACT

grew up in, and their work was molded by, a lusty Paul Bunyan climate of action and building that touched every dynamic human being. It was a young country, confident that it could master any physical problem, committed to hard work, struggle, and fierce competition. Sociology and psychology, conceived in such a milieu, would very likely be saturated by notions of activity. They were. The action-concept was central to Peirce, to James, to Dewey, and to Veblen.

But the milieu was saturated with the function-social-use conception also. I shall use the function concept as one of the principal ideas of the foundations of education. As the Chicago social psychological scientists began their work, the spirit of American social democracy had already been expressing itself in popular political movements. Social legislation was being passed to regulate and control business enterprise. Freedom of enterprise, indeed the meaning of property, was definitely being redefined. Although all forms of property — land, fuels, metals, and other strategic resources — had long been nominalistically defined as Things,¹ from the 1890's its definition changed to stress social use. A coal mine, said the functional view, is more than the physical deposit and the caverns dug in the earth by men and the modern equipment for doing it. A coal mine is the light, heat, and power and other services rendered to mankind by the energy released in using the coal. The ownership of a coal mine no longer carries the negative right of withholding from use; it carries the positive obligation of development for the use of the people generally. Thus, the new definition of property is expressed fundamentally in terms of function. "What is it for?" . . . "For whom is it to be developed?" are the new measures. The concept of "preempt and exploit, first come first served," slowly gave way to that of "by the people, of the people," and . . . "for the use of the people." In many other ways the infant philosophy of experience was put to work after 1890; witness the manner in which the great dissenting jurists — Holmes, Brandeis, and Cardozo — were implementing it in the law in place of the authority of precedent.

All these forces and factors of the American social and intellectual scene that we have been describing surrounded and molded Dewey and his colleagues. What environment could be more favorable for the building of a "functional" *psychology of mind in use*? No Germanic elementarism could come out of that milieu. It was inevitable that

¹ See James Feibleman's pioneer study of this matter in his *Positive Democracy*; also my own *Now Is the Moment*, Chapters III and IV.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

the concept of function would grip thinking Americans in every phase of the culture — philosophers, psychologists, sociologists, historians, architects, and artists as well as engineers. All were asking: “*What function is this thing to carry out?*”

The city of Chicago itself epitomized it, mushrooming its terrifying bulk and complexity, boasting its “bigness and be-damnedness” as Carl Sandburg later called it, teeming with its new immigrants. Chicago “was fixin’ to make culture hum,” said Frank Lloyd Wright, who was Louis H. Sullivan’s architectural assistant in these same years. Here was a climate of action, of domineering purpose. Social utility and practical efficiency were in the air. Build it! Make it big! Make it stunning! This was Manifest Destiny at its peak. Thus Chicago, the mushroom metropolis of the 1890’s, was the perfect habitat in which to breed an action-functional psychology and social science.

The group that assembled under Dewey’s leadership was perfectly prepared for the undertaking. All had recently had the experience of reading James’s new functional synthesis of human experience¹ and of understanding his functionalism in the British biological sense, not in the German physical sense, for all had absorbed Darwinian and Galtonian evolutionary biology. Dewey and Veblen had been stimulated by Peirce’s pragmatic operational principle. Angell had studied at Harvard with James. They were all reading the new sociologists’ psychological interpretations of society; Thomas and Veblen, Starr and Boas, prodded them in that direction. With this fusion of the social disciplines it was inevitable that the psychology that was being created would become definitely social and the sociology, psychological. And, not the least to be emphasized, the psychological statement that emerged at Chicago after 1896 was characteristically American. It showed Man-the-American, master of his own soul, struggling with his environment, building himself and his society in the course of it. While it was built on the Darwinian concept of adaptation, it constantly insisted that *man was primarily the great orderer*. Education was not *merely* “adjustment”; *one of its major goals was the ordered*

¹ The concept of “experience” rings out in Dewey’s writings, from his first monograph written in the Laboratory School in 1899, *School and Society*, through his profoundly important book, *Experience and Nature*, in 1925, and in his latest analysis of the development of “progressive education” in *Experience and Education* in 1938. Dewey built his entire educational reconstruction upon the concept of experience, and the progressive schools under his leadership have tended to build the life and program around it.

*personal and social control of the individual and the world about him.*¹

THE FIRST EDUCATIONAL PSYCHOLOGY:

THE DEWEY LABORATORY SCHOOL, 1896-1904

But from the beginning the psychology that emerged was a psychology of growth because it was educational.² Two years after Mr. Dewey arrived at the University, he and his wife (Alice Chipman Dewey) and a group of colleagues and neighbors organized a private school for their children. It was under Mr. Dewey's general direction and Mrs. Dewey actively participated, being for a time principal of one of the divisions of the school. It was called "The Laboratory School," although today it is more commonly referred to as The Dewey School.³ In answer to a question about it, Mr. Dewey said that he joined in its organization "mainly on account of the children" (his own) and also to apply the pragmatic test to the theories which he and his associates were then developing. In his Appendix to *The Dewey School* (1936) he said:

¹ Many free-lance critics have attacked Dewey *et al.* for a presumed emphasis on "adaptation." The real sinners in this mistaken goal-setting were the newly created professors of education; read any one of the dozen books on the "principles of education" that came from the press in the first decade of the twentieth century.

² Psychology was in the educational air of the 1890's, and it affected the leaders of public education as well as the college professors. Dewey and the Chicago men met and published with their philosophical and psychological colleagues in such new regional organizations as the Illinois Society for Child Study and in such national organizations as the National Herbart Society (1895). In 1902 the name of the latter was changed to the National Society for the Scientific Study of Education (there was much emphasis by Dewey and others that their study should be scientific) and later to the National Society for the Study of Education. The forty-five annual yearbooks of this organization, of which I was a director from 1921 to 1929, constitute today one of the most important single statements of educational thought and discussion available to the student of our times.

It was in the fourth yearbook of the Illinois Society for Child Study (1899) that Dewey's pioneer article, "Principles of Mental Development as Illustrated in Early Infancy," was published; the third yearbook of the Herbart Society contains his "Ethical Principles Underlying Education."

³ The latter is, indeed, the title of the definitive book which was published in 1936 by two teachers who were in the school from the beginning — Mrs. Katherine Camp Mayhew and Mrs. Anna Camp Edwards. Students of psychology as well as education should not miss it, especially the two appendices, one by Mrs. Edwards on "The Evolution of Mr. Dewey's Principles of Education" and the other by Mr. Dewey himself, "The Theory of the Chicago Experiment."

"The only place in which a comprehensive theory of knowledge can receive an active test is in the processes of education . . . to discover and apply the principles that govern all human development, that is truly educative, to utilize the methods by which mankind has collectively and progressively advanced in skill, understanding and associative life." [My italics.]

The Concept of Growth

The old psychologists had given lip service to the concepts of growth and continuity, but in the theory and practice of the Laboratory School Dewey and his colleagues put the ideas to work. From the youngest infant years of his children he used his own nursery to test out his theories, and he learned much from the home and extra-school experience of the parents of the school. He regarded the newborn infant as the "key to the nature of growth" and *the concept of growth as absolutely central*.¹ His study of philosophy centered around the question: What is the meaning of life? In answering it he insisted that, *"since growth is the characteristic of life, education is all one with growing."* Hence it was through the study of the behavior of infants and little children that he hoped to find the "secret of the controlling principles of development."

The Beginnings of a "Social" Psychology

The growth of children under directed education was the scene Dewey created in which to build *a psychology of the individual which would be definitely social*. Dewey's emphasis upon "the social," expressed in his Plan of Organization (1895) outlining the theory underlying the Laboratory School, was revolutionary for that day, when the principal aim of education was regarded as "the harmonious development of all of the powers of the individual." Even the best schools gave little or no attention to contemporary social conditions or to social aims and values. Indeed, it was the besetting sin of the next generation of the "progressive" schools — from the 1910's well through the 1930's — that *they still emphasized the interests of the individual child and largely ignored the coordination of interests and aptitudes with social purposes*. Individual economic success was in the center of the American creed, and altogether too much and too long did edu-

¹The reader will find a further discussion of Mr. Dewey's basic concern with growth in Chapter XVII.

DEWEY AND THE PSYCHOLOGY OF THE ACT

cational leaders advocate a kind of social adjustment which really meant the fitting of the individual into some preordained niche. Dewey carried his theory definitely over into education, *setting up the Laboratory School as a form of community life. In intent at least it was "community-centered" as well as "child-centered."* He said: "The process of mental development is essentially a social process, a process of participation." Against the traditional psychology which was largely a study of individuals in a physical environment of things, the new "social psychology" was aimed at the "ability of individuals to live in coöperative integration with others."

As he built a new psychology of behavior he insisted that the "complete act," in the analysis of which he was the pioneer, is a social act. The individual is developing his own powers but is using them in the larger affairs of the group. Education is not only "all one with growing"; it is also "a freeing of individual capacity in a progressive growth *directed to social aims.*" Hence the school

"must reproduce, in miniature, the activities fundamental to life as a whole (for example, the home) and thus enable the child, on the one side, to become acquainted gradually with the structure, materials, and modes of operation of the larger community; upon the other side, it must enable him to express himself individually through these lines of conduct and thus gain control of his own powers."¹

This new functional psychology, therefore, was not only dynamic and integrated, it was also both *individual and social.*

DEWEY'S DESCRIPTION OF KNOWING:

"THE ACT" OF THE SELF; ORGANIC AND INTEGRATIVE

The mechanical idea of the nature of the act of knowing that has been held by most teachers even to our own day is the one that is technically called "the reflex-arc." It had been articulated and given dramatic form in 1874 by an Austrian anatomist, Meynert. This concept held human response to be a "sensation-followed-by-idea-followed-by-movement-process," as Dewey phrased it in his famous criticism in 1896. Even William James's explanation of it² is colored with the mechanism of the "Meynert scheme."

¹ Mayhew and Edwards: *The Dewey School*, Appendix I, page 461.

² In Volume I, pages 24-27, of the *Principles of Psychology.*

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

In a series of articles launched in 1896 with the now historic one on "The Reflex-Arc Concept in Psychology,"¹ Mr. Dewey built up his conception of "the psychology of the Act," with the "whole" Self as the unifying factor. In his description of the Act all the elements are brought together — sensation, ideas, meaning, intelligence, motion. He was searching for principles, he says, which would stress the continuity of *function* in "*the living unity which is the child,*" and he believed that his theory would succeed where the old psychologists had failed — namely, in "*connecting earlier and later facts into a living unity.*" Their study, like his own, had been concentrated on the life principle, but their psychology had sorted the observed facts out into "pigeonholes, irrespective to their relation to life history." They really held coördination "to be a sensation-followed-by-idea-followed-by-movement-process," in which the central stimulus, the central activity, and the act proper were all regarded as separate entities succeeding each other in time. "As a result," Dewey said, "the reflex-arc is not a comprehensive or organic unity but a patchwork of disjointed parts."

Against this mechanical reflex-arc idea Mr. Dewey presented an interpretation which came to be known as "the organic-circuit concept." The key was "the principle of coördination, or of sensory motor action." As early as 1899² he expressed the integrative concept of today, and in our very words: "*the interaction of the various functions with one another means the organism-as-a-whole is coming into play.*" Four decades later, in 1931,³ and in 1936,⁴ he restated his matured appraisal of the "unit of behavior," as he called it then. In the reflex-arc idea,

"the sensory stimulus was one thing, the central activity standing for the idea is another thing, and the motor discharge standing for the act proper a third. . . . As a result, the reflex-arc is not a comprehensive or organic unity, but . . . a mechanical conjunction of unallied processes . . . what is wanted is that sensory stimulus, central connections, and motor responses shall not be viewed as separate and complete entities in themselves, but as divisions of labor, functioning factors, within the single concrete whole."⁵

¹ *Psychological Review*, July, 1896.

² In the fourth volume of the *Transactions of the Illinois Society of Child Study*.

³ *Philosophy and Civilization*; the chapter on "The Unit of Behavior," page 233 (1931).

⁴ Appendix II to *The Dewey School*, pages 463-477.

⁵ *Ibid.*, page 234.

The "arc," he said, is actually a "circuit" . . . a "continual reconstitution."

Central Role of the Self and Its Purposes

With Dewey, as with James, the unifying factor in the complete act is the Self. The complete act is the Self in expression; note the emphasis upon *expression*: "the consciously completed act which expresses the unified self." Motives, which are springs to action, are the original impulses to action identified with purpose through the mediation of thought; they are

"home-made, for they are self-initiated, self-deliberated, and self-evaluated. They are self-improved and finally result in a truly moral self-expressive act."

Thus:

"No action is moral . . . save as voluntary, and every voluntary act is the self-operating and hence is free. Impulse is self; the developing ideal is self; . . . The entire voluntary process is one of . . . coming to consciousness of self. This intimate and thoroughgoing *selfness* of the deed constitutes freedom."

Three factors coöperate to produce this moral act — thinking, feeling, and muscular response; *here fifty years ago is the concept of wholeness or integration*:

"As the ideas move toward a unified purpose, so the emotions directed by ideas or meaning tend toward a unified desire, or affection, and finally become a definite interest. . . . Action is then the expression of the best thought and the deepest desire (or interest) of the whole self."

The Dewey moral statement, then, is:

"a unified person is one who acts as he both thinks and desires, whose intellectual ideal is . . . reinforced by his undivided interest."¹

Dewey Accepts the Operational Concept of Meaning

In 1910 Dewey, about fifteen years after he began his studies of psychology of the Act, especially emphasizing meaning, thinking, inference, and understanding, published his practical, and now famous, little

¹ *Ibid.*, pages 455-456.

book, *How We Think*.¹ In this he summed up a quarter century of work from the time of his experiences at Hopkins in the 1880's. In *How We Think*, discussing "Understanding: Ideas and Meanings" (Chapter IX), he accepts Peirce's favorite method of science — namely, the testing of meanings by their consequences. Discussing the way any new thing strikes an adult and quoting first James's much overworked phrase, "one great blooming, buzzing confusion," he says the first stage can be described as "vague wholes" . . . "antecedent to understanding"; witness — the traditional cat in a strange garret, the learning of foreign languages, the countryman in a crowded city street, the land-lubber at sea, the inexperienced man in the factory. These are vague wholes, hence to have things acquire meaning — that is, to form habits of simple apprehension — we must make the vague wholes definite, coherent, consistent, give them stability of meaning. We do that, he says, by *making practical responses*.

"By rolling an object, the child makes its roundness appreciable; by bouncing it, he singles out its elasticity; by lifting it, he makes weight its conspicuous distinctive factor. Not through the senses, but by means of the reaction, the responsive adjustment, is an impression given a character marked off from qualities that call out unlike reactions."²

Later he shows that as little children build the meaning of words, things acquire significance "by entering into a context of use." He then says:

"things gain meaning when they are used as means to bring *about consequences* (or as means to prevent the occurrence of undesired consequences), or as standing for *consequences* for which we have to discover means. The relation of *means-consequence* is the center and heart of all understanding. The operations by which things become understood as chairs, tables, shoes, hats, food, illustrate the means-consequence relation from the 'means' side. The relation beginning with the 'consequence,' or result-sought, side is illustrated in any invention. Edison thought of producing light by the use of electricity; he then had to discover the conditions of things and relations that would produce it — the means for it. The same obtained with Langley and the Wright brothers

¹ D. C. Heath & Co., Boston; the second and revised edition (1933) is really a thoroughly rewritten and essentially a new book; see pages 146–147 especially.

² *Ibid.*, page 142.

DEWEY AND THE PSYCHOLOGY OF THE ACT

after they conceived the idea, as a desired end, of a machine to fly in the air. It is illustrated in all cases of ordinary planning. . . . Every time we have to solve a problem of this kind, things enter into the means-consequence relation and in doing so take on added meaning, just as carbon filaments obtained a new significance through the production of electric light, and as gasoline, once almost a waste by-product, secured new meaning when the internal-combustion engine was invented.”¹

Thus Dewey also joins in the chorus of the “operational” interpretation of the meaning of concepts.

Confirmation from Progressive Educational Practice

But the operational principle finds elaborate confirmation from educational practice as well as from the theories of the philosophers and psychologists. The entire “learning-by-doing” gamut of curriculum practices of the newer schools for the past fifty years has illustrated it. For a single example, consider the process of building the meaning of a fraction. Formerly it was taught by imposed generalization in one fell swoop in the fourth or fifth grade. Today, in the better schools, its meaning is slowly built up over a cumulating multitude of practical experiences of *manipulating things and performing operations* from the kindergarten to the top of the elementary school.² Similarly the entire “intuitive geometry” of modern high school mathematics is based on overt recognition of the operational principle. Much of the life and program of the “progressive” schools has been committed to it for a generation.

THE PROBLEM AND THE ACT OF THOUGHT: THE NUB OF THE PROGRESSIVE PSYCHOLOGY

While Mr. Dewey’s first concern in the half century of his creative work was to establish the organic nature of human response, his second, and equally important one, was to make clear the “complete act of thought.” To him and his followers of the past thirty years — conspicuously Bode and Kilpatrick and their thousands of students in the teaching staff of the nation — *The Problem has been the focal concept of psychology*. Success in meeting the problems of life became the chief concern of the progressives and thinking the central concept;

¹ *Ibid.*, pages 146–147.

² See Thorndike’s protracted discussion of it in his *Psychology of Arithmetic* (1922).

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

by "thinking" was meant what is generally called problem-solving.¹ This consuming interest was revealed from the earliest years of the Dewey School. His first systematic analysis of it was published in the now classic *How We Think*, a text which influenced the psychology of the teachers colleges and their hundreds of thousands of teachers more than any other psychological book in a generation. Perhaps, in the light of Mr. Dewey's broader philosophical interests it would be sounder to say that his chief concern was to *clarify the scientific method of inquiry* and there, in a half century of creative statement, he has made a lasting contribution. But the nub of that method is the problem and the act of thought.

TYPES OF ACTS

To get the Dewey psychology of problem-solving thought clearly before us, it will be necessary to digress for a moment for a little systematic classifying of types of human situation and response.² I find it useful to distinguish roughly several kinds of human act, although we shall indulge in no hard-and-fast categorizing. Let us distinguish three types of act —

- Acts of Habit or Skill
- Acts of Thought
- Esthetic Acts.

These can be viewed another way, as:

- A. Acts of immediate response — generally called "habit"; in curriculum terms, "skill."
- B. Acts of delayed response, generally called "thought." I shall recognize three types of "thought":
 - (1) Problem-solving thinking . . . direct, mainline confronting and analyzing of problems in head-on collision; variously called reflective thought, systematic reasoning, etc. This is the type to which Dewey, Bode, Kilpatrick, and the experimentalists generally have devoted their lives.

¹ See, for example, Kilpatrick's *The Reconstructed Learning Process*, Bode's *How We Learn*, and almost any of the textbooks in educational psychology since 1920.

² In Chapter V we continue this discussion of the psychology of thought, with the work of the connectionists, the Gestaltists, and the psychoanalysts.

DEWEY AND THE PSYCHOLOGY OF THE ACT

- (2) Divers forms of “tangential” thinking, variously called “reverie,” “free association,” uncontrolled connection-forming. These are of profound significance; witness their role in the creative acts of scientists, philosophers, and artists. These have been much neglected in the past half-century because of the absorption in problem-solving-thinking.
- (3) Various kinds of “defensive thought” – notably rationalization, compensation, escape, defense, and the like, clarified in a generation of study by Freud and the psychoanalysts.
- C. The Esthetic Act. This is essentially a delayed response, although its appreciative phases are impulsive. For practical purposes of study, I shall distinguish two major phases of the esthetic act:
 - The creative act (largely delayed response)
 - The appreciative act (largely immediate response)

In the remaining pages of this chapter I shall discuss the first two of these types of act; namely, skill and thought according to the Dewey-functional school. The esthetic act will be discussed in Chapter XIV.

SELECTED SOURCES ON THE PSYCHOLOGY OF THINKING

We have a rich library of sources on the psychology of habit and thought. I list herewith merely the conspicuously important ones from which I have drawn the consensus on problem-solving.

- From the pragmatic, experimentalist philosophers and psychologists:
 - John Dewey: *How We Think* (1910). Best brief analysis of “the complete act of (problem-solving) thought.”
 - John Dewey: *Democracy and Education* (1916)
 - B. H. Bode: *Conflicting Psychologies of Learning ... How We Learn*
- From the connectionist psychologists:
 - E. L. Thorndike: *Psychology of Learning* (1914) ... *Adult Learning* (1928) ... *Human Learning* (1931)
 - J. B. Watson: *Behaviorism* (1930)
- From the Gestalt psychologists:
 - Koffka, K.: *The Growth of the Mind* (1924)
 - G. Hartmann: *Educational Psychology* (1941) ... *Gestalt Psychology* (1935)

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

ACTS OF HABIT AND THOUGHT IN TWO TYPES OF SITUATION

To gather up succinctly what we have learned about habit and thinking, let us endure one more bit of categorizing — namely, kinds of situations. It is a truism of current psychology that all human responses are functions of the situations in which they are made. Some situations, most of them indeed, call for prompt and efficient habits for effective living; others require thought; still others induce appreciative responses. It is important, therefore, to discriminate two kinds of situation with which life confronts us:

First: the face-to-face personal and group situations of moment-by-moment living. These dominate the waking life of most people, calling forth habitual behavior most of the time, only occasionally requiring the delayed responses of thought to meet personal and group problems of the immediate locality. In the face-to-face situations the data of thought and behavior are brought directly to the individual via the reports of the senses as well as the report of the organism-as-a-whole. In most instances the situation is suffused with personal interest and intense attention.

Second: the non-face-to-face situations. These include both personal and social problems. The former are countless minor problems of the home, the neighborhood, and the community, of the “What-should-I-do-about-this-matter?” type. The latter are such social problems of the locality, the nation, and the modern world as full-employment-at-abundance-level, the role of government in the economic system, and America’s participation and leadership in world coöperation. In our democratic society, which is becoming conscious of the need for having every citizen play his part, the “personal” problems now reach out to include the national and international questions of the day. For most of our people the “facts” are not brought directly to the individual by the reports of the senses; they are brought through words: the *printed word* through newspapers, magazines, pamphlets, and books, the *spoken word* via the radio, lectures, and the small talk of the community. Thus in non-face-to-face situations personal interest tends definitely to be less intense than in the face-to-face ones.

Habit in Face-to-Face Personal Situations

First in studying the consensus in the psychology of habit and thought, consider an illustration fairly common to the experience of

our people. Visualize a car moving through traffic, the driver continuously alert to the kaleidoscope of changing situations. He drives chiefly on the habit level of behavior: putting on brakes, accelerating speed to avoid pedestrians or other cars, or responding to red lights or other controls of traffic. Here, in infinitesimal units of behavior, the whole organism is at work. "Signs" flash up — cars approaching or passing, pedestrians crossing, loose rock or other menacing objects on the road, red lights, the fire engine's siren (or the traffic officer's), the arrow of the one-way street.

Although most of the continuous process presents to the driver tiny episodes of habit reaction, there is still a sense in which each of these consists of solving problems. That is, the driver is facing a constantly changing situation and to a degree he picks and chooses his way, even though on a simple level. The total ongoing experience is one of continuous reorganization, quite different from the process of the manual and mental repetitive skills — such as running a typewriter or other machine, calculating figures, and the like. Moreover, there is no learning unless new elements come into play, but wherever they do, detection of and response to significant relationships again become central. Nevertheless, the problems are of the face-to-face and short-spanned type, and are to be dealt with on the near habitual level.

The human being is both constituted by nature and practiced by his social environment to respond to such situations impulsively. Little wonder that William James was led to characterize human beings as "mere bundles of habits." As a famous drillmaster once exclaimed: "Habit a second nature? Habit is ten times nature!" Much of life is routine, one habit after another; reaction is in familiar patterns and formulae; the give-and-take of conversation illustrates it — smiles load meaning with liking and arouse corresponding facial gestures and words; frowns, high-pitched angry tones, aggressive gestures produce tensions and characteristic defensive replies. Thus most of human behavior seems to be of the stimulus-and-immediate-response type. The tendency is toward immediate response to the directly perceived situation; we go off without thinking.

"Problems" in Face-to-Face Situations

Come back again to that man driving his car, but this time to a face-to-face situation in which impulsive response will not serve. Suddenly the driver notices the odor of heat; his engine knocks:

"Engine's hot." He makes one impulsive act; he stops the car. Then he stops "to think." Something's wrong; an engine should *not* be hot. A problem confronts him. He's blocked; his habits will not serve him. Alternatives confront him; he must choose among them. Signs flash up from his past experience: Is the oil tank empty? A glance at the dashboard gauge: "Oil's O.K. But — maybe the tank's really empty." He measures it with the measuring rod. "No — it's O.K. Water may be low." Radiator cap comes off. "No, water's O.K." The signs to which he responds are suggestions learned in past similar situations. What other factors could cause it? "The oil feed line may be clogged; that's a job for the garage. The water may not be circulating; also a job for the garage." Suddenly another cue: "*The fan belt may be broken.*" He starts the motor. The fan does not turn; he sees the belt lying broken below. The problem has been solved.

/ / /

This example of face-to-face problem situation could be multiplied n -fold from the moment-by-moment living of every one of us. How, then, does the twentieth-century American meet them? A generation ago, Dewey wrote perhaps the best description of this process of ideally successful problem-solving thinking that has ever been achieved. The steps paraphrased in quick review are:

First: We recognize the problem; we confront it directly. Dewey calls it the "felt-difficulty" . . . the "forked-road situation." It has become a problem — impulsive, habitual behavior will no longer serve. We confront *alternatives*: hence we must choose. The situation is tense; we must confront it directly in *head-on-collision*.

Second: We meet it in a rapid process of calling up suggestions . . . ways of behaving . . . from our past experience. In imagination we bring to consciousness things that we might do, find factors that may fit the situation.

Third: We try them, comparing and appraising, rejecting one or another.

Fourth: We accept one and act upon it.

In this analysis the process has been broken down into a series of enumerated steps. Actually they are fairly concurrent, flashing up in

swift succession, shot through with the mood, feeling, and emotion of the moment, tangled with meanings, desires, or fears.

This is Mr. Dewey's famous analysis of the complete act of thought.¹ In the thirty years that have followed his publication of *How We Think*, this analysis has been made the basis of most of the theorizing about thinking that has been going on in the schools of education and teachers colleges of the country.

The Familiar vs. the Significant Relationship

Before leaving these much belabored concepts of the problem and thinking, one final word on their relation to habit. Involved in both habit and problem situations is the tendency of the organism to respond on impulse. The make-up of the nervous system and its close integration with the glandular and muscular systems predisposes the individual to become a slave of habit; this is as true in complex social situations as in the simple routine ones. Every social situation presents a complex of elements which are shot together in a fused on-going and ever changing process. Each person responds to the total pattern, but it always takes on for him a unique organization. He *impulsively selects one particular meaning* to which to respond, although without being aware of his selective process, and acts on it as the "cue." Some single phrase or idea or other element, in conjunction with the integration of another's gesture and voice and with meanings that are passing through the other's mind at that moment, touches off the response. Hence the tendency is to respond with the act, word, gesture, called out by that particular fusion of *familiar* elements. The habitual reaction is to the *familiar* cue, not necessarily to the *significant* one. Where habitual response is called for this guarantees efficiency, but if thought is demanded it may result in misunderstanding; because of the varied gamut of experience and meaning, and the infinite permutations into which social behavior can fall, every situation is loaded by chance as well as by human predisposition *with marked possibilities of the individual's reacting to and with the wrong meaning.*

To state the almost universal propensity of human beings to follow the path of least resistance sets out the chief *intellectual* task of education: to teach people to take thought by inhibiting their own impulsive responses. Intelligent understanding demands that we react to the *significant* meaning in a situation, not necessarily to the

¹ The reader should not miss Dewey's chapter, "The Analysis of the Complete Act of Thought," in the first edition of his *How We Think*.

familiar one. The *familiar* one may or may not be the significant one, and our task is to *delay* response long enough to analyze the situation and to find the most significant meaning.

Dewey on the Role of Signs in the Act

One more brief note on the role of "signs," to round out the consensus on the act. The sign characteristic of human response has been the subject of extensive study for two generations. Charles Peirce regarded the concept of signs as of such importance that he devoted himself to it recurringly, from his first paper on logic, dated May 14, 1867, to the last years of his life. In 1908 he said in a letter to one of his scientific British correspondents, Lady Welby: "I am now working desperately to get written before I die a book on Logic that shall attract some minds through whom I may do some real good." He defined logic as the doctrine of the formal conditions of the truth; near the end of his life he had become convinced that those "who make researches into the reference of symbols to their objects will be forced to make original studies into all branches of the theory of signs."

This Peirce did himself in naming his theory semeiotic. As Ogden and Richards say: "Unfortunately his terminology was so formidable that few have been willing to devote time to its mastery, and the work was never completed."¹ Following Peirce's pioneer but

¹ See the elaborate Appendix D of Ogden and Richards' *Meaning of Meaning* in which is analyzed and interpreted the work on signs of Husserl, Bertrand Russell, Frege, and Peirce.

SELECTED SOURCES ON SIGNS

A brief statement of the consensus can be made from the study of such sources as the following:

1. Basic Sources:

Charles Peirce: Brief note on his early work in Appendix D, pages 279-290, of Ogden and Richards' *Meaning of Meaning*; full statement in many references in his six-volume *Collected Papers*.

Ogden and Richards: *The Meaning of Meaning*.

Charles Morris: *Signs, Language and Behavior*. (Contains the most complete bibliography.)

Korzybski: *Science and Sanity*.

Dewey, in Mayhew and Edwards: *The Dewey School*, Appendix II.

2. Popular Discussions:

S. Hayakawa: *Language in Action*.

Stuart Chase: *The Tyranny of Words*.

relatively unknown work on the sign characteristic of the act, Dewey picked it up and dealt with it in several of his early writings. It was then neglected by students of meaning for a quarter of a century. After World War I, one by one, the various investigators to whom I shall refer — Boyd Bode and the latest generation of the pragmatic operationalists, Ogden and Richards, Korzybski and the semanticists, Charles Morris and Carnap, Coleman Griffiths and others in educational psychology — elucidated the concept of signs.

I make here only a brief note on Dewey's use of the concept.

In Dewey's writings, from the original reflex-arc article to his Appendix to Mayhew-Edwards' *The Dewey School* in 1936, this concept of the building up of coördination through a succession of "sign-pointing" meanings is central. Tracing the growth of the act through three periods in the first year of infant life, he shows that "*one experience points to, is a sign of, another.*" Using the Meynert-James illustration of the child seeing the flame, reaching for it, trying to handle it, he says the very "*essence of intelligence*" lies in the "*translation from the turn of one activity into another, when what is heard means something for what can be seen, and what is seen means something for reaching and handling.*" He shows how each coördination is worked out by more or less staple blind reaction at first (compare Thorndike's concept of "trial and error"), followed rhythmically by periods of "application in which the given coördination becomes the part of a larger coördination by actively coöperating with others of its own general order." Development is not even taking place in all directions simultaneously; "while one coördination is building up, all other activities are secondary and contributory. The forming coördination locates the center of interest and decides the stress of effort in any particular line."

Mr. Dewey's associates in the Laboratory School were much influenced by this stress on signs. Years later, Mrs. Ella Flagg Young, long a collaborator of Mr. Dewey's, said: ¹

"There is a most important element in this connection of growth that deserves special attention. The non-recognition of it is the greatest weakness of the present-day educational theory. It is the return of the circular activity into the impulse in which it originated, and the four effects resulting from this return:

¹ In her book, *Some Types of Modern Educational Theory*. Mrs. Young was Supervisor of the Laboratory School; later Professor in the School of Education, University of Chicago; and still later Superintendent of the Public Schools of Chicago.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

(1) an interpretation of the impulse as to its meaning and worth, (2) an increasing definiteness in the aim of the impulse, (3) a greater certainty in its expression, (4) a development of the activity into a habit whose flexibility partakes of the nature of intelligence."

Mrs. Edwards,¹ reviewing the development of Dewey's theory, says:

"A meaningful activity is the definition of an idea which continues to direct that activity in new expression. Such an activity is a genuine expression and at the same time is the development of self. *The whole hypothesis about ideas . . . is that they arise, are clarified and defined . . . in the course of the activity which they first guide and later provide the meaning of. Then this development of meaning or idea leads on to new expressions and constructions in action, which in turn normally produce new developments and ideas, and so on. This process constitutes human growth.*"

In 1940 Boyd Bode developed² the concept of signs to *explain the meaning of mind through a study of the transformation of perception*. Using the child-reaching-for-the-lighted-match example, he says that each experience, including the burning of fingers, builds up a different set of responses, each one modified by previous experiences, and these all lead to *the integration of a new way of seeing the match*. Bode sums it up:

"in this transformation of perception we have the meaning of 'mind' . . . this peculiar *function of things in pointing to the future* is what is meant by the mind. . . . The term mind is a name, not for a substance or a mental state but for a *function of the environment*."

The cue to adaptive behavior is this *pointing, functional aspect*:

"the function of pointing, or leading, is what is meant by mind. This function is not anything separate; it is something that things do. Through the medium of our responses future events or pos-

¹ *Op. cit.*, Mayhew and Edwards, Appendix I.

² See Boyd Bode: *How We Learn*.

sibilities get themselves translated into present facts and thus they become effective for the control of behavior.”¹

Thus daily behavior is a kaleidoscope of responses to changing “signs.” We can multiply them without end: we reach for a match to light a cigarette, responding to a succession of signs — the location of the match, of the cigarette, the striking of the match, its bursting into flame or the failure to light, the closeness of our fingers to the flame, etc., etc. One can illustrate the role of signs in any example of physical behavior. As Bode says, “the function of pointing, or leading, is what is meant by mind . . . it is something that things do.” Or as Ogden and Richards put it: “a sign may be any stimulus from without or process within.” Our world of meaning, then, is built on the interpretation of signs and that interpretation, with a bit of fused experience from the past, is our reaction.

This is further confirmation of the operational psychology of the modern physicists and the pragmatic philosophy and psychology. Here is the reiteration of Dewey’s “the power to understand things in terms of the use made of them.” The function of pointing stands out in the ongoing experience — whether of the habitual or problem type; as Bode says, this is

“nature’s way of introducing *foresight, purpose, intention*, into behavior. Materialism tries to explain behavior without reference to purpose. Dualism tries to explain behavior by importing purpose from some other realm and then trying to hitch it onto the body. Men have struggled in vain to solve the problems that are thus created. The source of all the *trouble lies* in the basic assumptions.”

¹ Coleman R. Griffith, in his *Psychology Applied to Teaching and Learning*, has attempted to found an “educational” psychology of learning on the “sign-pointing” concept:

“The essence of learning appears to lie in the creation of signs. The laws of association are used to state either the nature of the signs or the process of their creation, while learning by conditioning is a physical view of the way in which signs are created. All of the facts directly called ‘sign learning’ and also those known as insight are further instances of what it means to learn.” . . .

“It is quite likely that the creation of signs is just what we ought to mean by the word ‘learning,’ because we then proceed to repeat the sign so that it becomes a permanent part of what we are.”

As we grow from infancy to maturity, Griffith says that part of the growth “consists of acquiring an immense number of new pointings, while the rest consists of those pointings which have been converted into habits.”

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

The latest version of the "pragmatic theory of mind," then, draws together the concepts of the previous pages: integration ... dynamic pattern ... organism ... the whole ... generalization ... relationship. These are now combined with "purpose" — the goal-seeking of the organism — to emphasize the foreseeing, pointing-to-the-future nature of the response. And this all helps to round out our pragmatic explanation of direct problem-solving.

LOOKING BACK AGAIN AT THE TRAIL BLAZERS

Here we must bring to a close our appraisal of what Dewey added to the pioneering of Peirce and James.

Dewey worked as an introspective psychologist, and as a careful observer of the behavior of children in school and home. He lacked James's technical acquaintance with physiology and Peirce's technical knowledge of mathematics, physical science, and measurement. But he was and is equipped with one of the most systematic and logical minds of modern times, with the consequence that, whereas James knew intuitively and dramatized the concepts of experience, organism, the Self, the organic nature of response, habit, and the like, Dewey built up a powerful logic for them. It is not too much to say that in fifty years of creative writing Dewey made a logical record of the following major concepts:

- the scientific method of inquiry, including especially the problem and problem-solving thinking
- growth as a basic characteristic of life
- the human act as organic, general, unified, the organism acting as a whole
- mental development as "a social process, a process of participation"
- the Self as the unifying, motivating agent
- the complete act as the Self in expression
- much of life as problematic; hence the deep intellectual aim of the school is training in thinking of the problem-solving type
- education as "a freeing of individual capacity in a progressive growth directed to social aims"

It is indeed a giant contribution to our understanding of human behavior.

DEWEY AND THE PSYCHOLOGY OF THE ACT

If, bearing these concepts in mind, the reader will scan again the comparable summary made for Peirce and James, he will have an approximate list of the major ideas which could have been available for use in education before World War I.

CHAPTER V

The Last Stand of Mechanism: Connectionism *vs.* Gestalt

It would be convenient if at this point we could turn to a man or a group that, from about 1900 on, took these major concepts of Peirce, James, and Dewey and developed them systematically into a mature, organic, and functional psychology. But that we cannot do. James himself did not do it, and Dewey can be said to have done it only by the totality of his life's work. After publishing his *Psychology* in 1890,¹ James gave most of his creative energy for the next twenty years to philosophy and religion. Dewey continued to develop psychological concepts, but he too gave most of his time to philosophic matters. Vigorous personalities and groups emerged, each one gripped by a central idea or special aspect of behavior. The work of each one had some importance for education, and we shall incorporate them in our statement of psychological foundations. But no one worker consciously took the concepts that had been discovered and built upon them systematically. Since William James gave psychology its first modern synthesis in a single great book, we have never had another.²

NINE MINOR "PSYCHOLOGIES"

But from no less than nine minor groups we did get important contributions to selected aspects of psychology:

¹ And a *Briefer Course* (1892) made from it for teachers, and his pedagogical *Talks to Teachers* (1898).

² This seems to me to be the greatest single need today, and it presents a thrilling opportunity to the student who grapples with it. For ten years I have tried to persuade the men now equipped to do so to write the great psychological synthesis — personal and social — comparable for our mid-century years to the great James *Psychology* of 1890. Who will be the one to do it?

THE LAST STAND OF MECHANISM

1. Thorndike and the connectionist psychology of the teachers colleges
2. Watson and the conditioned-reflex psychology of the Behaviorists
3. Wertheimer, Köhler, Koffka, Lewin, and Gestalt psychology
4. Freud, Adler, Jung, Rank, and varieties of psychoanalysis
5. Bode, Kilpatrick, and the psychology of the progressive schools
6. Stern, Allport, and the psychology of the person
7. The psychology of intuition or primal awareness — that is, of the response of the organism-as-a-whole
8. The social psychology of self and society
9. The psychology of esthetics

Taken all together, the contributions of these nine groups supplement those of Peirce, James, and Dewey and provide us with a solid psychological foundation upon which to rebuild education in the post-war world.¹

The first three groups will be studied in the present chapter:

- the connectionist psychology of Thorndike
- the behaviorism of Watson
- the Gestalt of Wertheimer, Köhler, Koffka, and Lewin

The other six — the psychology of the progressive schools, of the person, of intuition, of society, and of esthetics — contribute so much that is new to the organic field-energy-force concept and to the recon-

¹ Several of the minor groups gave much of their energy to denouncing what was wrong in the current psychology rather than to building a better one. Their special aversion was what they conceived to be the reigning psychology, namely Wundtian elementarism. John B. Watson's first behavioristic publications denounced the subjective nature of the prevalent Wundtian psychology, especially its reliance on introspection for an explanation of behavior. Similarly, and at the same moment (about 1910 to 1915), the Gestalt psychology of Wertheimer, Köhler, and Koffka was originally marked by rebellion against the atomism of Wundt. It was conspicuously true of Korzybski in his attempts to get a hearing for his so-called "semantic" idea. A vast amount of his energy was devoted to attacking the bishops of the established psychological church; see, for example, the very long Introduction to his *Science and Sanity*. Coming upon many instances of this in the teaching profession, I had long ago arrived at the conclusion that newcomers to a field of work, striving to make a place for themselves, feel that first they must find something in the existing order to attack.

struction of education that they must be discussed in considerable fullness. I shall appraise them in the following chapters:

- Stern, Allport, Freud, and the psychology of the person ... in Chapter VI
- The psychology of intuition, primal awareness, and of the response of the organism-as-a-whole ... in Chapter VII
- The psychology of society ... in Chapter XII
- The psychology of esthetics ... in Chapter XIV
- The educational psychology of Dewey-Bode-Kilpatrick and the progressive schools ... in Chapter XVIII

The discussion of these nine contributions is to be interpreted as a continuation of the study of the great shift in thought from mechanism to organism; from mechanical and atomistic explanations to field-energy-force explanations.

I. THORNDIKE AND THE CONNECTIONIST PSYCHOLOGY OF THE TEACHERS COLLEGES

From World War I to the present moment the psychology developed by Edward Lee Thorndike was taught in most of the normal schools and teachers colleges of the United States. This was partly due to the fact that Teachers College, Columbia University, where he had the leading professional post from 1901 to his retirement in 1940, was the center which trained most of the professors of educational philosophy, administration, and psychology. These in turn founded the new teacher-education institutions after 1900. Thorndike's three-volume *Educational Psychology*¹ was published in 1913 and 1914, and soon became the standard work used in the teachers colleges of the country. The consequence was that until the late 1920's more educationists were brought up on the Thorndike psychology than on any other single brand; even Kilpatrick and others who had already accepted the Dewey philosophy of education still taught their students an S-R bond connectionist psychology. By the beginning of the Great Depression, however, most of the progressives had thrown it off and worked out what they began to call an "organismic" psychology which was more appropriate to the organic concepts they had taken from Dewey.

¹ Vol. I, *The Original Nature of Man* ... Vol. II, *The Psychology of Learning* ... Vol. III, *Work, Fatigue and Individual Differences*.

THE LAST STAND OF MECHANISM

But, after 1925, when new texts in educational psychology began to come from the press, the impress of Thorndike was upon most of the teachers colleges. I find that even today, in the 1940's, his influence is widespread. During the years of World War II, I made a systematic appraisal of the reading materials most widely used in educational psychology and in curriculum and teaching in the teachers colleges. I found that a psychology that is very Thorndikian still rules the minds of most of the professors.

THORNDIKE AND JUDD: TWO BRIDGES FROM PSYCHOLOGY TO EDUCATION¹

Mr. Thorndike was one of the two main bridges by which experimental, scientific, and statistical techniques were carried over from science and general psychology into education. The other bridge was Charles Hubbard Judd. The two men were college mates (and rivals, I am told) at Wesleyan University in the middle 1890's, and both went into psychology. Judd went to Leipzig and got his doctor's degree with Wundt, returning to the United States to serve for many years as one of the chief protagonists of the use of experimental methods and of the development of what he always called the "science of education."²

Thorndike went to Harvard (1896 and 1897), took a degree with William James, Wundt's rival; then a Ph.D. at Columbia (1898) with J. McKeen Cattell. From Cattell he got a mastery of exact laboratory and statistical methods; Cattell had acquired them from Wundt and Galton respectively and had become the intermediary between those methods and the young American psychologists of the 1890's.³ As a consequence, throughout his entire working life Thorndike's work has been molded by the quantitative approach, although not by a truly mathematical one. He was completely immersed in the concepts of the slogan that he gave the study of education in 1916, "Whatever

¹ My appraisal of the two men is based first on some years of professional participation in their departments: with Judd at Chicago from 1915 to 1920 . . . in Thorndike's department at Teachers College during the 1920's. At Chicago I "taught" Judd's course, "Psychology of the High School Subjects"; at Teachers College in the 1920's, Thorndike's course in "Psychology of the Elementary School Subjects."

² Without exaggeration, I think I have heard him give his lecture on "the science of education" fifty times.

³ I deal more fully in Chapter XXIII with the contribution of both Judd and Thorndike in the attempt to apply the scientific method to education.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

exists, exists in some amount," implying (although it was McCall who actually added the phrase) "and can be measured." In the quantitative field, however, Mr. Thorndike was the outstanding initiating pioneer, and the history of education will credit him with the following "firsts":

- the first systematic development of an animal psychology
- the first thorough quantitative investigation of transfer of training and of learning ("the practice curve")
- the first carefully standardized scales and tests in education
- the first designing of the content of the subject-curriculum on the results of studies of social use

Indeed, I think it was Thorndike's "firstness" and the fact that he began his work at a moment when modern conceptions and technique of educational psychology and teaching were just being formed, and the invention of new methods was felt to be the chief need, that has made his psychology the dominant one in hundreds of normal schools and teachers colleges for a full generation. I turn to a brief appraisal of Thorndike and the connectionist psychology with profound admiration for his brilliant pioneering and for the vast scope and improvisational skill that went into the work. Taken all together, it is one of the most impressive single contributions of our times.

A CONNECTIONIST PSYCHOLOGY

That the psychology is connectionist Thorndike says explicitly himself. There has been so much undocumented criticism of his psychology that I quote from three of his major books, written over a period of a quarter century. First from a mature statement written by Thorndike in 1935:

"We ask the reader to adopt . . . the vocabulary of what may be called a situation-response or connectionist psychology, in which the word *situation* or the symbol S is used to mean any state of affairs outside or inside an organism; the word *response* or the symbol R is used to mean any state of affairs in some organism which is, or seems to be, related to some S by sequence at least and perhaps in more dynamic ways; and the word *connection* or the symbol → is used to mean the fact that S is followed by R or the probability that S will be followed by R, other things

being equal. A situation may be as minute and definite as a pinprick on a certain spot, or as large and vague as a thunderstorm. It may be short — e.g., a flash of light — or long¹ — e.g., a sermon. It may literally be, as stated, any state of affairs in nature. A response may be any real event in an organism — a movement, an idea, a mood, a liking, a craving, or any part or feature of any such real event. It may be as little and short and unitary as the knee-jerk or as big and long and elaborate as writing an encyclopedia. A connection may be as direct as that between the tap on the knee and the jerk of the muscle, or as meditated as that between the receipt of a bill and the writing of a check. It may be as single as that between thinking *a*, *b*, *c*, *d* and thinking *e*, or as multiple as that between the impression of tennis court, opponent, and balls and the position, timing, force, and direction of one's return stroke. *Situation*, *response*, and *connection* are terms used here to help describe and prophesy what an animal does, not to make any assumptions concerning how or why the animal does it. I use them rather than *state of affairs* or *event* or *related state of affairs* or *related event and probability that, other things being equal, the related event will follow the event* partly for brevity and partly because they are terms favored by scientific workers."¹

Here is the connectionist's own view of The Act. Note three concepts: Situation . . . Response . . . Connection (or Bond). These are succinctly symbolized by $S \rightarrow R$, and popularly referred to as S-R Bonds. Certainly Thorndike defines his major concept — the connecting of response with situations — with care. And the nature of the Act is defined very comprehensively; broadly enough, indeed, to include any kind of human experience — large or small, long or short, direct or indirect, specific or complex, single or multiple. The center with Thorndike, as with Dewey and other moderns, is always The Act — what the animal or human being does, his behavior. Thorndike's psychology, as well as Watson's, was behavioristic; indeed, most of them since James have been that.

Nevertheless, controversy has raged over the connectionist theory for a generation, perhaps because of its very great influence in the education of teachers. The thirty years of repetition of the symbolism has only served to clinch the criticism of Thorndike's critics — and they

¹Edward L. Thorndike: *The Psychology of Wants, Interests and Attitudes*, pages 17-18 (1935). [My italics.]

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

have been legion — that the connectionist psychology is mechanistic and atomistic and no fit theory upon which to found education. The critics quote many of his publications, from the first brilliant monograph, *Animal Intelligence*, written in 1898 at the age of twenty-four, to the latest *Human Nature and the Social Order* (1940). Thus they base their criticism on an impressive body of data from Thorndike's own work, viz.:

- the characteristic types of acts, processes, and “mental functions” which he always chose as the subject of investigation — namely, markedly minute, specific, verbal, symbolic acts in which the “generalization” of the organism would operate least effectively
- his prolonged concentration on the specific skills and techniques of life to the relative exclusion of the more generalized forms of behavior; witness the focusing on arithmetic, handwriting, algebra, etc., as the subject matter for the making of scales and tests
- the setting of the stage for investigations in a similar “narrow” framework — for example, the use of puzzle boxes, mazes, and the like in the animal learning studies
- his argument that learning is restricted to specific neurons
- his trial-and-error theory of learning

Both animal and human learning go on, Thorndike says, by “stamping in and stamping out” . . . “neural connections” . . . “between situation and response.” Certainly he has always meant *neural connections* whenever he said “bonds.” He drew the often quoted conclusion from his transfer of training study (1901) in which he found that “no transfer” of learning took place across specific synapses and hence transfer of training was impossible. As Hartmann says in his critique of it:

“the familiar Thorndikian position . . . maintains that *if* learning is restricted to particular synapses, there can be no influence of training upon other activities than those actually practiced; any improvement in unpracticed functions must be the result of nervous connections which they have in common with the practiced activities. The rejection of the older doctrines of ‘formal discipline’ and ‘transfer of training,’ leading indirectly to a great variety of curricular changes, seems to have been based as much upon

the plausibility of such reasoning as upon any convincing experimental evidence."

Hartmann adds:

"it is very doubtful if the same neurons or synapses are involved even in two similar reactions to the same stimulus."¹

He quotes Lashley's investigation of the *Basic Neural Mechanisms in Behavior*:

"Our data seem to prove that the structural elements are relatively unimportant for integration and that the common factors must be some sort of dynamic patterns, determined by the relations or ratios among the parts of the system and not by the specific neurons activated. If this be true, we cannot, on the basis of our present knowledge of the nervous system, set any limit to the kinds or amount of transfer possible or to the sort of relations which may be directly recognized."²

It is easy to account for Thorndike's selection of these narrow mental functions for study. He was imbued with the scientific attitude. He believed that we know only as we can measure; to measure and control, one necessarily must restrict one's investigations to specific and objectively describable mental functions. Hence the enormous consumption of "paper situations," his insistence on drawing generalizations only from "test" results, his emphasis upon verbal and other abstract forms of symbolism. Such a point of view pushed him toward the conclusion that the efficiency of behavior is a function of the number of connections, or bonds established; it led him to stress situation-response bonds, to give great emphasis to the "trial and error" nature of human response, and to make much use of the rank-order concept.

By the end of World War I, Thorndike was sure that connectionism was winning its battle. In 1923 he stated what he regarded as the major achievements of the new educational psychology:

"Within recent years there have been three lines of advance in psychology which are of notable significance for teaching. The first is the new point of view concerning the general process of learning. We now understand that learning is essentially the formation of connections or bonds between situations and responses, *that the satisfyingness of the result is the chief force that*

¹ George W. Hartmann: *Gestalt Psychology*, page 35.

² *Ibid.*, page 58.

forms them, and that habit rules in the realm of thought as truly and as fully as in the realm of action.

"The second is the great increase in knowledge of the amount, rate, and condition of improvement in those *organized groups or hierarchies of habits which we call abilities* to read. Practice and improvement are no longer vague generalities, but concern changes which are definable and measurable by standard tests and scales.

"The third is the better understanding of the so-called 'higher processes' of analysis, abstraction, the formation of general notions, and reasoning. The older view of a mental chemistry whereby sensations were compounded into percepts, percepts were duplicated by images, and percepts and images were amalgamated into abstractions and concepts, and these were manipulated by reasoning, has given way to the understanding of the laws of response to elements or aspects of situations and to many situations or elements thereof in combination."¹

In the first paragraph we see the process by which bonds are stamped in: "*The satisfyingness of the result is the chief force that forms them;*" conversely, the "annoyingness of the result . . . stamps them out." (This, of course, lends support to the interest theories of the progressives.) Two "laws" (he would have been better advised to have given them a less rigorously scientific name) were stated and were given nation-wide lip service in the teachers colleges of the country. The first is the Law of Exercise, which means that the more frequently, recently, and vigorously a connection is exercised, the more it is stamped in, and vice versa. The second is the Law of Effect, which implies that responses that give satisfaction are retained, those that annoy are eliminated. Thus, Thorndike *assumes* that "the neural connections are influenced by the effect of the reaction," but we have as yet no way of confirming or refuting his conclusion.

OTHER CONTRIBUTIONS

Psychology of Skill

A connectionist psychology emphasizes the analysis of mental abilities into components and the improvement of specific habit formation. It is in this general area that Thorndike has made his chief contribution to education. Our knowledge of the psychology of skill has been greatly enhanced by his work. This was done by his acute

¹ Edward L. Thorndike: *The Psychology of Arithmetic*, page v of Preface. [My italics.]

analysis of the nature and constitution of the abilities involved in various kinds of learning — arithmetic, algebra, reading, and the like. The analysis of the nature of arithmetical abilities, for example, led to a working knowledge of the various specific meanings of numbers, decimal notation, meanings of addition, subtraction, etc., of common measures, of working ability to add, subtract, etc., of knowledge of words, symbols, diagrams, and the like; and the ability to apply these to life's arithmetical demands.

His discussion of the "knowledge of the meaning of a fraction"¹ is a capital illustration of the advance of his analytic psychology over the old methods of the 1890's. According to the latter,

"The nature of fractions was taught as one principle, in one step, and the habits of dealing with fractions was supposed to be deduced from the general law of a fraction's nature."

Thorndike, on the contrary, shows that the new teaching of *the meaning* of a fraction begins in the earliest primary grades and continues well up toward the upper grades, spreading over several years. He enumerates seventeen recognizable stages of use of materials and of human responses which slowly develop, fuse, and organize into more and more complex and generalized forms of meaning. They begin with the first concrete manipulation of objective materials and evolve through several years of advancing control until by the fifth grade, for example, an intellectual definition of fraction can be given in terms of numerator and denominator.

He made a similar contribution to the clarification of reasoning as it is involved in such abilities by showing that there was no magical "reasoning" power which counteracted the ordinary laws of habit.

"Reasoning" . . . (or, as he called it) "selective, inferential thinking is not at all opposed to, or independent of, the laws of habit, but really is their necessary result under the conditions imposed by man's nature and training."

"Reasoning is not a radically different sort of force operating against habit, but the organization and coöperation of many habits, thinking facts together. Reasoning is not the negation of ordinary bonds, but the action of many of them, especially of bonds with subtle elements of the situation. Some outside power does not enter to select and criticize; the pupil's own total repertory of bonds relative to the problem is what selects and rejects."²

¹ *Ibid.*, pages 54-57.

² *Ibid.*, pages 190, 193-194.

With a sufficiently broad interpretation of "bonds," this could be good James or good Dewey.

The Course of Growth

He made a new contribution to our knowledge of *the shape of the growth curve*. Dewey had taught us to make growth synonymous with life and hence central to education. Thorndike implemented the idea by an enormous amount of measurement of the growth of abilities and traits and of quantitative plotting of growth curves. Almost all of Volume II of his classic *Educational Psychology* is devoted to the quantitative study of the "improvement of mental functions by practice." When I began my professional work, in the years 1909 to 1915, the "psychology of the practice curve" was one of the consuming interests of educational psychologists. Thorndike was the outstanding pioneer and contributor. As a result, by the early 1920's the *course of the growth* of a large range of mental functions had been exhaustively analyzed and plotted. In the first years after World War I, for example, leaders of the new curriculum-making in the Lincoln School between 1920 and 1925 were *using these growth curves as the objective base of the design of the curriculum of the experimental schools*. But this brief qualification should be added. While Thorndike gave us a validated record of *the course* of the growth of mental functions, he contributed little to our knowledge of *the process* of their development. Indeed, his measuring work for thirty years was *primarily of human products, not of processes*. This point will be clarified in Chapter XXI.

Individual Differences

Similarly, Thorndike's quantitative studies of individual differences¹ greatly extended the earlier work of Cattell. Two thirds of his famous Volume III (1914) is devoted to an analysis of the problems of individual differences, their scientific measurement, their statistical distribution in relation to probability curves, the nature and amount of individual differences in single traits, the influence of sex, of remote ancestry or race, of immediate ancestry or family, of maturity, and of environment. Certainly after Thorndike's work there was no longer any doubt about the validity of the law of individual differences. As a consequence, tens of thousands of young teachers

¹ See Vol. III of *Educational Psychology: Work, Fatigue, and Individual Differences*.

went into public schools from our teachers colleges alert to the significance of this basic concept.

The Controversy over the Nature of Human Response

But these positive contributions of Thorndike are frequently forgotten as we remember how wrong he was in the thirty years of controversy over the nature of human response. Is it general or specific? Organic-circuit or stimulus-response? The organic-field-energy point of view insisted it was general. Throughout the generation of controversy Dewey's analysis remained essentially what it had been in the 1890's: the human act is organic, general, unified — best summed up as organism-acting-as-a-whole. The total Self is the unifying factor; it is the motivating and organizing agent. "The complete act is the Self in expression." The reflex-arc concept of "sensation-followed-by-idea-followed-by-movement" is not a sound principle of knowing; response is "general"; it is not "specific" in any sequential or atomistic sense.

Immediately after 1900 the special "educational" phase of psychology developed as a major university department. Thorndike, first a student of James's at Harvard and then of Cattell's at Columbia, developed it at Teachers College after 1900. Judd, his rival, turned his energies in that direction — first at New York University, then at Cincinnati, after 1909 at Chicago, taking over Dewey's School of Education and, in close collaboration with James R. Angell, building it up in a quarter century of scientific leadership. Bagley and Whipple, students of Titchener's at Cornell, after varied careers found themselves together at the University of Illinois, where I worked with them in educational psychology from 1911 to 1915. From the leadership of such centers as these spread the new profession of educational psychology which, in the generation after 1910, produced students and writers of such varied points of view as Frank N. Freeman at Chicago, now Dean of the School of Education at the University of California at Berkeley; Arthur Gates and Goodwin Watson at Teachers College; Gordon Allport at Harvard; F. B. Knight at Iowa; L. L. Thurstone and Karl Holzinger at Chicago; and Frank S. Freeman at Cornell — to name only a few.

Through these developments of educational psychology, and especially in the work of Thorndike and Judd, the idea of employing the scientific method in educational studies radiated across the country. We shall see in Chapter XXI how this developed a vigorous attempt to

measure educational products and ramified into the curriculum and administration as well as into learning; but for our present purpose we need merely note that in the years from 1900 to World War I it resulted in furthering the building of a quantitative educational psychology, and this along fairly narrow and mechanistic lines.

The "Transfer" Controversy

One of the problems most vigorously studied by quantitative methods was the "transfer of training." By controlled experimentation some thirty different investigators, between James's first attempt in the 1880's and my own in 1911 to 1914, tried to determine whether proficiency built up in one "mental function" would spread without specific training to another mental function. Concretely, they asked: Does training transfer? The new educational psychologists divided into two camps. One, under Thorndike's leadership, emphasized what they called the "specific" nature of situation-response and talked and wrote so much about it that the profession generally came to call them "S-R bondists," or "connectionists," and associated them with the Wundt-Titchener "mechanists." The other camp, under Judd's leadership, emphasized the general nature of response. James had launched the controversy in 1890 by reporting, in a footnote of his *Principles*, that, working with himself and several colleagues as subjects, he had been unable to establish a spread of training in learning different kinds of verse. Ten years later his student, Thorndike, associated with Woodworth at Columbia had reported (1901),¹ in a much quoted monograph, no spread from one specific mental function (recognition of geometric shapes) to another (discrimination of weights).

The generalist camp, under Judd's leadership, rushed to the defense of generalization. Judd's study (1905)² is perhaps the best. He showed that a group of fifth-grade pupils could hit apples under water with darts more accurately *after training in the theory of refraction of light* than could a comparable "control" group that had revealed equal skill at the beginning of the study but had acquired no understanding of the scientific principle.

In 1914 I brought together and interpreted the twenty-nine in-

¹ Thorndike and Woodworth: *The Influence of Improvement in One Mental Function upon the Efficiency of Other Functions*.

² C. H. Judd: *Psychology of High School Subjects* (1915). See the chapter "Generalization," analyzing various studies.

THE LAST STAND OF MECHANISM

vestigations that had been made up to that time. In all the cases in which the stage had been set for learning and generalization in "narrow" terms, as in Thorndike's study, spread or transfer was small, even negligible. In those cases in which the stage had been set so as to give a chance for generalization, as in Judd's study, the individual generalized; there was "transfer." This was confirmed elaborately by the Köhler learning studies on apes at the German animal experiment station in Teneriffe in the Canary Islands, where Köhler was interned during World War I. Working in the generalist framework, he put his apes in large open cages, let them have unobstructed vision of all materials needed to "solve the problems," and found — generalization.¹

✓ ✓ ✓

Looking back on the controversy after thirty years, I am inclined to lament the vast expenditure of research energy that went into these transfer studies. I spent four years on one of them,² yet the results, while they bore down on the side of "generalization," were far from definitive. Moreover, most of the studies threw little light on *the nature of the act of knowing*. I am convinced that the position we hold today about the organic character of the unit of behavior rests upon far more conclusive evidence from the psychologists and brain physiologists and the logic of such students as Dewey, Mead, and Whitehead than it does upon the exceedingly nebulous findings of more than a score and a half of statistical investigations of mental discipline.

✓ ✓ ✓

Thorndike, then, in addition to helping the more scientific spirit among the educationists, contributes definite concepts to our structure of the psychology of the new school: He

- confirmed the validity of the operational concept of meaning.
- documented the nature of individual differences.
- documented the course of growth for many mental abilities, contributing greatly to "the knowledge of the rate, amount, and condition of improvement in the hierarchy of habits called abilities."

¹ W. Köhler: *The Mentality of Apes*; English translation, 1925. See especially K. Koffka's excellent analysis of Thorndike and Köhler in *The Growth of the Mind*, 1924; second edition, 1928.

² *Mental Discipline in School Studies*. Warwick and York (1916).

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

- promoted concepts basic to exact measurement in education.
- clarified the concepts of measurement in education — unit, scale, test, zero point, rate of work, role of speed in work.
- fixed attention on the concept “whatever exists, exists in some amount.”
- confirmed the wholeness-psychologists’ insistence that “mere sequence, or contiguity, or repetition is not enough” for learning; “connections are strengthened by belongingness” as well as by “satisfaction.”

II. WATSON AND THE CONDITIONED-REFLEX PSYCHOLOGY OF THE BEHAVIORISTS

Of the several “psychologies” that have arisen in our times, the closest to Thorndike’s connectionism was John Broadus Watson’s conditioned-response “Behaviorism.”¹

It was short-lived. Watson’s first blast against an introspective-consciousness psychology came in 1912. Eight years later he had left the university study of psychology and had gone permanently into the psychology of advertising. During the last quarter century, he reissued his *Behaviorism* twice (I use here the 1930 edition); aside from that he has played no part in maturing the psychological foundations of education. But during his single decade of professional work he aroused psychologists to widespread controversial discussion, and his brief activity left a definite residue of attitude and understanding.

On the negative side he stirred academic psychology by leveling a barrage of destructive attack against the “subjective” and unscientific nature of its basic concepts and methods. In his first broadside he announced that he had

¹ John Broadus Watson, assistant in experimental psychology 1903–1904, instructor 1904–1908, University of Chicago; professor of experimental and comparative psychology and director of the psychological laboratory, Johns Hopkins University, 1908–1920; became vice-president of J. Walter Thompson Company, New York, 1924; now vice-president of William Esty & Co., New York. Editor of the *Psychological Review* 1908–1915, *Journal of Experimental Psychology* 1915–1927. Commanding major of Aviation Section, Signal Corps U.S.R., 1917; on duty at Washington, Mineola, and with A.E.F. Member of the American Psychological Association (president, 1915). Author: *Animal Education* (1903), *Behavior* (1914), *Homing and Related Activities of Birds* (1915), *Suggestions of Modern Science Concerning Education* (1917), *Psychology from the Standpoint of the Behaviorist* (1919), *Behaviorism* (1925; Revised Edition, 1930), *Ways of Behaviorism* (1928), *Psychological Care of Infant and Child* (1928).

“decided either to give up psychology or else make it a natural science.” [Hence we shall] . . . “limit ourselves to things that can be observed, and formulate laws concerning only those things. Now what can we observe? Well, we can observe *behavior* — *what the organism does or says*. And let me make this fundamental point at once: that *saying* is doing — that is, *behaving*.”

Watson set himself a definite standard:

“Can I describe this bit of behavior I see in terms of ‘stimulus and response’? By stimulus we mean any object in the general environment or any change in the tissues themselves due to the physiological condition of the animal, such as the change we get when we keep an animal from sex activity, when we keep it from feeding, when we keep it from building a nest. By response we mean anything the animal does — such as turning toward or away from a light, jumping at a sound, and more highly organized activities such as building a skyscraper, drawing plans, having babies, writing books, and the like.”¹

Here, then, was a thoroughgoing “behaviorism.” What the human being “does” — not what he “thinks” or “feels” he has done after he has done it. Watson’s conception of being “scientific” in psychology is perfectly presented in his descriptions of the “conditioning” of very young infants, one example of which I quote on later pages. Set the behavior stage meticulously for observation and record making, he said, but set it with actual complex life situations. Watson’s critics have frequently misinterpreted him,² saying that, like Thorndike, he studied minute mental functions — specific “conditioned-reflexes.” Actually he always studied the most complex “total” forms of behavior.³

¹ John B. Watson: *Behaviorism*, pages 6–7.

² See especially Bode’s prolonged attack in his *Conflicting Psychologies of Learning*.

³ I give here a few sample subjects from his dozens of examples:

- the “conditioning” of fear in infants
- the design of a dress by Patou
- learning to speak a foreign language
- memory of long-absent friends
- many examples of the “complexity of (bodily) organization” of human behavior in thinking
- analysis of thought and habit systems of the deaf-blind-dumb Sara Bridgman
- analysis of the psychology of forming a new business partnership

See his *Behaviorism* (1930).

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

He makes movement the key to response, although "the response may be so slight that it can be observed only by the use of instruments." Recognizing that his psychology has been criticized for this emphasis, he adds, in the 1930 edition of *Behaviorism*:

"Let me emphasize again that the Behaviorist is primarily interested in the behavior of the whole man. From morning to night he watches him perform his daily round of duties . . . no one can distort the behaviorist's platform to such an extent that it can be claimed that the behaviorist is merely a muscle psychologist."

We see, then, that Watson stands very close to Thorndike in his basic description of the human processes involved in what he calls psychology. Both men use the S-R concept — Thorndike using the word "Situation" while Watson used "Stimulus" for the first symbol. Like James, Dewey, and others, both are behaviorists. I think it is doubtful whether Watson can be called a true connectionist; his examples have a definitely generalist coloration. At one point he said: "Yes, emphatically, the Behaviorist is an integrationist."

CONTRIBUTION TO OUR KNOWLEDGE OF THE INSTINCTS AND UNLEARNED EMOTIONAL REACTIONS

Since Watson's studies were primarily on the responses of newborn infants and very young children, his investigations led to a unique contribution in the field of instinct. Before 1910 the best of our psychologists, including James himself, assumed a large number of responses to be unlearned tendencies to behavior — climbing, imitation, pugnacity, anger, resentment, sympathy, hunting, fear, and many others. Today, with even a cursory glance we can eliminate most of these because they are clearly examples of learned behavior. Thorndike,¹ following his former teacher, assumed an even longer list.

But Watson said, "Let's find out by investigation of newborn infants just what unlearned tendencies are revealed." So he studied their behavior, and out of "almost daily observation of several hundred infants, from birth to the first thirty days of infancy, and of a smaller number through the first years of childhood," got the following list: sneezing, hiccoughing, crying, erection of penis, voiding of urine, defecation, early eye movements, smiling, manual responses, turning the head, holding up head when the infant is held in upright position,

¹ See his *Original Nature of Man* (1913).

hand, arm, leg and foot, and trunk, leg, foot, and toe movements, feeding responses, crawling, standing and walking, vocal behavior, grasping and blinking (handedness could not be established). Note carefully: *every one of these reflects tendencies to body movement.* Watson's evidence confirmed me years ago in my conclusion that James's emphasis on body-response was very important, and too much ignored since his time. Watson built in place of the "stream of consciousness" idea, the concept of "activity stream," a vast stream of actual behavior of the individual, which begins "when the egg is fertilized and becomes more complex as age increases."

He worked in the same way on the problem of the emotions. He compared McDougall's long list of emotions — fear, disgust, wonder, anger, subjection and elation, and the tender emotions — with his own systematic observations as found in the emotional behavior of infants. He found evidence of only three types of unlearned emotional reactions; these he called fear, rage, and love, but gave the terms new connotations. He found the fear reaction with infants under only two conditions: a loud sound — especially of a harsh, shrill type, such as that produced by striking a steel bar with a hammer — and loss of support, especially when the body is not set to compensate for it. Rage was brought about by such conditions as the hampering of bodily movements. As for the third reaction — love — he used the term to include various responses, such as the

"stroking of the skin, tickling, gently rocking, patting. . . . The responses we intend to mark off here are those popularly called 'affectionate,' 'good-natured,' 'kindly.' The term 'love' embraces all of these as well as the responses we see in adults between the sexes."

THE CONDITIONING OF RESPONSES —
THE INDIVIDUAL'S WAY OF ADAPTING TO HIS ENVIRONMENT

Out of Watson's work came a new and emphatic stress on the greater role of the environment and a study of the *process* of learning. To explain the process by which the human being is inducted into and adapts himself to the environment, Watson was influenced by the concept of "the conditioned reflex" which the Russian biologists Bechterev and Pavlov had developed in their experiments in animal behavior. In Watson's first edition of *Behaviorism*¹ he mentioned it

¹ Entitled *Standpoint of the Behaviorist* (1919) . . . *Behaviorism* (1925; Revised Edition, 1930) . . . *Ways of Behaviorism* (1928).

approvingly, although he did not make it the foundation of his interpretation of human response; in the 1930 edition, however, he committed himself to it wholeheartedly.¹ Especially since the time of Watson's studies psychological literature has abounded in examples showing how human beings are "conditioned." Watson's illustration of little Albert being conditioned with fear responses to white rats and other furry objects is so clear and objective that I refer the reader to the original source.²

A BODY-RESPONSE PSYCHOLOGY

Among the twentieth-century psychologists Watson was the only one to make much of the response of the body, although he ignored James's idea that it was the mechanism of the feelings. Such concepts were anathema to him, on a par with consciousness, mind, memory, meaning, thinking, attention, perception — all useless to a true behavior psychology. It was bodily habits that Watson was absorbed in, how they start, how we retain them, and how we discard them. (He apparently did not see that *the instruments of "feeling" were the body-habits.*) The human being is differentiated from the rest of the animal kingdom, he said, by the number and fineness of his visceral or emotional habits, his laryngeal or verbal habits, and his manual habits. Using the concept of conditioning, he shows the step-by-step growth of these specific habits, their nature and complexity, and the order in which they are taken. A complicated habit, he says, breaks down into a series of conditioned reflexes. He admits you cannot "explain" a conditioned reflex, but at least you have reduced the process to simpler terms — simple enough so that you can experiment and record development.

"HIGHER THOUGHT PROCESSES" ARE ALSO BODY-RESPONSE

The complex and so-called "higher" mental processes — such as, thought, creative effort, meaning, memory — he also reduced to bodily response. Consider "thought," for example:

¹ Gordon Allport also later made a systematic use of it, speaking of the "law of conditioned reflex" and defining it:

"Whenever a stimulus has a motor outlet, any stimulus occurring simultaneously will tend to acquire the same motor outlet; after sufficient repetition (sometimes one occasion is enough), the second stimulus alone will suffice to produce a discharge in that motor outlet." — *Personality*, page 140.

² *Op. cit.*, *Behaviorism*, pages 159–161 (1930).

"The behaviorist advances the view that *what the psychologists have hitherto called thought is in short nothing but talking to ourselves*. The evidence for this view is admittedly largely theoretical, but it is the one theory so far advanced which explains thought in terms of natural science. I wish here expressly to affirm that in developing this view I have never believed that the *laryngeal movement . . .* as such played the predominating role in thought. I admit that in my former presentations I have, in order to gain pedagogical simplicity, expressed myself in ways which can be so interpreted. We have all had the proofs before us time and again that the *larynx can be removed without completely destroying* a person's ability to think. *Removal of the larynx does destroy articulate speech, but it does not destroy whispered speech. . . .*

"My theory does hold that *the muscular habits learned in overt speech are responsible for implicit or internal speech (thought)*. It holds, too, that there are hundreds of muscular combinations with which one can say either aloud or to himself almost any word, so rich and flexible is language organization and so varied are our overt speech habits. . . ." ¹

We "think," then, primarily with the organism, especially the body, and especially through the utterance of words.

"*Whenever the individual is thinking, the whole of his bodily organization is at work (implicitly)* — even though the final solution shall be a spoken, written, or subvocally expressed verbal formulation. In other words, from the moment the thinking problem is set for the individual (by the situation he is in) activity is aroused that may lead finally to adjustment. Sometimes the activity goes on in terms of (1) implicit manual organization; more frequently in terms of (2) implicit verbal organization; sometimes in terms of (3) implicit (or even overt) visceral organization. *If (1) or (3) dominates, thinking takes place without words.*" ²

How does the creative act take place? "How does the 'new' come into being? . . . How do we ever get new verbal creations such as a poem or a brilliant essay?" Watson's answer is: "We get them by manipulating words, shifting them about until a new pattern is hit upon." How is a new design created in the world of plastic art? Consider, says Watson, how Patou, the dress designer, works:

¹ *Op. cit.*, *Behaviorism*, pages 238–239. [My italics.]

² *Ibid.*, pages 266–267. [My italics.]

"He calls his model in, picks up a new piece of silk, throws it around her; he pulls it in here, he pulls it out there . . . makes the skirt short or long. He manipulates the material until it takes on the semblance of a dress. *He has to react to it as a new creation before manipulation stops.* Nothing exactly like it has ever been made before. His emotional reactions are aroused one way or another by the finished product. He may rip it off and start over again. On the other hand, he may smile and say, 'Voilà, parfait!' In this case the model looks at herself in the mirror and smiles and says, 'Merci, Monsieur.' The other assistants say, 'Magnifique!' Behold, a Patou model has come into being!"¹

How about the concepts of meaning and memory? The behaviorist insists these concepts have no "scientific connotation," but if you insist on knowing how the behaviorist interprets "meaning," he says:

"Let us take a simple case. Let us take the object 'fire.' . . . During the course of many years I became conditioned in a hundred ways to fire. In other words, depending upon the situation I am now in and the series of situations leading up to the present one, I may do one of a hundred things in the presence of fire. As a matter of fact *I do but one at a time. Which one? The one which my previous organization and my present physiological state call forth.* I am hungry; the fire makes me start to cook bacon and fry eggs. On another occasion I go to the brook and get water to put out the fire after I am through camping. . . . On still another occasion, when a forest fire hedges me about, I jump into the lake. On a cold day I stand in front of the fire and toast my whole body. Again, under the influence of some propagandist of murder, I pick up a burning brand and set fire to a whole village. *If you are willing to agree that 'meaning' is just a way of saying that out of all the ways the individual has of reacting to this object, at any one time he reacts in only one of these ways, then I find no quarrel with meaning.* While I have chosen my illustrations in the manual field, the same procedure holds good in the verbal field. In other words, when we understand the genesis of all forms of an individual's behavior, know the varieties of his organization, can arrange or manipulate the various situations that will call out one or another form of his organization, then we no longer need such a term as meaning. Meaning is just one way of telling what the individual is doing."

¹ *Ibid.*, pages 247-248.

"So the behaviorist can turn the tables upon his critics. They cannot give any explanation of meaning. He can, but he does not believe the word is needed or that it is useful except as a literary expression."¹

How about "memory"?

"You can see that *'memory' is really the functioning of the 'verbal' part of a total habit.* Once we have verbalized a bodily habit, we can always talk about it. If we couldn't talk about golf, the only way we could prove or exhibit our organization in it (our 'memory' of it) would be to go to the golf field and play it out hole by hole. But the situation for touching off our verbal organization in golf occurs a thousand times more frequently than does the actual situation touching off our organization for playing golf (simultaneous presence of links, leisure, clubs, golf balls, companions, clothes, plus bodily and verbal set — 'I am going to play golf now'). What is popularly meant by 'memory' is, *then, the running through or exhibition of the verbal part of a total bodily organization.* The manual part of this organization is not being called out — if the manual part were called out, we'd say *'he is doing it'* instead of *'he is remembering it.'*"²

Thus Watson is consistent throughout; all the higher processes are accounted for by the "total bodily organization," and the "verbal part" is the special instrument of "thinking," "meaning," or "memory." I shall comment further on this emphasis on body response in Chapter VII.

THE BEHAVIORISTS' VIEW OF PERSONALITY

But Watson carries the theory further; even to the point of saying "our personality is but the outgrowth of the habits we form." Think of a man as "an assembled organic machine ready to run." As an automobile is good for certain kinds of duties, so man, who is made up of parts, is good for certain jobs. Watson says that the behaviorist "doesn't care what kind of man he is"; his concern is "to be able to state what the human machine is good for."

"What kind of work habits has John Doe? What kind of husband does he make? What kind of father? How does he behave toward his subordinates? His superiors? How does he behave toward his partners or equals in whatever group he works? Is he

¹ *Ibid.*, pages 249-250.

² *Ibid.*, page 256. [My italics.]

really a man of principle or is he a psalm-singing, sanctimonious individual on Sunday, and a grasping, close-fisted, unscrupulous businessman on Monday? Is he pleasantly well-bred, or is he over-courteous, with accent and mannerisms dependent on the college he grew up in, or the last country he visited? Does he make a faithful friend to friends in need? Will he work hard? Is he cheerful? Does he keep his troubles to himself?"¹

Thus we are to analyze personality by cataloguing what people do. He speaks of the shoemaker in terms of "the shoemaking habit system," "the deeply religious man" in terms of "the religious habit system of the individual" — viz.: the man who goes to church, reads the Bible, says grace, and tries to convert his neighbor. Hence:

*"Personality is the sum of activities that can be discovered by actual observation of behavior over a long enough time to give reliable information. In other words, personality is but the end product of our habit systems. Our procedure in studying personality is the making and plotting of a cross section of the activity stream."*²

/ / /

These are the high spots of Watson behaviorism, near to Thorndike in its connectionism, extreme in its reduction of all psychological activity to overt systems of habits, insisting it is in the main stream of organism, by its inclusion of implicit manual, verbal, and visceral habits, and claiming acceptance of the idea of the "total response of the organism." But its critics, and they have been many for thirty years, found one great fault with it. They said it really was not an organic psychology, that it gave only lip service to the integration principle. The fault is in the central concept of "conditioned-reflex." With Bode,³ they ask: What is it that organizes the reflexes to meet the special demands of any moment? Each human situation is unique, demanding a unique organization of the conditioned responses. What brings that about? The critics say: "Purpose." Bode puts it:

"To the average man purpose in some form is an indispensable condition for giving direction to our acts. Is it really possible to dispense with purpose and foresight altogether?"

"According to behaviorism, however, no human behavior of

¹ *Ibid.*, pages 270–271.

² *Ibid.*, page 274.

³ See *Conflicting Psychologies of Learning*.

THE LAST STAND OF MECHANISM

any kind is determined by purpose, since purpose has been reduced to physiological activity. . . . All behavior is reducible to the type of reflexes, in other words, learning is 'building up new reflexes.'

But the experiments of K. S. Lashley prove that "learning is not a matter of building up conditioned reflexes." Lashley says:

"I am coming to doubt the validity of the reflex-arc hypothesis, even as applied to final reflexes. There are many indications that the spinal reflexes are no more dependent upon isolated conduction paths than are cerebral functions." [He says it is] "very doubtful if the same neurons or synapses are involved even in two similar reactions to the same stimulus."

After a generation of discussion, these are the high spots of the residue of Watson's conditioned-reflex psychology. His is clearly a contribution, although a minor one. It has helped the reconstruction of education by

- an effective emphasis on the necessity of making psychology a natural science.
- the building of an attitude of caution in the use of introspection.
- definitely confirming the role of the movement of the body in meaningful behavior.
- contributing to the building of a healthy attitude toward definiteness in use of such psychological concepts as thinking and meaning.
- practical documentation of the usefulness of the concepts of the conditioned response.

III. GESTALT AS A "FIELD" PSYCHOLOGY: EXPERIMENTAL EVIDENCE FOR WHOLENESS AND GENERALIZATION

ANTECEDENTS OF GESTALT

In the connectionist and the conditioned-response psychologies we have the last stand of the mechanical explanations of human behavior — the last flare-up of the elementarist tradition. Although the micro-psychology still continued to impregnate most of our teacher education institutions and teaching in classrooms around the world,

there has been no reëmergence of a connectionist or conditioned-reflex psychology since those of Thorndike and Watson. On the contrary, as the evidence of my earlier chapters established, the concept of organism steadily ousted mechanism in every "science" that the philosophy of experience created. That was central to every school of psychological thought — Gestalt, psychoanalysis, psychology of the progressive schools, psychology of the person, the psychology of primal awareness, social psychology, and the psychology of esthetics. Of these the Gestalt leaders¹ did the most *to document experimentally* the integrational or wholeness view of man and his behavior.

The groping for the organic nature of human response was so widespread, even before 1900, that no psychologist or group can claim the credit for originating the concept. We have seen how completely William James and John Dewey were gripped by the wholeness, generalizing concept. A quick glance back at Chapters III and IV will give the reader a half dozen synonyms for the central meanings of Gestalt psychology. Because it has been the tendency of devotees of Gestalt psychology to claim credit for originating the organic idea, maintaining that the European pioneers of the 1890's were a part of their movement, I shall review their antecedents a bit further.

The Early Germans Had Resisted Wundt's Micro-Psychology

At the very moment of Wundt's supremacy, in the 1880's and 1890's, creative men in Germany as well as in England, France, Russia, and the United States were working along "wholeness" lines that were utterly divorced from the mechanism of the Wundtian laboratory. Inside Germany there were two fairly distinct groups of younger Germans that had never fallen under the elementarists' sway. Brentano and Stumpf led one group, building what was called the "Act" psychology, exploring "functions" and "relations," stressing processes rather than "mental contents" and catching just a glimpse of the gen-

¹ Hartmann, in the glossary for his *Gestalt Psychology*, defines it:

"Gestalt . . . the theory that all mental experience comes organized in the form of structures which, when relatively incomplete, possess an immanent tendency toward their own completion. It rejects the assumption that isolated local determination of psychic processes ever occurs and maintains that all organic and inorganic stresses tend toward an end—the state of equilibrium. In its broadest sense, the doctrine of Gestalt is a philosophy of nature and holds for all the sciences and not just for psychology. The external universe, life, and mind are composed of Gestalten."

eralizing motor activity of the organism. The other group, led by Mach, Ehrenfels, Lipps, Ebbinghaus, Külpe, and several minor figures, were working on memory and the "higher mental processes," on "Gestalt qualities," "form qualities," slowly building an awareness of the self, making first studies of the role of feeling, and struggling to define what was involved in such generals as form and quality. Mach¹ had stressed the general qualities in organic objects:

"the tree with its hard, rough, gray trunk, its numberless branches swayed by the wind, its smooth, soft, shining leaves, appears to us at first a single indivisible whole."

The wholeness was an entity, not a mere aggregation of elements. Christian Ehrenfels, working experimentally in music on the apprehension of melodies, concluded that "the experience is more than the sum of the separate 'local determinants.'" He was concerned to find out whether in the total presentation more can be found than appears in the component sensations. He found that

"the resemblance between spatial and tonal patterns rests upon something other than a similarity of their accompanying elements. The totals themselves, then, must be different entities than the sums of their parts."²

Ehrenfels gave the term "Gestalt-Qualitat" or "form-quality" to this new "whole" which emerged in the experience.

Meanwhile, even in Germany, other students were not only recognizing the concept of wholeness but were saying that "the whole is more than the sum of its parts." In an unusual scientific paper in 1894 Wilhelm Dilthey used the phrase in a pioneer discussion of the mental and moral sciences. He insisted that for any adequate interpretation there must be apprehension of the "total."

"The psychic life process is in all cases an original unity from its simplest to its highest forms. Mental life does not grow together from parts; it does not build itself up out of elements; it is not a composite, nor a result of coöperating atoms of sensation and feeling; it is primitively and always a comprehensive unity."³

The perception studies contributed more evidence. Rubin, the Danish psychologist, had pointed to the role of pattern in his studies

¹ In his original *Analysis of Sensations* (1886).

² Quoted by Hartmann in his *Gestalt Psychology*, page 11.

³ *Ibid.*, page 15.

of the process of fixation and the recognition of figures. The "herring-bone" illusion had long been known. Rubin contributed the concept that in perception objects are seen as "figure and ground," stressed the role of the unity of the whole, showed that the total was always organized so that one aspect was central as "figure," the remainder serving as "ground." Reviewing the data, Hartmann concluded that "the basic rule which emerges from these researches is that a field cannot be experienced simultaneously as figure and as ground." The generalizing influence of various German studies had been felt in the United States by the 1890's. Herbart's conception of apperception had given some added impetus to the interest in wholeness, and in the eye-movement studies of Erdman and Dodge (1898) the role of the "higher perceptual units" was emphasized. In England, Stout¹ was asking, "Can the whole be apprehended without apprehension of the parts?" At approximately the same moment Lipps was stating his concept of empathy, emphasizing that the whole organism "felt itself" into a situation.

Thus, all through the scientific world of the 1890's, in Europe as well as in America, there was a vague reaching toward an understanding of the action of the total organism. Each student widened the horizon a bit, pushed the curtains of perceptionist psychology a little farther apart, permitting a view of more of the human being in action. It was in this background that the psychology known as Gestalt was developed after 1910.

IV. THE FIRST GESTALTISTS AND THEIR STUDIES

Scores of investigators have contributed to the central concepts of Gestalt, but seven names stand out above all others: four from Germany and three from the United States. The Germans were:

- Max Wertheimer, the original pioneer on the investigation of the perceived movement.
- Wolfgang Köhler and Kurt Koffka, Wertheimer's subjects and later his associates in Berlin, and by far the leading experimentalists and phrasers of the theory and the finding.
- Kurt Lewin, the younger colleague who carried the original perception studies into emotion, will, and action.

¹ In his *Analytical Psychology* (1896).

The Americans were:

- R. M. Ogden, the pioneer.
- George Hartmann and Raymond Wheeler, authors of Gestalt interpretations which are by far the best for American conditions.

/ / /

In 1912, Max Wertheimer reported at Berlin a provocative new study of *perceived movement* which denied Wundtian and other atomistic explanations of meaning. He had shown his subjects two vertical lines moving at varying rates; beginning with a time interval of one second, he gradually reduced the time to 1/45 of a second. When shown a second apart, the subject saw two separated lines; at various shorter intervals, such as 1/5 second, he still saw two stationary lines. *But at .06 second, he saw a single line, moving from the first position toward the second position.* Still further decreasing the interval, say to .03 second, the two stationary lines appeared again. Moreover, a horizontal line followed by a vertical line was perceived as a single line rotating through 90°; there were other similar variations in the perceived movement. Apparently, there was an optimum speed (about .06 second) at which *the lines in two positions were perceived as movement.* This is a form of the phenomenon well known to laboratory psychologists as “apparent movement,” four

SELECTED SOURCES ON GESTALT

I pick a few publications from an enormous library of experiment and interpretation. The first ones appeared between 1912 and the close of World War I, associated with the names of Wertheimer, Köhler, and Koffka.

1. The Europeans:

- Wolfgang Köhler: *Gestalt Psychology ... The Mentality of Apes*
- Kurt Koffka: *The Growth of the Mind ... The Principles of Gestalt Psychology*
- Kurt Lewin: *A Dynamic Theory of Personality ... Principles of Topological Psychology*

2. The Americans:

- R. M. Ogden: *Psychology and Education*
- George Hartmann: *Gestalt Psychology*
- Wheeler and Perkins: *Principles of Mental Development*
- Harry Helson: *Gestalt Psychology*
- J. F. Brown: *Psychology and the Social Order*
- R. S. Woodworth: *Contemporary Schools of Psychology*

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

types of which have been discriminated — alpha, beta, gamma, delta. Wertheimer named the type he discovered the “phi-phenomenon,” or “pure phi,” that variety in which *nothing but motion is perceived*.

Wertheimer did two things with his findings: first, he announced them as devastating evidence against the Wundtian elementarist interpretations of perception; second, he presented a *theory that movement is actually sensed — not reinterpreted by the higher mental processes*, as was commonly said by psychologists. The novel element in the theory was that changing positions of objects in space are recorded directly by the brain process. As Woodworth says:

“Psychologists have been accustomed to say that we do not really see those facts, but *infer them*, or reach them by a process of association based on past experience. In all such cases, the *Gestalt psychologists* hope to show that seeing, in the sense of the primary brain response to the situation, *does give the facts directly*. They hold, then, that the primary brain response does not depend simply on the stimulation received by the retina, but also on other factors in the total situation. Any stimulation reaching the brain is taken up into a dynamic interacting system, and its effect there depends on the total activity going on in the brain.”¹ [My italics.]

After thirty years of controversy, the point is still a matter of theoretical debate.

KÖHLER'S FIRST ANIMAL STUDIES

Two years after Wertheimer's study, one of his subjects and associates at Berlin, Wolfgang Köhler, was interned by the outbreak of World War I on the Canary Island of Teneriffe, where he was studying the learning of apes at a German experiment station. Out of this long-enforced isolation came the distinguished study, *The Mentality of Apes*. By the time of its appearance, Wertheimer's associates had become vigorous opponents of all associationism — including Thorndike's connectionist, “trial and error” explanation of animal learning. Convinced that Thorndike had “set the stage” for his animals so that they could not “see the whole situation” and could do nothing but respond blindly at random, Köhler arranged a seventeen-step graded series of animal experiments on chimpanzees, on the theory that the key to successful response was a brain process which he called “in-

¹ R. S. Woodworth: *Contemporary Schools of Psychology*, pages 104–105.

THE LAST STAND OF MECHANISM

sight." If the animal had sufficient power of insight, the experiment must be so set as to let him exercise it; putting animals in mazes and puzzle boxes would not do that. So, instead of using "blind situations," Köhler put Sultan and the other chimpanzees in a big open cage and left the "stimulus" — food in a basket and strings and sticks and other paraphernalia — out in full view so that the subjects could "see the whole situation."

What was the result? Köhler reports many examples of behavior, that he says are the result of what he calls "insight" or "the sense of seeing what he is doing." For example, to name only a few:

1. Hungry ape perceiving food in a basket outside the cage, with string attached to basket, "learns" to reach for string and eventually successfully to pull basket (and food) to him.

2. Hungry ape tries to reach basket or string . . . fails . . . idles for a long time. Hours later, looking around the cage, he sees stick, handles it, reaches with it, finally succeeds in pulling basket (and food) to him. The stick, formerly meaning "something to hit with," has now, *through his new response, acquired the new meaning* "something to fetch things with."

3. Hungry ape, reaching with a single stick, is unable to bring basket in. He idles, looks around cage, finally, after hours of delay, sees a second stick, handles it, tries unsuccessfully to reach basket with it. At last, after long manipulation, matches the two sticks together, making a single stick long enough to fetch the basket to him.

So it went through seventeen "problems" — each one graduated in complexity. How do the Gestalt psychologists appraise the animals' behavior? Koffka, associate of Köhler, emphasizing that the animal must see all the significant parts of the situation together — for example, the food, the stick, and other paraphernalia he is to use in fetching it — interprets the behavior thus:

"From this significant influence of visual factors we can understand the actual accomplishment of the animal in his employment of the stick; for it is not merely a matter of seeing or noticing an object such as a stick, because before it is employed the object must cease to be an isolated neutral thing to the animal and become a member of the situation at hand. The object must, in short, become a 'tool.' As a necessary condition for a correct type of behavior an *alteration must occur in the object of percep-*

tion. What at the beginning possessed only the character of 'indifference,' or 'something to bite upon,' etc., now obtains the character of a 'thing to fetch fruit with.' . . .

"What the animal has actually learned is to make an irrelevant object relevant to the situation. . . .

"... only one conception of the performance is possible: that the animal has acquired an ability to introduce 'tools' into certain situations. Nor is this ability limited to the particular thing with which it was acquired; on the contrary, it is an acquisition of a much more general nature. As Köhler expresses it, the stick as it appears in the field of vision has acquired a definite *functional value* in certain situations, and this effect is itself carried over to any object which may have certain general characteristics in common with sticks, even though these objects appear otherwise quite differently. . . .

"A transfer of learning from one thing to another results, therefore, from the sensible application of a certain principle of configuration."¹

Woodworth, interpreting Köhler's studies,² says:

"The stress of Gestalt psychology is on the perceptual factor in learning. Learning means doing something new. The newness cannot be understood by examining the motor performance alone, for the newness consists in a *reorganization of the situation*, so as to bridge the gap between the situation as it is and the goal. *The gap is bridged by seeing the situation as a pattern including and leading to the goal.*

"To show what is meant by 'insight,' the simplest instance of it may be described. If a dog is brought into a strange yard, containing a length of fence, and if, while the dog is at the middle of the fence, some food is placed directly in front of him but on the other side of the fence, the dog almost immediately, so Köhler found, makes a dash around the end of the fence to the food. The dog can *see* the way to the food, though it is not a direct path. In a complicated maze, on the other hand, the animal must explore, not being able to see the whole path to the goal. Köhler's chimpanzees solved with ease any problem which consisted literally in a roundabout path to the objective, provided the path were all in clear view."³

¹ Kurt Koffka: *The Growth of the Mind*. From pages 191, 192, 193, and 172. [My italics.]

² *Op. cit.*, Woodworth, pages 101-105.

³ *Ibid.*, pages 115-116.

In the thirty years since Wertheimer's first study there have been hundreds of Gestalt experimental investigations of animal and human behavior; those we have cited are but two of the more widely discussed ones.¹ Many of these involve the learning of animals in responding to fairly simple perceptual situations. To cite a single one: chickens were trained to peck corn from alternative squares which had been painted light and dark gray. When the chickens had learned to peck from dark gray squares, the light gray squares were repainted with a new and equally *darker* gray. The chickens now pecked the grain, not from the gray squares to which they had been habituated, but to the new *darker* gray squares. The Gestalt explanation is that they responded, via "*insight*," to the total pattern of light and dark; the brain process "saw" the alternate squares together, the dark at the focus or "figure" from which they pecked. The American problem-solving explanation is: the chicks responded to *the relation* between the grays. The one, say the "problem-solving" psychologists, is *the significant relationship*. They agree on the usefulness of the notion of pattern, or configuration, but feel that the brain interpretation of "insight" has not been established.

"Insight" to the Gestaltists is "the phenomenal correlate of the closing of a configuration." "Insight is the how and why of a situation, an understanding of the innermost nature of the field, the stresses not merely apprehended, but comprehended." And again: all "learning is via insight." Hartmann indeed says of "learning,"

"in Gestalt theory, this is equivalent to the process of acquiring insight into a situation; or more generally, the process of establishing new organized wholes."

For Dewey's concept of problem-solving, the Gestaltists substitute "closing the gap" in the configuration. This is the function of reasoning.

The Gestaltists also confirm the artists in their emphasis on form and organization.² Wertheimer stressed it, inventing the word

"Pragnanz for the most typical form an organization can assume and toward which every such structure tends. It is the most general law of configurations and states that all experienced fields tend to become as well-articulated as possible."

¹ See, for example, Harry Helson: *Gestalt Psychology*, or George Hartmann: *Gestalt Psychology*.

² See Chapter XIV.

And all of this seems to be very close to Thorndike's later-developed concept of "belongingness," when he grants that "mere sequence, or contiguity, or repetition is not enough." "Connections are strengthened by belongingness."

The Gestaltists insist that the brain process of seeing is itself part of the "situation." This, I am convinced, is mere hypothesis, on the order of Thorndike's neuron explanation of human response. Applied to the countless minute physical manipulative situations of home and occupational life, it *may be* a good, even the correct, interpretation of how we understand and respond. But what application the "insight" (brain process) theory has to the non-face-to-face situations, to the "social problems" in which the data of understanding are instated through words, memory, and imagination, has not been shown. Certainly no clear enhancement of the teaching process can be traced to it.

V. LEWIN: THE STUDY OF PSYCHIC NEEDS (TENSIONS), EMOTION, AND WILL¹

The fourth leader, and the conspicuous current one, in Gestalt psychology is Kurt Lewin (1890-1947). He too was a student of Stumpf, receiving his degree at Berlin in 1914. His academic work having been interrupted by World War I, he finally reestablished himself in university life in 1927, going to Berlin as associate professor of psychology. Five years later he was in the United States, teaching psychology at Stanford University. With the rise of Hitler to power in 1933, Lewin was officially expelled from Germany along with Wertheimer, Hornbostel, Stern, Werner, and other distinguished scientists, many of whom were brought together under Alvin Johnson's leadership in the "University in Exile" at the New School for Social Research in New York City. Following his year at Stanford, Lewin taught psychology at various American universities, including Cornell, Iowa, Harvard, and the Massachusetts Institute of Technology.

¹ I seriously considered postponing this discussion of Lewin's work until Chapter VI, to include it with the material on the psychology of the Person. I finally decided to leave it here with the other "Gestalt" contributions. It should be considered again in connection with the psychology of personality.

*Again the Principle: Theory before Experiment,
Design before Construction*

Lewin's experimental contribution is important, but it can be understood only in the light of his *more primary work in theory*; in it, indeed, we have another exhibit of the principle that *design must precede* construction in any area of life. As the new physics built atomic fission on a hundred years of accumulating theory from Faraday to Einstein, Lewin built a theory of mind and behavior before he set up psychological experiments. Whether or not his theory is sound, the technique of theory before experiment is scientifically right.

A THEORY OF PSYCHIC TENSION

In 1926 Lewin published the provocative essay, "Purpose, Will, and Need," confronting the fundamental question: "What is the origin of causative energies? What *causes* human behavior?" Studying the laws of association in his own early experiments, he concluded that neural connections (as was implied in the connectionist and conditioned-reflex psychologies) cannot possibly be the causes of behavior.

LEWIN'S MAJOR WRITINGS

Two scores of monographs and articles and several major books measure the prolific creative work of Lewin and his associates. Most of these report specific investigations in his laboratory. In addition, four theoretical papers appeared between 1926 and 1936, from which the general structure of his psychology can be seen:

1. A theoretical paper on "Purpose, Will, and Need: with a Preliminary Account of Psychic Forces and Energies and the Structure of the Mind," "Versatz, Wille, and Bedürfnis." *Psych. Forsch.*, 1926, 7, 330-384.
2. 1931, "The Conflict between Aristotelian and Galilean Modes of Thought in Contemporary Psychology." *Journal of Psychology*, 1931, v. 141-177.
3. 1935, *A Dynamic Theory of Personality*; a reprinting of selected essays. McGraw-Hill Book Company.
4. 1936, *Principles of Topological Psychology*; his general systematic theoretical book. McGraw-Hill Book Company.
5. 1938, *Conceptual Representation and Measurement of Psychological Forces*.

See also such American writings as:

6. J. F. Brown: *Psychology and the Social Order*.
7. G. Hartmann: *Gestalt Psychology* (pages 202-240).
8. Wheeler and Perkins: *Principles of Mental Development*.

The nub of his theory, accepting the Gestalt concept of action wholes, is that *behavior is caused by tension systems of energy which result from the needs (wants) of the organism*. Lewin postulated that the root of all mental activity is a tense psychic system; it is this which produces unity of concept and behavior. The release of tension is the principal factor determining the action of the individual. His favorite concrete illustration — the task of remembering to mail a letter — is an example of the tensions set up by an uncompleted task. As long as the letter remains unposted, the tension remains in the physical system; once the letter is dropped in the box, the tension is released and one can forget it. Hartmann reports that when he was in Berlin, the story was being told in the Institute that Lewin first got his investigational hunch by noting that waiters in restaurants were successful in remembering many complex details of customers' bills *before they were paid*; forgetting set in rapidly with the completion of the payment of the bill and the receiving of the tip. Thus, Lewin extended Gestalt into the field of psychic energies and their relation to needs (wants). To account theoretically for the needs of the organism, he built his conception of psychic forces (need-like tensions) drawing upon reservoirs of energy, postulating that, as needs and psychological processes change, body tensions change also. Activity is produced, therefore, only by tense psychic systems. Lewin makes no attempt to explain psychological events in terms of physiological events, balance and imbalance (homeostasis), no attempt to theorize about the neural-somatic condition of the organism. Yet we have here, I think, the best qualitative description we have yet had of the role of needs, purpose, emotions, and will — in general, of the dynamic motivating aspects of human behavior.¹

*Experimental Studies of Needs:
Psychic Energies . . . Tensions*

A score of careful investigations scattered over a decade of research centered primarily on the psychological explanation of need (purpose), one of the first explanatory accounts of the causative forces determining behavior in attitude-emotion situations.²

¹ See in this connection Allport's "functional autonomy of motives," the key idea of his *Personality*.

² The nature of the general traits which were studied is shown by a brief sample of key words which Lewin lists in summarizing the problems which he handled experimentally:

THE LAST STAND OF MECHANISM

A score of investigations made by Lewin and his students dealt with such problems as:

- retention in completed and uncompleted activities . . . resumption of interrupted activities . . . the forgetting of an intention
- success and failure, and their relation to level of aspiration and achievement and carefully graded goal structures
- anger and the structure of fields of force in conflict situations
- the speed of discharge of tense systems on different levels of reality and unreality
- the dynamics of play (Sliosberg)
- the behavior of the child in strange situations
- the structure and the state of the whole person, stressing the relation of tension to fatigue and effectivity, the stratification of the whole person and the relation of its character to success and failure

THE FAINT OUTLINES OF A FORCE-ENERGY PSYCHOLOGY

By the early 1930's, Lewin had taken another theoretical step and thereby had given another push to the development of modern psychology.¹ This step was to formulate the theoretical outlines of a "topological" psychology on the modern concept of the "field of force." If Lewin had not taken it, someone else would no doubt have done so, for by the 1920's, as we have seen, the field idea was being given widespread circulation by the builders of the new physics. Einstein had published his energy formula in 1905, by which time the cumulative contributions of Faraday, Oersted, Maxwell, and Hertz had replaced the old mechanical explanations in physics with the concept of

Action	Forgetting	Satisfaction
Attitude	Gestalt	Self-control
Character	Gesture	Social relations
Compensation	Goal	Structure of environment
Conflict	Ideal	Success
Depth	Need	Whole, unity
Emotion	Person, structure of	Will
Experience	Purpose	
Force	Reality	

– *A Dynamic Theory of Personality*, pages 271–273.

¹ See his appraisal of the shift in modern times from the Aristotelian to the Galilean modes of thought in *A Dynamic Theory of Personality*.

the "field" and the so-called fourth-dimensional space-time concept of relativity. But the psychologists knew little or nothing of the new view until the revival of interest in the "new physics" two decades ago. With the exception of Charles Peirce, they had vast blind spots in physical science and mathematics — a tragic deficiency which still handicaps the development of our discipline. But Lewin had the imagination to grasp the basic concept that precise definition of theory must precede practical experiment and construction and to see in the energy-force concept the cue to the representation of psychic needs.

Looking back upon it, we can see that *the field concept can be used to embrace most of the organic versions of psychological thought which we have sketched in the foregoing pages — the American functional organic school, the various brands of configurationism including Gestalt, the organismic psychology of Wheeler and others, wholism, and the latest topological psychology of Lewin.* The work of Lewin and his students rounds out the trend, shows how closely related the human sciences are to the physical sciences, and takes the first tentative step toward building a mathematical theory as the underlying structure of psychology. We shall, therefore, use the term "field theory" to embrace all the wholeness psychologies, all those in which the part-whole relation is the nub, all those which insist that psychical phenomena are functions of their contexts and psychological properties are consequences of their organization.

By field, then, in psychology, we shall mean an organization of psychic forces or energies. Hence Lewin's topological psychology¹ is a first attempt to build a force-energy psychology: and here we leave behind the atomism-mechanism stage once and for all — association and the focusing on things as such, the "average child" of a statistical frequency, and "law" as the summary of measured empirical facts.

Above all, the use of the field concept in psychology is an attempt to get at the *causes* of behavior. What, in the light of all that man knows today, gets closest to the causes, motives, drives behind human action? He asks two basic psychological questions:

1. Why, at a given moment, with a given person in a given state and environment, does precisely this behavior result?
2. Why, at this moment, does a situation have precisely this structure and the person precisely this condition or state?

¹To present Lewin's topological psychology adequately is beyond the possibilities of the limited space of this chapter; nothing more will be attempted here than a brief note.

THE LAST STAND OF MECHANISM

All connectionist psychologies said: "the stimulus possesses an *adhesion* with certain reactions" — the adhesion being the cause. Time after time Lewin denies that associative processes, neural connections, can be the *causes* of behavior. The answer of the field psychologist is: the causes of behavior *will be found in closest relation to human psychic energies*. To study causes, we must study the actual behavior of human beings in concrete situations; the statistical average of a thousand cases can throw no light on this problem. As Lewin says, we must seek "the establishment of a form of definite structure in a definite sort of environment," but this can take place only when the dynamics of the processes are "derived from the relation of the concrete individual to the concrete situation."

"Psychic energy," then, is the nub of our problem, but in the present state of our ignorance we know next to nothing about it. Since James we have been taught the wonders of the reservoirs of energy to which the human being has recourse and from which he draws the astounding mainsprings of his act. From Peirce, Dewey, and their followers we have had accumulatively better descriptions of the act itself. But never have we been able to dig beneath these descriptions of behavior itself to lay bare its causes.

It is at this point that Lewin and his associates come forward with their theory of the "field of force" structure of the mind. And we receive it as one of the most provocative theories yet brought forth. Lewin himself stated the problem succinctly:

"the providing of a workable representation of a concrete psychological situation according to its individual characteristics and its associated functional properties, and of the concrete structure of the psychological person and its internal dynamic facts."¹

But this "workable representation" cannot be provided "without the help of topology, the youngest branch of mathematics."²

The theory starts with the concept of space. Space must not be visualized in physical concrete terms; it is a "mathematical construct in which positional relationships may be expressed." A psychological field, therefore, is "a spatial construct to which our phenomenal descriptions of psychological behavior are ordered"; the term "spatial" means

¹ In *A Dynamic Theory of Personality* (1935).

² Topology, literally the "science of place," was introduced by Listing in 1883 to distinguish qualitative geometry from the standard quantitative geometry. It is defined as "the geometrical theory of situations without respect to size or shape."

‘pertaining to *all possible, logical constructs about positional relationships.*’ As Euclidean space in geometry has given way to Riemannian space and to Einsteinian space-time concepts of relativity, so first steps are now being taken in postulating and plotting *psychological space.* Psychology must be structured in space-time concepts. Hence the field-structure is the space-time organization of human energy within the psychological field. Apparently what the field psychologists are looking forward to is this: just as atomic fission has become possible as a consequence of profound researches in mathematical physical theory, so its psychological correlate in human energy may perhaps be found in the future. But, I assume that the Lewin theory would say, it will be found only as we build from a sound mathematical and theoretical foundation.

Representing the Structure of Person and Environment by Topological Concepts

Lewin insists that this use of the concept of field structure is more than the carrying over of an analogy from the new physics; it is the initial step in the building of a logical dynamics in psychology. In this theory “whenever an organism behaves psychologically it is said to be behaving in a psychological field.” To give theoretical definiteness, whenever an organism’s “behavior is directed toward a goal, the force behind the behavior may be said to have a magnitude.” At the present stage we cannot define the direction and measure the magnitude of behavior quantitatively, hence we call to our assistance the new non-metrical mathematics — topology.

Human situations are viewed as regions in which organisms move under drive, from stated positions toward goals. We need to know definitely where the individual is at any moment, how free he is to move — that is, the psychological regions in which he can move — and what the forces are that move him and the barriers that prevent him. Topology applied to human situations provides such a definite graphic record. Using topological methods, we can plot varying paths, note the points to which they lead, the regions which they cross, and the role of a barrier which corresponds as a dynamic concept to the mathematical concept of boundary. Organisms move toward goals under the propulsion of “forces.” We don’t know what, precisely, these forces are. We can postulate psychic energies or tensions corresponding to what we traditionally call the needs of the organism. These energies (forces) move with direction and magnitude. We shall call

the *combined direction and magnitude* a "vector." (Hence the term sometimes given to Lewin's work — "vector psychology.") Thus, mathematical fields are "spatial regions," either scalar or vector. In a scalar field, every point has "an associated set of magnitudes." In a vector field, "every point has both magnitude and direction." In a force field, "every point is characterized by a vector." This vector "represents the potential at that point."

Topological psychology accepts the Gestalt concepts of action totals and the unity of the mind. Aware of the danger of carrying the concept of wholeness too far, they break the whole up into sub-psychic systems, each of which is a functioning whole in itself. Each and all belong in some way to the ongoing total process. Otherwise we could not get ordered action; each of these systems must be flexible and free enough within the total, so that the changing life experience, with its infinitely varied demands and organizations, can make use of it. Lewin shows by many examples of child behavior that the actual total process is not a continuous flow but rather "proceeds typically in successive action steps which themselves fall largely in autochthonous wholes." As he analyzes topologically such problems of organisms moving in regions, he constantly stresses the concept of

"steering by the Field forces." In the changing process "there is resort to a kind of 'reservoir of energy,' that is, of certain needs or need-like tensions." And again "the forces which control the course of the process remain without effect or simply do not arise . . . when there exists no connection with tense psychical systems which keep the process in motion."¹

American Applications

This must conclude my brief note on the first attempt to build a force-energy psychology. Already its influence has spread far. In the United States, notably in the work of Raymond Wheeler, American Gestalt psychologists are restating their theories more in terms of the concepts of energy. Speaking of measuring intelligence as an example, he continues:

"It is human work, kinetic energy in the form of achievement that is being measured. . . . A real intelligence test is measuring an individual's will as much as his intelligence, his personality as

¹ Lewin: *A Dynamic Theory of Personality*, page 51.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

much as his reasoning, his emotional life as much as his judgment. It is measuring the organization of his forces toward achievement, and the achievement is an expression of derived potentials. . . . As a physiological phenomenon, this achievement is insightful response."¹

The characteristics of the Lewin brand of Gestalt psychology are well summed up in what Wheeler calls the "organismic laws," which I summarize succinctly:

1. The Law of Field Properties . . . "a whole is more than the sum of its parts" . . . "properties pertaining to these complex wholes are called field properties" . . . such things as squareness, melody, life.
2. The Law of Derived Properties . . . "parts derive their properties from wholes" (for example, personality is a derived property).
3. The Law of Determined Action . . . "the whole determines the activities of its parts."
4. The Law of Individuation . . . "parts of wholes come into existence through an emergence process called individuation, or structurization, or differentiation."
5. The Law of Field Genesis . . . "wholes evolve as wholes."
6. The Law of Least Action . . . Hartmann's brief epitome is excellent: "energy interchange takes place through the shortest spatio-temporal interval."
7. The Law of Maximum Work . . . "any influence affecting a system of energy affects it throughout . . . in an energy system a maximum amount of energy, for any given set of conditions, will be expended in the course of maintaining balance."
8. The Law of Configuration . . . systems of energy function as units and adjust themselves to multitudes of disturbing influences (which are called total situations) . . . "the unit that adjusts itself is called a configuration . . . the laws of least action and maximum work explain why a configuration must behave as a single unit."

Finally, we should note that the major concern of the Lewin school is with problems of action, will, and emotion. The wholeness

¹ Wheeler and Perkins: *Principles of Mental Development*, pages 167-168.

point of view is splendidly synthesized in Wheeler's two fine definitions of will and emotion:

"the will is the energy of the total human system consciously conditioning the activities of its parts."

*"Emotion is not a special discrete kind of behavior. . . . It is an aspect of whatever the person is doing at the time, when, in the approach to a given goal, the tension is increased and maintained through intraorganic stimulation. . . . Emotive behavior . . . is an intentional, intelligent behavior, energized."*¹

Thus Gestalt piled up and pushed forward a tremendous body of evidence against the connectionist interpretation and in support of the wholeness, integrationist view of human behavior.

¹ *Ibid.*, pages 201 and 207.

The Person and the Psychology of Personality

About the time the progressive trend began to intrigue considerable numbers of teachers — in the late 1920's — there was a vogue of the shibboleth "I don't teach the subject; I teach the child." No doubt many of those who used it would have been embarrassed if pressed to fill in the details of their educational theory. Most of them had seized upon the idea of "the whole child" that by that time had come to pervade the educational air. They knew in a vague way that a boy's general physical condition, his mood and natural way of responding, his worries and joys, hobbies and special enthusiasms, all played their parts along with his intelligence and study habits in determining how he got along in school. But *what* part these played they did not know, and beyond giving lip service to the slogan "Teach the whole child," they did very little about it. A few among the teachers, however, knew that the great task of education was to transform the egocentric Individual Self that appears in the nursery school or the kindergarten, into the mature Person of adult years.

An important trend was under way. Even by the 1920's some psychologists were distinguishing definitely between the Individual and The Person. By the Individual they meant the human being at birth; but they used the word Person to stand for a very special concept¹ — namely, the fullest maturity of personal and social awareness

¹ The student must not miss Gordon Allport's exhaustive assembly and appraisal of the various meanings of "person" and "personality" in his *Personality, A Psychological Interpretation*, Chapter II. Following a statement of the etymology and early history of the Greek concept *persona*, he develops an encyclopedic assembly of the various meanings that have been given to "personality" — theological meanings, philosophical, juristic, sociological, biosocial, and psychological meanings. Finally he defines psychology itself as "the science of the person considered as having experience or capable of having experience."

THE PSYCHOLOGY OF PERSONALITY

and behavior that is possible to develop with the given raw materials of personality with which the Individual comes into the world.

I know no more subtle distinction in the body of modern psychological concepts than this one. The nub resides, I think, in the ever widening radius of awareness of the relation of the Individual Self to other individual Selves. As Waldo Frank, one of our most profound students of the Great Tradition and the Person, puts it: ¹

"The aware individual knows himself a focus of concentric cycles of wholes: his family, his calling, his nation, mankind, and — last and first to round the cycle — the whole of Being whose atmospheric touch upon his body in his hours of meditation he will recognize as God."

"This concept of the Person is dynamic and indeed revolutionary. A society where not the individual but *the potential Person* is the norm of value is one in which all intelligence is dedicated intrinsically . . . to the public welfare. For the act of social justice is in the heart of the potential Person who knows himself a heart of all men and of the universe; and whose knowing — however stumbling and full of error — is action. Not the individual, not the individual economic class or nation which is the sum of individuals, but the Person and the group of persons is the valid integer for social justice."

This is the ever recurring dichotomy of The Individualist *vs.* The Person. In its historical setting it is the perennial conflict of The Exploitive Tradition and The Great Tradition. I have recently summed it up in another source.²

THE CURRENT RECONSTRUCTION OF PSYCHOLOGY AROUND THE CONCEPT OF PERSONALITY

Both in Europe and in America, after World War I, a rising two-fold trend of thought magnified the importance of the Person. The first trend, developed largely in Germany, was the building of a self-conscious psychology of the Person, variously called "personalism," or

¹ Waldo Frank: *Chart for Rough Water*, pages 128, 132.

² A brief sketch of historical background of certain phases of the deep dichotomy is presented in Chapter III, "The Exploitive Tradition," and Chapter IV, "The Great Tradition," of my *Now Is the Moment*, pages 49–50. Duell, Sloan & Pearce (1943).

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

“personalistic psychology.” The most systematic statement was William Stern’s *General Psychology, from the Personalistic Standpoint*.¹ Personalistic psychology was to Stern only one branch of a vast “discipline of personalistics,” in which psychology is the “science of the person considered as having experience or as capable of having experience.” Stern’s Personalistics, in true German academic fashion, embrace the whole realm of personal existence; the human person is merely a connecting bond between higher and lower persons — the Godhead, humanity, a folk, a family, and so on down to molecules and atoms; it is a graduated scheme of the facts of consciousness. He finds a place in personalistic psychology for the facts of memory, imagery, attitude, insight, intelligence, thought, feeling; problems become psychological only at the level of perception and the Person is the perceiving agent. Great emphasis is laid upon motivation — personal goals and strivings. With Dewey he insists that the individual does not merely adapt to environment; he is a creative, reconstructive agent. Hence Stern emphasizes motive and effort and conscious planning.

After 1920 the psychology of the person received increasing attention from American psychologists, artists, and educators. Among the former were Gordon Allport, Gardner Murphy, Kimball Young,

¹ W. Stern’s *Allgemeine Psychologie, auf personalistischer Grundlage*. English translation 1938, The Macmillan Company. The most important digest and interpretation of this work is Gordon Allport’s *The Personalistic Psychology of William Stern: Character and Personality* (1937), 5, 231–246, Duke University Press; see the brief digest of it in his *Personality; A Psychological Interpretation*, pages 552–556.

SELECTED SOURCES FOR THE CONSENSUS ON PERSONALITY

An extensive body of materials is now available; I cite only a few important examples from four main strands of inquiry:

- Alfred Adler: *Individual Psychology*
- Gordon Allport: *Personality; A Psychological Interpretation*
- Boris B. Bogoslovsky: *The Ideal School*
- John Dewey: *Democracy and Education ... Interest and Effort in Education*
- H. Flanders Dunbar: *Emotions and Bodily Changes* (1946). (Best summary of investigations.)
- Waldo Frank: *Chart for Rough Water ... Salvos ... Rediscovery of America ... In the American Jungle ... America Hispana*
- Sigmund Freud: *General Introduction to Psychoanalysis*
- C. G. Jung: *Psychological Types*

and Goodwin Watson. Unknown to most of them, the students of the esthetic act were their collaborators; as a single witness, note the thirty years of creative leadership of Waldo Frank. In education my own writings have consistently built on the conception of The Person, and it is of course the supreme educational goal of this present book. By far the most important American work in my judgment is that of Gordon W. Allport in the book I have referred to several times — *Personality; A Psychological Interpretation*. As its climax he states ten important principles which he had documented elaborately in the avowed purpose to

“limber up the frame of psychological science” . . . “psychology has lost the human person as we know him in everyday life. To rescue him and to reinstate him as a psychological datum in his own right is the avowed purpose of the psychology of personality.”

His ten generalizations are so important that I excerpt and paraphrase them briefly: [My italics throughout.]

1. “The proposition that psychology seeks laws has not been denied, but it has been shown that *a general law may be a law that tells how uniqueness comes about.*” His own special contribution is “the principle of *the functional autonomy of motives.*”
2. One of the goals of science is to predict; in psychology we can predict only if we have knowledge of the total individual.
3. To make sure that we get as complete and true a picture as possible we must constantly come back to The Person, what he is like in his essential nature.

SELECTED SOURCES — *Continued*

- Alice Keliher and others: *Psychology and Human Living*
- Otto Rank: *Will Therapy . . . Art and the Artist . . . Modern Education*
- Kurt Lewin: *A Dynamic Theory of Personality*
- Gardner Murphy and Friedrich Jensen: *Approaches to Personality*
- Harold Rugg: *Culture and Education in America*
- Harold Rugg and Ann Shumaker: *The Child-Centered School*
- W. Stern: *General Psychology, from the Personalistic Standpoint* (English translation, 1938)
- W. I. Thomas: *The Unadjusted Girl*, Chapters I and II
- R. S. Woodworth: *Contemporary Schools of Psychology*

I give additional selected bibliographies at appropriate places throughout the chapter.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

4. "The analysis of personality shall proceed at significant levels only." Its natural units are complex dispositions called *traits*. These are internally generalized, flexible, and interdependent.
5. The problem of the unity of personality is of profound psychological concern. We cannot solve it by the empirical and statistical methods of correlation.¹
6. Total organization can be expressed only by "concepts that savor of individuality"; for example, concepts such as attitude, configuration, differentiation, ego systems, functional autonomy, integration, interest, intuition, life history . . . rather than attribute, average, correspondence of measures, factor, Id, identical element, instinct, intelligence quotient, mental faculties, needs, standard deviation.
7. While the psychology of personality is aimed at the study of individual forms of mental life, it also compares one person with another with respect to their common traits.
8. One of the unique things about the psychology of personality is that it brings together from broad fields of knowledge and behavior a vast range of examples of concrete human behavior and codifies them. It uses history as well as other supposedly non-psychological fields of study. It enters many provinces of human thought.
9. As a step toward the unifying of the whole field, the psychology of personality has developed an empirical-intuitive theory of understanding.
10. It assumes a liberal outlook using every legitimate method available to depict the personality and action. It tries not to close its mind to any field of knowledge or investigation or to any point of view which might throw light upon behavior.

/ / /

This brief reference to two of the most important systematic approaches to the psychology of personality has perhaps sufficiently introduced the problem. Now for the essence of what the half century of studies has taught us.²

¹ See Lewin's agreement with this contention in his *Dynamic Theory of Personality*.

² The section on physique and temperament in Chapter XXIII should be read in connection with the following ones.

THE RAW MATERIALS OF PERSONALITY

The Individual Not Born with "Personality"

The consensus begins with the flat statement that the infant is not born with a personality; he does not come into our world equipped with habits, traits, and dispositions, with a world view and opinions about the problems and issues of men. He builds his beliefs and opinions as he lives in the company of other men. He creates his world-view day by day as he lives among them.

The educator does not start from scratch, however. Certain indispensable raw materials are present at birth out of which the human being builds his personality in the first two decades of life. Three are definitely agreed upon:

1. The physical organism and its capacity for movement
2. The potential temperamental characteristics
3. The potential intelligence

Although we state these as though they were separable entities, we know that actually the infant is a whole-acting physical organism of habits, traits, attitudes, sentiments, and other dispositions, in which these three phases are fused together inextricably. Present scientific opinion, however, picks out two basic psychological characteristics — intelligence and temperament — and associates physique with them to constitute the raw materials of personality. These are the vital materials with which the educator has to work.

I. PHYSIQUE: INBORN TENDENCIES TOWARD MOVEMENT

Since our present knowledge of the structure of the physical organism can be checked from any standard work of the day, I shall not even catalogue it here,¹ concerning myself primarily with the function-

¹ I quote a single technical authority to provide a bit of vivid illustration:

"The infant maintains continuous body movement with such speed and excessiveness that the experimenter, even when using a specially devised code, cannot keep up with the infant. The body squirms, twists, rolls, and bends. The back arches, the hips sway, and the head rolls from side to side or is thrown back. The arms slash vigorously and the legs are kicked in exaggerated extensor thrusts or are flexed sharply at ankle, knee, and hip. Hands, feet, toes, and fingers are in continuous movement. Sucking and smacking sounds frequently occur, while loud crying is usually coincident with mass activity. All of this activity is more or less simultaneous and comes and goes

ing of the organism in development. The word "organism" implies the birth of a *complete* physical human being, all phases present and proportionally developed although some are latent so far as actual functioning is concerned.

The teacher should know that at birth the organism is equipped to make two kinds of responses:

First: Gross random movements of large sectors of the organism which are obvious to casual observation; such movements as squirming, kicking, vocalization, elimination processes, and the like.

Second: Specific unlearned reflexes which give the initial impetus to the differentiating and integrating processes of development.

As for the gross random movements, the tendency today, following Franz, Lashley, Coghill, and others, is to describe its generalized nature as "mass action." The task of growth, hence of education, is to transform the random inefficient mass-action into more defined and organized visual, auditory, tactual, and other perceptions, and to build these into efficient systems of habits and moods, attitudes, sentiments, and other general dispositions; all to be ultimately controlled by standards of thought, codes of behavior, loyalties, and values.

Moreover, we know now with considerable finality that this is a twofold process: on the one hand the differentiation of the mass-action into specialized forms of reaction; on the other, their integration into broader and broader meaningful wholes.

Even at birth the second kind of equipment — namely, the specific reflexes of breathing, swallowing, grasping, tendencies to withdraw the limbs, to turn toward moving objects and sounds, and the like — is present in the organism and equips it to take the first step in this differentiating and integrating process. As educators, we need not be too concerned that we lack an elaborate documented analysis of the nature and operation of these processes as they collaborate in the mass-action

with periodicities which appear in intervals of a few seconds to several minutes." — O. C. Irwin, *Genetic Psychological Monographs* (1930), 8, pages 59 f.

See also: R. S. Woodworth: *Psychology* (Fifth Edition); Gates, Jersild, Challman, and McConnel, *Educational Psychology*; J. B. Watson: *Behaviorism* (1924), pages 90–103; Floyd H. Allport: *Social Psychology* (1924), Chapter III; others. For the best current study of Physique as the foundation of a new "Constitutional" psychology, see W. H. Sheldon's *Varieties of Human Physique*.

THE PSYCHOLOGY OF PERSONALITY

of the infant. We do know that the physical equipment of the individual at birth is adequate for both mass-action and specific response. And we know also that other kinds of physical equipment are present even if latent; for example, the sex equipment which begins to play its supreme role in the years of adolescence.

Bearing in mind that these make their appearance in more mature stages of development, we shall turn to two of the raw materials of personality — Temperament and Intelligence — with which educators are very much concerned. They are concerned for two reasons: first, to know which kinds of human equipment can be counted on in the various stages of development; second, how far education can be expected to modify them.

II. TEMPERAMENT: THE FOUNDATION OF THE INDIVIDUAL'S LIFE SEARCH FOR SECURITY

Here the consensus is somewhat less unanimous. My own interpretation of the findings is that temperament, too much neglected by psychology until recent years, *is the vital factor* in determining the nature of human response. While intelligence determines the intellectual level and acuity of the act, temperament, by determining its emotional quality, pervades the basic attitudes and the very character of meaning. Hence teachers must be alert to the problems of temperament; without definite knowledge one may misunderstand the boy or the girl and hence do the wrong thing educationally.

SELECTED SOURCES OF THE CONSENSUS

For the chief sources of our documentation we shall rely upon these physiologists and psychiatrists:

- On endocrinology the most authoritative book is *Endocrine Medicine*
- See R. G. Hoskins: *Endocrinology*; an expansion and rewriting of his *The Tides of Life*.
- W. B. Cannon: *Bodily Changes in Pain, Hunger, Fear, and Rage* (First Edition, 1915); (Second Edition, 1929); see also his *Wisdom of the Body* (1932)
- Eugen Kahn: *Psychopathic Personalities* (1931)
- Ernst Kretschmer: *Physique and Character* (1925)
- C. C. Fry and H. W. Haggard: *The Anatomy of Personality*. For a layman's interpretation.
- Eduard Spranger: *The Types of Men* (English translation, 1928)
- C. G. Jung: *Psychological Types* (1926)
- By far the most important work in temperament is W. H. Sheldon's *Varieties of Temperament*.

What Is Temperament?

Fry and Haggard, interpreting Kahn *et al.*, define temperament as "the sum total of all the emotional qualities of the individual; his sensations and his reactions; what he feels and how he responds." It is unique in each individual: "One man may respond in quiet cheerfulness, another with trembling anxiety, and still another with explosive rage; and so on through the entire range of temperamental qualities." One's temperamental moods and emotions are of foundational importance; they color perceptions and responses to others, mold interests and aptitudes, determine rhythm of work and the formation of general outlooks and points of view.

Three Phases: Tempo, Mood, and Resonance

Three identifiable phases of temperament are generally distinguished — tempo, mood, and emotional resonance. By "tempo" is meant the basic time beat and rhythm of movement which marks us as individuals; its overt signs are revealed in characteristic rates of walking, talking, movement of the arms, legs, and the body in general. Here is the foundation of the characteristic "body gesture" which marks us all from early childhood to old age.

Beneath these external revelations of movement and time beat are the basic moods that characterize our temperaments. Fry and Haggard say of them:

"One temperament may show a tempo that is phlegmatic, a mood that is gloomy, a resonance that is deep (warm). Another may be vivacious, anxious, cold; still another explosive, changeable, warm."¹

It is through our moods that we respond to the situations of the outside world:

"In response to changes and external sensations, the mood alters from moment to moment . . . it is this fundamental mood that characterizes temperament."

This is not to say that moods, or the factors which constitute them, can be sharply and clearly discerned. Human beings are distributed

¹ C. C. Fry and H. W. Haggard: *The Anatomy of Personality*, page 133; Harper & Brothers (1936). Fry is Professor of Psychiatry and Mental Hygiene and Haggard, Professor of Applied Physiology, in Yale University.

THE PSYCHOLOGY OF PERSONALITY

along scales of graduated temperamental differences as they are in intelligence and other qualities. We do, however, distinguish personalities in descriptive terms: are they cheerful, apprehensive, gloomy, anxious, happy, or irritable?

These three phases of temperament — the basic time beat and rhythm, associated with mood and resonance — help to clarify the role of emotion. "Emotion means literally a movement or stirring up . . . of the activities of the flesh." Each stimulus sets off some still undefined set of tensions in the body and produces body response. This is a tendency to movement which can be discerned and measured; for example, rate of heart beat and breathing, blood pressure, presence of sugar in the blood stream, changes in tensions in the muscles. These inner tensions produce what we call, in the present state of our ignorance, "emotional reaction," and in turn cause the individual to seek relief in muscular movement; that is, in laughing, crying, trembling, running, talking, and so forth. Thus the emotional tensions seek to be discharged in movement, thereby creating emotional tones.

Now we associate these concepts with the general attitudes with which we are set to respond to people or to ideas, problems or institutions. The moods, and probably the attitudes, which are the products of the inner tensions going off in discharged movements, supply the tone; they not only determine the discharge in movement, they also play a deeply formative role in the meaning of the concepts with which the individual responds and builds his whole system of understanding.

Students of this problem are now inclined to conclude that changes in mood are produced by changes in the supply of thyroid and other internal secretions. There seems to be a direct relation between the way in which the internal secretion glands operate in the blood stream and the "excitability" of man. There is a vast range of individual differences in the physical constitution of the internal secretion glands and other body organs, and in the manner in which their products operate in the blood stream and the autonomic and nervous systems. As yet we know little about the details of this process, although recent investigational work appears to show that no one gland operates alone.¹

¹ See the excellent summary of a generation of researches in Walter B. Cannon's *Bodily Changes in Pain, Hunger, Fear, and Rage* (First Edition, 1915; Second Edition, 1929); D. Appleton-Century Company, Inc., New York; see also his *Wisdom of the Body* (1932).

Temperament and "Characters": Types of Men

Are there distinguishable temperamental types of men? Controversy has raged over this question throughout recorded history. Century after century one school of thought, recording its common-sense observations, has insisted that there are discernible types. Why we all know them; we ourselves can be fitted into one or another of them. Theophrastus, a pupil of Plato's and a friend of Aristotle's, because his records have been preserved, is always quoted on this subject. In the ninety-ninth year of his life he wrote a "book of characters," because, as he says, "I have thought myself fitted for the task of describing those habitual peculiarities by which the manners of everyone are distinguished." In every century since that time philosophers of temperament have insisted that his description applied to men of all places and all times, for they all found in their company "the impure man" ... "the suspicious man" ... "the fearful man" ... "the sophist." Shakespeare's writings are full of such generalizations. In our own time William James distinguished between the "tough-minded" and the "tender-minded." C. G. Jung built up from his extensive clinical practice an elaborate "typology" based on the division of people into two types — "introverts" (those who are more self-centered and live in their own inner world of fantasy) and "extroverts" (those who are directed more toward the outward world of action). Jung subdivided each of these into an elaborate fourfold scheme of "thinking," "feeling," "sensation," and "intuition" sub-types.¹

Ernst Kretschmer, a German psychiatrist, collecting data in his practice in mental pathology, created a scheme based on a threefold division of types of "body build" and temperament: "the *asthenic*, tall, thin, hungry-looking man with angular face and narrow shoulders ... the *athletic* — thick chest, broad shoulders, heavy muscles ... the *pyknic* — the fat rounded figure, familiar in middle life."

W. I. Thomas and F. Znaniecki² classified men in three types: the *philistine*, the practical man who was always seeking security ... the *bohemian*, hunting for new experience ... the creative man, *markedly* stable and yet flexible and inventive, the productive leader in science and art and philosophy. Their scheme has been used frequently by sociologists. Such students of political science as H. D. Lasswell have

¹ See C. G. Jung: *Psychological Types* (1922).

² W. I. Thomas and F. Znaniecki: *The Polish Peasant in Europe and America* (1927). G. W. Allport: *Personality*, Chapters III, XI, XII.

THE PSYCHOLOGY OF PERSONALITY

also developed schemes of types of men, frequently social rather than psychological types. Eduard Spranger¹ developed six "ideally basic types of individuality as expressed through corresponding attitudes: the theoretic attitude ... the economic attitude ... the esthetic attitude ... the social attitude ... the political attitude ... and the religious attitude."

Digesting a century of modern discoveries in physiology, psychiatry, and mental hygiene, such students as Kahn, and Fry and Haggard, agree that we should distinguish men in terms of degrees of emotionality. As we have just said, these are descriptive terms not defined by precise quantitative measures.² Some eight or ten types are generally distinguished. This list is representative:

1. The *vivacious* — "distinguished by their continual play of movement ... intensely alert but the world ... appraises them as overly-expansive, even superficial or fickle."
2. The *excitables* — inner tensions expanding into sudden explosions of physical activity.
3. The *explosives* — whose inner tensions go off in a temper tantrum and other "sudden violent discharges."
4. The *irritables* — "mildly explosive in temperament," who fuss and fume over inconsequential things.
5. The *phlegmatic* — characterized by inertia, quiet moods, lack of irritation or excitableness.
6. The *cheerful* ... friendly, pleasant people to have around.
7. The *gloomy* ... the "sad subdued people, continually depressed."
8. The *anxious* — anxiety appears to be the base of a large number of moods.
9. The *moody* ... those of constantly changing temperament.

/ / /

Putting facts and theories together: Are there "types" of men? Yes! ... and ... No! No doubt the reader responds with acquiescing recognition to every "type" named by all of the investigators cited.

¹ Eduard Spranger: *Types of Men* (English translation, 1928).

² Sheldon's investigational results given in Chapter XXIII should be read in connection with these.

There are "anxious" people, "irritables," "moody" ones, gay and cheerful people. There are men of "lean and hungry look" who "think too much"; and there are philistines, bohemians, and athletes. We've all seen them, even recognize ourselves in them. For the "law of individual differences" fits the distribution of human temperament as it does other functions. Accepting the three phases of temperament — tempo, mood, and resonance — we see that on each of these the members of any population are scattered widely from a very few at each extreme toward a great modal group at the middle. Differences between adjacent individuals on the scale are so slight that it is arbitrary to divide them into "types"; yet divide them we can for practical purposes. Hence the "characters" of Theophrastus, the "humours" of Shakespeare, the "types" of Jung, Thomas, Kretschmer, and others.

Temperament and Security and Teaching

Teachers, therefore, should be alert to uniformities as well as to differences in every class. Every group they teach will have a few phlegmatics and explosives — perhaps a couple of vivacious ones and anxious ones flanking the everyday, adaptable normals. The teaching will not only be enormously helped by recognizing these types; it may succeed or fail because of a teacher's sensitive or dull reaction to these temperamental characteristics. If there is any one key which will unlock the doors to happy, effective living, it is our new understanding of the role of temperament in the individual's everlasting search for security. The new literature of guidance and mental hygiene centers around the problem of helping people to "satisfy their emotional needs in acceptable ways." The personality of a child is changed moment by moment by the fusion of these acceptable ways of satisfying his emotional needs — the need to get status, to be approved by others, the need to achieve, to be wanted, to be included in the group — in short, to feel psychologically secure.

Can Temperament Be Changed by Education?

There are some "environmentalists" among the progressive educators of the day who insist that "education" can change any aspect of human nature and behavior; but the consensus among physiologists, psychiatrists, and psychologists does not bear them out. While searching diligently for the cues to just what education can do, most authorities agree that the basic elements of personality — the physique, the

temperament, the intelligence, the impulse, and the ego — can be changed but little, if at all, by changes in the social environment. Common observation confirms the conclusions of the scientific studies. Unless changes have been made in the organism by physiological operations, we continue to walk and talk, express ourselves through body gesture with the same characteristic time beat and rhythm of movement from infancy to old age. We can learn to “act a part,” but it is mere simulation; when off guard the old habitual “gesture” reasserts itself. We never free ourselves from the grip of our temperament.

Fry and Haggard, reflecting the psychiatric view, say “Fundamental moods are altered only by altering the vital activities of the body.” It is generally agreed that diseases that

“interfere with the circulation of blood, with the digestion of food, with respiration, or with the delicate adjustment of the glands of internal secretion . . . influence mood profoundly, sometimes permanently.”

We know that lung and heart diseases

“are often accompanied by anxiety, while diseases of the abdominal organs are accompanied by gloom. There is the pessimism of the dyspeptic.”¹

Moods of irritability appear to accompany hardening of the arteries or other diseases that affect the circulation of the blood. Allport agrees:

“the more directly a quality is bound to structural inheritance, the less modifiable it is. The three principal raw materials of personality, *physique*, the endowment of *intelligence* and *temperament*, are genetically determined through structural inheritance, and are only slightly altered by conditions existing subsequent to birth.”²

What, Then, Should Education Do?

Grant, then, that we can change temperament only by changing physiology. What can the teacher do? He can learn to be alert to these basic elements of personality, studying the traits, dispositions,

¹ *Op. cit.*, Fry and Haggard, page 135.

² G. W. Allport, *Personality*, page 107.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

moods, and attitudes of his individual pupils. Maximum success in teaching will depend upon his skill in adapting "instruction" to the various types of personality in the group.

On the positive side the emotional program of the school can and must build in every child the very maximum of self-knowledge. Granted that individuals can do little about changing their temperaments, they will be wise to understand themselves as far as possible, to become aware of the significance of their moods, to learn their characteristic tempo and rhythm of work and of response. Self-knowledge will go far toward wise choice of career as well as increase the probability of self-discipline in the moment-by-moment living of everyday life.

III. INTELLIGENCE: THE NUB OF CONTROVERSY

The third "raw material" of personality is the "intelligence." Like physique and temperament, the intelligence conditions the entire life

SELECTED SOURCES

For convenience and clarity I divide the principal sources in terms of the dichotomy: Nature vs. Nurture, or Heredity vs. Environment. The two most comprehensive reports on the problem are two Yearbooks of the National Society for the Study of Education: the Twenty-seventh Yearbook (1928), *Nature and Nurture*, and the Thirty-ninth Yearbook (1940), *Intelligence: Its Nature and Nurture* (Lewis M. Terman, Editor). In addition, I depend upon the following:

- I. The evidence and logic of the hereditarians:
 - Terman, L. M.: *The Measurement of Intelligence* (1916)
 - Terman, L. M., and Merrill, M. and A.: *Measuring Intelligence* (1937)
 - Kelley, Truman L.: *The Influence of Nurture upon Native Differences* (1926)
 - Jennings, H. S.: *The Biological Basis of Human Nature* (1930)
 - Thorndike, E. L.: *Human Nature and the Social Order* (1940)
 - Thorndike, E. L.: *The Measurement of Intelligence* (1926)
- II. The evidence and logic of the environmentalists:
 - Stoddard, George D.: *The Meaning of Intelligence* (1943)
 - Wellman, Beth L.: *Our Changing Concept of Intelligence*. *Journal of Consulting Psychology* (1938), pages 97-107
- III. For balanced statement of both views:
 - Freeman, F. N.: *Mental Tests: Their History, Principles, and Applications* (1939)

THE PSYCHOLOGY OF PERSONALITY

of the human being — the kind of work he does, the kinds of people he lives with, his attitude toward politics and other social issues. It limits or enhances his creativeness and his appreciation of the sensitive aspects of living. There is no essential disagreement on this point among the students: intelligence is one of the basic makings of personality.

But they disagree on nearly everything else about it:

- What it is . . .
- The chief kinds of intelligence . . .
- To what extent it is inherited . . . the product of nurture . . .
- How it is constituted . . .
- How it can be measured . . . What you have measured, once you measure it . . .
- How far it can be modified by changing the environment . . .
- Hence what can education do about it?

The disagreements are so sharp and clear that perhaps instead of speaking of "intelligence" one should always use the phrase: "that type of behavior called intelligent." A library of controversial materials has been published in the last thirty years. I shall set down the answers to the questions at issue succinctly, as far as they can be found in the consensus.

SELECTED SOURCES — *Continued*

IV. Sources on Infants and Young Children:

- Gesell, Arnold: *The Mental Growth of the Pre-school Child*. New York: The Macmillan Company (1925)
- Gesell, Arnold: *Infancy and Human Growth*. New York: The Macmillan Company (1928)
- Jones, Mary Cover: *The Development of Early Behavior Patterns in Young Children*. *Journal of Genetic Psychology*, 1926, 33, 537-585
- Shirley, Mary M.: *The First Two Years: A Study of Twenty-five Babies*. Vol. I: Postural and Locomotor Development. Minneapolis: University of Minnesota Press (c. 1931). Vol. II: *Intellectual Development*. Minneapolis: University of Minnesota Press (c. 1933)
- Stutsman, Rachel: *Mental Measurement of Preschool Children: With a Guide for the Administration of the Merrill-Palmer Scale of Mental Tests*. Yonkers-on-Hudson, N. Y.: World Book Company (1931)

Three Problems

Three problems confront us, and they are so tangled together that no one can be solved without dealing with the others:

- What is intelligence?
- How can it be measured?¹
- Is it “native,” “inherited,” or is it the product of environment?
That is, can it be “improved” by education?

For thirty years controversy has raged over these questions; all three have been worked at, simultaneously. Two schools of thought emerged and fought each other for a quarter of a century. One was for nature, hereditarian; the other for nurture, environmentalist. Tentative definitions have been set down. Test materials have been designed and used to measure the abilities defined. The results changed the definitions, and the tests too, which were given again, the process going on and on for a generation. An enormous literature of report and criticism resulted. Generalizations accumulated. Points of view solidified.

WHAT IS INTELLIGENCE?

To document the consensus, I quote a bit from the outstanding authorities, both environmentalist and hereditarian. George Stoddard, one of the most distinguished students of intelligence and one of the most vigorous environmentalists, treats it “as a theoretical composite whose elements may be operationally tested,” and defines it thus:

*“Intelligence is the ability to undertake activities that are characterized by (1) difficulty, (2) complexity, (3) abstractness, (4) economy, (5) adaptiveness to a goal, (6) social value, and (7) the emergence of originals, and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces.”*²

On the hereditarian side, Burt defined intelligence:

“By intelligence, the psychologist understands inborn, all-around intellectual ability. It is inherited or at least innate, not due to teaching or training; it is intellectual, not emotional or

¹ This question is discussed in Chapter XXIII.

² George D. Stoddard: *The Meaning of Intelligence*, page 4.

THE PSYCHOLOGY OF PERSONALITY

moral, and remains uninfluenced by industry or zeal; it is general, not specific — that is, it is not limited to any particular kind of work, but enters into all we do or say or think. Of all our mental qualities it is the most far-reaching; fortunately it can be measured with accuracy and ease.”¹

To Thorndike, the hereditarian, everything lies in the inherited genes . . . “after all, man’s genes made the environment which now fashions him.”² He defines intelligence (or “intellect” as he calls it) in terms of its measurement.

“We have learned to think of intellect as the ability to succeed with intellectual tasks, and to measure it by making an inventory of a fair sampling from these tasks, arranging these in levels of intellectual difficulty, and observing how many the intellect in question succeeds with at each level (and, if we wish, how long a time each success takes).”³

He grants that “the appreciation and management of relations is a very important feature of intellect, by any reasonable definition thereof.”⁴ But his primary definition insists that “quality of intellect depends upon *quantity of connections*.”

“The hypothesis which we present and shall defend admits the distinction in respect of surface behavior, but asserts that in their deeper nature the higher forms of intellectual operation are identical with mere association or connection forming, depending upon the same sort of physiological connections but requiring *many more of them*. By the same argument the person whose intellect is greater or higher or better than that of another person differs from him in the last analysis in having, not a new sort of physiological process, but simply a larger number of connections of the ordinary sort.”⁵

Binet and Simon, who measured it first, and best, said:

“It seems to us that in intelligence there is a *fundamental faculty*, the alteration or the lack of which is of the utmost importance for practical life. This faculty is *judgment*, otherwise called *good sense, practical sense, initiative, the faculty of adapting*

¹ Burt, Cyril; Jones, Ernest; Miller, Emanuel; and Moodie, William: *How the Mind Works*, page 336. New York: D. Appleton-Century Company, Inc. (1934).

² E. L. Thorndike: *Human Nature and the Social Order*, page 305.

³ E. L. Thorndike: *The Measurement of Intelligence*, page 412.

⁴ *Ibid.*, page 19.

⁵ *Ibid.*, page 415.

one's self to circumstances. To judge well, to comprehend well, to reason well, these are the essential activities of intelligence. A Person may be a moron or an imbecile if he is lacking in judgment; but with good judgment he can never be either. Indeed, the rest of the intellectual faculties seem of little importance in comparison with judgment. . . .¹ [My italics.]

Hartmann, analyzing the nature of the intelligent act, and insisting that like all psychological traits it must be "built upon the human body and its function" . . . says it is "one in which behavior is modified appropriately to the demands of the situation . . . looks for possible casual relations," (hence) "one basic attribute is fitness to purpose." And later: "*Inability to perceive such necessary relations among objects is a mark of dullness.*" . . . "The intelligent person characteristically discerned resemblances between unlike things (often so different that less intelligent folk miss the underlying kinship) and significant to differences where others see only the superficial likeness." Using Gestalt language, he says, "Wherever there is an intelligent performance there is insight; and conversely."

Gordon Allport seems to emphasize heredity *more than* environment in making intelligence synonymous with sensory capacity, nervous plasticity, and retentivity.

Kimball Young and the Gestalt psychologists generally follow Köhler in defining it as "the capacity to develop a means of taking a 'roundabout' or substitute path in order to meet a situation or solve a problem."²

Wheeler and Perkins define intelligence as "human work, kinetic energy, in the form of achievement . . . solving a problem is the energy of a goal-idea 'flowing' to a remote end."

Summing Up

But enough of sampling definitions; from those given we can state the consensus concerning the characteristics of intelligent behavior. Above all, *the emphasis is on generalizing activities:*

- Judgment and good sense are the central factor.
- Ability to learn, to solve problems, to meet "difficult," complex abstract situations, to appreciate and manage relations, to succeed with intellectual tasks.

¹ *The Development of Intelligence in Children*, page 336.

² Kimball Young: *Social Psychology*, page 32.

- Ability to comprehend, to respond well and to adapt well to new situations.
- Knowledge is involved, but only as a necessary supplying of content; information is kept constant or at a low level.

*“Kinds” of Intelligence Distinguished
in Terms of Kinds of Situations*

Since the appearance of Thorndike’s original treatment of the problem, the general tendency is to follow him in discriminating three kinds of intelligence:

- “Abstract (verbal) intelligence or ability with ideas, as in language and mathematics, and much of science and affairs.
- Mechanical intelligence, or ability to understand things, as in skilled trades and much of science.
- Social intelligence, or ability to understand persons and other animals.”¹

Looking back over a generation and a half, the study of *verbal* intelligence appears to have had the center of the stage. Most of the tests of intelligence are definitely linguistic, although a considerable body of “non-language” tests have been designed and widely used.²

Verbal intelligence is the capacity to confront novel situations and to solve problems expressed in words. It is highly correlated with various measures or ability to use symbols, especially words. Tests for comprehension in reading ability show values of product-moment r in the neighborhood of .80.³

¹ E. L. Thorndike: *Human Nature and the Social Order*, page 57.

² In measuring 33,000 persons from the ages of five to thirty-three in the educational survey of the Philippine Islands in 1925, I made up a battery of thirteen tests, four of which were definitely non-language, five of which were thoroughly linguistic, and four partly linguistic. This procedure is characteristic of the attempt to measure intelligence with modern “intelligence tests” in all situations in which language difficulty plays an important part. See *Survey of the Educational System of the Philippine Islands* (1925).

³ Allport (in *Personality*) issues an important warning concerning:

“the treacherous nature of the interpretation of verbal intelligence tests.” He insists that “the intelligence is personally formed; that is, with his sensory capacity, nervous plasticity, and retentivity, the individual acquires information, responds with meaning, builds up concepts, is oriented by attitudes — always in the frame of his controlling master sentiment; thus he personally forms the intelligence which he makes use of at any moment.”

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

“Mechanical” intelligence, variously called “manual dexterity” or “ability in spatial manipulation,” is an indispensable capacity for the efficient production of goods in an industrial society. Studies of correlation of abilities confirm Thorndike and others in distinguishing mechanical from verbal intelligence; most of the product-moment r 's vary from .25 to .40. That this amount of specialization exists in our population, probably accompanied by similar variation in interests, is fortunate for the morale of our people.

Social intelligence is the name given to the ability to adapt one's self to social situations, to get along with other people, to organize and to lead them, or to fit in as coöperative followers. Correlation coefficients for the relation between verbal and social intelligence are even lower than those that measure the relation between verbal and mechanical intelligence, the value of r being positive but generally less than .20.¹ Although social intelligence also rests upon native sensory capacity, nervous plasticity, and retentivity, it is not as predominantly “native” as verbal and mechanical intelligence.

NATURE VS. NURTURE: HEREDITY VS. ENVIRONMENT

The most important question for the educator with respect to intelligence is: Can education change it? Can it be improved by improving the environment? Put another way: To what extent is intelligence inherited?

Both the biologists and the physiologists have studied this question for a generation. Their answers can be scattered along a scale of great variation from one die-hard pole to another. Few biologists would go as far toward the hereditarian view as do Fry and Haggard, a psychiatrist and a physiologist, writing together:

“Studies of families have revealed the fact that intelligence is wholly a hereditary quality. Indeed, it follows closely the so-called Mendelian law of inheritance. A child is predestined by its inheritance to develop a certain degree of intelligence; at the moment of conception the factors are established that will endow it with superior or average intelligence or leave it a moron or an imbecile. No amount of education will increase — and fortunately

¹ I remember well the child of wealthy parents in the Lincoln School with an IQ of 90 who was utterly unable to keep pace with her mates in the intellectual or the mechanical work of the school. But if there had been quantitative social quotients, she would have rated high, for she was indeed gifted in her ability to undertake and carry on the social life of the school.

THE PSYCHOLOGY OF PERSONALITY

neither will it decrease — the intelligence. What education does do is to supply information, and if it is good education, as far as intelligence is concerned, it supplies methods of correlation and application. The trained mind has learned the best and most logical methods of approaching its problems; but intelligence is required for the solution. No system has yet been devised that will do a man's thinking for him."¹

Instead of endorsing this extreme commitment, most students of the biological foundations of behavior would go along with Jennings and with Carmichael; Jennings said:

"Which is more important for the characteristics of organisms, heredity or environment? . . . No single general answer can be given to either. For good results, both fit materials and appropriate treatment of these materials are required; good genes and fit conditions for their development. . . . Though they have large powers of adjustment, individuals differ genetically in their tastes, powers, and aptitudes. Respect for individuality is the great contribution of genetics to the treatment and understanding of human beings. To attribute everything to heredity, as some have done of late, is doubtless even more harmful than to attribute everything to environment; for it promotes a fatalistic viewpoint, it discourages effort. But to attribute everything to the environment is to encourage the disastrous belief that parent and teacher can fashion all their unhappy subjects on a uniform plan; is to promote that neglect of individuality which made education and home discipline in past generations one long cruelty."²

Carmichael's recent summary agrees:

"It may be because of my biological bias that I do not see how education *as such* can change the fundamental protoplasm of the individual and render him 'more intelligent.' But it does seem clear that without education, no matter what protoplasm a given individual may have, he cannot do well on most intelligence tests or in most life situations in civilization that require intelligent behavior. Thus in a sense the educator may well teach always as if he were aiming to increase intelligence as well as to impart knowledge. He should not be discouraged, however, if the same educational procedures do not produce the same results in all individuals."³

¹ *Op. cit.*, Fry and Haggard, pages 103-104.

² H. S. Jennings: *The Biological Basis of Human Nature*, pages 139, 179-180.

³ Leonard Carmichael: *Thirty-ninth Yearbook of the National Society for the Study of Education*, Part I, page 447.

The psychologists, after studying the question for a generation with elaborate experimental and statistical techniques, also split into two camps — hereditarians against environmentalists:

1. *The Hereditarians*

Twenty years ago Leta S. Hollingworth defined intelligence as “the capacity for learning, the capacity for comprehending and making adaptations to the environment (which) cannot be acquired by any course of training.”

Whipple, although a vigorous hereditary, cautioned that environment was important:

“In presenting these results, it ought to be made clear at the outset that no psychologist is foolish enough to suppose that native intelligence is the *sole factor* in academic success; all that is contended is that it is one factor, and probably the most important single factor, and that it is measurable by wholesale rapid methods with a reasonable degree of precision.”¹

Terman, who has always leaned toward the hereditary view, sums up his latest reaction in 1940:

“On the whole, I think that the evidence accumulated during the last dozen years has weakened rather than strengthened the position of the environmentalist. I base this opinion not only on the positive evidence for hereditary influences but even more on the growing recognition of weakness and error in the evidence that environmentalists have most heavily stressed. We are certainly far short of having adequate proof that the rate and character of mental maturation are determined primarily by exogenous rather than endogenous factors.

“This is not to say that environment can be regarded as a matter of small consequence. To it alone we owe the major cultural advances that separate us from our barbaric ancestors of 3000 years ago. The hereditary can wholeheartedly join with the environmentalist in the demand that more and better educational opportunity be provided for every child, but he has too much respect for facts and too little faith in miracles to expect that equalization of opportunity will result in equality of achievement.”²

¹ *The Measurement of Intelligence*, page 434.

² *Thirty-ninth Yearbook of the National Society for the Study of Education*, page 466.

2. *The Environmentalists*

The classic extremist was, for many years, John B. Watson; witness his oft-quoted paragraph:

"I should like to go one step further now and say, 'Give me a dozen healthy infants, well formed, and my own specified world to bring them up in, and I'll guarantee to take any one at random and train him to become any type of specialist I might select — doctor, lawyer, artist, merchant-chief, and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors.' I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years. Please note that when this experiment is made I am to be allowed to specify the way the children are to be brought up and the type of world they have to live in."¹

But even Stoddard, the accepted leader of the environmentalists among the psychologists, would not go that far:

"It is essential to think of the contributions of heredity and environment, not as mutually exclusive or diametrically opposed, but rather as close-coupled factors whose impingement is mutually interacting. Environment does not act *upon* heredity (who would say that heredity acts *upon* environment?); rather, various combinations of factors and forces, with different origins, produce measurable results in child development." (Pages 22–23.)²

But Stoddard reminds us that the history of modern democratic society brings impressive evidence on the environmentalists' side:

"In any case, democracy is upsetting to genealogy. What can one say about a sociobiological system that, upon a basis of n generations of individual obscurity, produces in $n + 1$ or $n + 2$ generations notable reserves of human talent, leading to the highest achievement along scientific, artistic, and social lines? Certainly, if a political system (democracy) can unleash such forces in a population biologically mongrel in type (the human race), our efforts may center less in the putative quality of human materials

¹ J. B. Watson: *Behaviorism*, page 104 (1930).

² George D. Stoddard: *Research in Child Development, in Educational Research: Its Nature, Essential Conditions, and Controlling Concepts*. American Council on Education Studies, 1939. Series I, Vol. 3, No. 10, pages 22–23.

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

and more in the opportunities presented for stimulation and development. The great social problem of the world today is not shortage of talent, but wastage of talent.”¹

G. L. Freeman presents a balanced statement of position:

“... whereas most people once assumed that tested intelligence measured the ‘native’ factor more than a ‘nurture’ factor, they now must concede that it is greatly determined by cultural influences to which the testee is exposed. There is nothing new or strange in this doctrine, and anyone who has thought through the implications of a measuring device whose most reliable part is the vocabulary test, will have realized years ago that aside from the broadest limits of idiocy and genius, the ‘native’ factor in intelligence may be effectively masked by differences in experience.” (Page 267.)²

Summing Up

These things we know, then: physique, temperament, and intelligence—are the raw materials of personality, and the basic question of the educator is: To what extent can they be changed by “education”? Certainly no student today would accept Watson’s dictum: “There is no such thing as an inheritance of capacities, talents, temperament, mental constitution and characteristics.” Most physiologists and psychologists would agree that while personality itself is not inherited, there is no aspect of it that is not influenced by the original nature of man. The burden of the investigational evidence supports Allport’s generalization that raw materials

“are genetically determined through structural inheritance and are only slightly altered by conditions existing subsequent to birth. . . . Sometimes they accelerate the molding influence of the environment; sometimes they place limitations upon it; but always their force is felt. . . . If the genes are altered, the personal characteristics are altered.”³

What, then, can education change, if not the physique, the temperament, and the intelligence? It can change human habits, traits,

¹ *Thirty-ninth Yearbook of the National Society for the Study of Education*, Part I, page 7.

² G. L. Freeman: “A Methodological Contribution to the Nature-Nurture Dilemma in Tested Intelligence,” *Psychological Review* (1940), 47, 267–270.

³ *Op. cit.*, Allport, pages 105, 107.

THE PSYCHOLOGY OF PERSONALITY

and play a large role in determining the total personality; but educators should make up their minds that the physical, temperamental, and intellectual qualities of the young people in their charge are not going to change much through their entire educational careers. Personal controls can be built, the old adage of "Know thyself" can be effectively carried out, but unless the physiology is altered, the physique, the temperament, and the intelligence will be of approximately the same *general level* throughout life.

THE GROWTH PROCESS: FROM COMPETITIVE INDIVIDUAL TO MATURE AND COÖPERATIVE PERSON

We come finally to the problem which, to the educator, is most important of all: the nature of the process by which the infant Individual becomes the mature Person. I shall state the consensus as it has developed in fifty years of study from James, Dewey, Baldwin, Cooley, and Mead to Caroline Zachry and the school psychologists of recent years.

1. *The Rise of the Self in the First Two Years*

The first step consists in the anticipatory reactions toward other people, especially the mother; hunger satisfied by her, being dressed by her, held in her arms, put to bed, and so on. It is in the social act that the Self arises, that the child's gestures take on significance. He identifies himself with the mother and the others in the immediate group as the primary habits of elimination, cleanliness, avoidance of danger, and the like are built up. The act is twofold, building an attitude of dependence on the one hand and, on the other, of habit and discipline. These are the first social acts of the Self and Other — the original form of "I" and "We." The first glimmer of Self arises through the "consciousness of acts and thoughts as they are related to others," the Other being largely the mother.

It is in these anticipatory activities, in part through imitation of others, that the child begins to act certain roles and comes to see himself as others see him. He uses tools, taking on the role of the father, the mother, or the workman in the house. In his play life he learns to walk, talk, handle things, develop skills. He assumes roles, plays a whole series of parts, identifies himself with the expectancies of others. As gradually he comes to employ body gesture and words he "thinks

socially," using the gesture and the words as media between his inner world and his acts. As Mead phrases it in his classic study:

"the Self arises in conduct, when the individual becomes a social object in experience to himself. This takes place when the individual assumes the attitude or uses the gesture which another individual would use in response to it himself. . . . The child gradually becomes a social being in his own experience and he acts toward himself in a manner analogous to that in which he acts toward others."¹

Around this concept of associating the child's responses with the roles he assumes from observing and imitating others, Mead built up an elaborate theory of the Self-Other.

"The Self is essentially a social process going on between these two distinguishable phases. If it did not have these phases, there could not be conscious responsibility, and there would be nothing novel in experience."²

Cooley's eyewitness records³ of the language and behavior of infants, dealing with such questions as: "How is 'I' learned and what does it mean?" confirm Mead. Cooley says:

"The Self idea is a social conception. . . . 'I' is social in that the very essence of it is the assertion of self-will in a social medium of which the speaker is conscious."

The correct understanding of "I" and "you" when used by others was achieved by the nineteenth month. A first step was the imitative use of "I" phrases, in fact of any discrimination of "I" from the rest of the phrase. He says:

"The child gradually comes to notice the indication of self feeling . . . accompanying the use of I, me, and my by others. These indications awaken his own Self feeling already existing in an inarticulate form. He sympathizes with them and reproduces them in his own use of these words. They thus come to stand for a self-assertive feeling, or attitude, of self-will and appropriation."⁴

¹ George H. Mead: "A Behavioristic Account of the Significant Symbol," *Journal of Philosophy* (1922), 19:160.

² *Mind, Self, and Society*, page 178.

³ Kimball Young, *Source Book in Social Psychology*, page 337, quoting C. H. Cooley: *The Rise of Self-Feeling*.

⁴ *Ibid.*, page 336.

Moreover, "I" does not mean the visible or tangible body; it "means primarily a *self-assertive feeling* linked with action or emphasis expressive of the same." Thus other "third person" names, such as "baby," are given the Self and were also learned by direct imitation. They may or may not precede "I," but they are gradually merged into "I." The use of "You" for "I" by direct imitation (for example, "I carry you," meaning "You carry me") is recorded about the twenty-third month.

2. *The Nursery School Years*

We know, then, that by the time the child is ready to enter the nursery school¹ — at two or three years — he is a little egocentric Self. The baby, says Zachry,² "is completely self-centered . . . as he discovers his body . . . his feeling of self is strengthened. . . . He has no sense of shame." In every nursery we must assume a group of little egocentric Selves, asserting, themselves, defending themselves, contradicting, commanding, resisting interferences.

"This interpretation of the individual as a protagonist of self is based on a vast amount of concrete investigation, partly of the behavior of preschool children. For example, [in 1928] the writer, in collaboration with Louise Krueger and Arensa Sondergaard, conducted studies of the personalities of kindergarten children. In one investigation, a study of the language of four-year-olds and five-year-olds, we found that more than two fifths of all their conversation revealed a naïve interest in themselves and their own affairs. Only one twenty-fifth of the conversations was an overt expression of the child's interest in the group. Most of the remarks were indicative of the trait we call 'self-assertion'; that is, they showed a sense of personal power, self-display, injection of self into a situation, defense of one's feeling of ownership, resistance to interference, contradiction, commands, threats, and derision."³

¹ In the post-war world educators will be confronted by the problem of building up across the United States a system of nursery schools. Two generations ago the problem was to extend the public school system downward to include the kindergarten of the fourth and fifth years of age. Today, for the bulk of our schools, that problem is solved, but that of guaranteeing universal public education for the youngest years of life still lies before us.

² *Third Yearbook of the John Dewey Society*. Caroline Zachry: *Democracy and the Curriculum*, Chapter XII, page 319.

³ Harold Rugg: *American Life and the School Curriculum* (1936), page 289

The problem of "I" and "We," which is to confront the individual throughout his entire life, now begins to take shape. At this stage the child depends on others for security, for a source of authority, for guidance in learning. The world begins pressing in upon him, "emotional-cultural pressures," on every side, and the school must manage him in an understanding, sympathetic way. "He demands cuddling, caressing, and comforting attention." Home and school must watch out that the child is not overloved, or, on the contrary, deprived of affection. He must be accepted as he is, an infant with complete absence of modesty. At this age, for example, he is interested in his body, plays with it, and asks questions about it; adults must accept this behavior for what it is — namely, an inevitable stage in growing up. The school and the home must both be careful not to demand self-reliance in a little child too soon, nor, on the other hand, hold him back in the building of self-responsibility. Dangerous emotional tensions may be created by insistence on too rapid learning. And the child's questions must be answered, reassuring him and so stimulating him to further inquiry. As for teachers — more experienced men at the elementary school, kindergarten, and nursery level will be one of the administrative goals in the post-war world.

3. *Childhood and the Elementary School*

Month after month, year after year, growth advances. Broken down into short periods it appears discontinuous, periods of rapid growth followed by plateaus of apparent standing still. But in its general over-all history it appears to be for most children an uninterrupted ever continuous process. If the irregularities are smoothed out over long-term intervals of several years, the curves of growth are seen to be continuous and ever rising. Thousands of such curves have been drawn in the past generation from objective measurements of human traits — anthropometrical traits, intelligence, a host of learning functions, emotional traits, creative and appreciative skills and dispositions. The consensus is clear: over-all growth is continuous, rising rapidly in the first years, slowing down during adolescence, approaching a plateau in the years of youth and young manhood and womanhood. But irrespective of traits considered, the shape of the total curve is of the same general parabolic nature. So we can agree with Zachry that "Every stage of development holds its residue of former stages, and boys and girls emerge from nursery to childhood years

THE PSYCHOLOGY OF PERSONALITY

at somewhat different ages and with differing behavior patterns.”¹

From birth to adulthood, young people are overtly dependent on grownups in two periods — first, in infancy through perhaps the years of the primary school; second, let us say from eleven or twelve through the years of adolescence. During the years of the elementary school fairly clearly discernible changes in child behavior appear. The intensity of feeling characteristic of infancy declines. Having few problems in common with grownups, and being less dependent on them, the child “tends to scorn their concerns, to reject their interest in what he is doing or thinking.” Hence he turns to his own mates, quite generally to gangs of his own sex; indeed, a real sex antagonism appears to develop. For a few years the gang seems to have more authority than the home. Manners and social habits deteriorate. As Dr. Zachry says, the boy may have washed his hands at six or seven, but at nine or ten he is “always dirty” . . . “prefers old and shabby clothes . . . glories in semiarticulate slang.” The family is now alien. The gang is the In-Group, and life must have its secrets. Intellectual interests develop and shift. Curiosity in the outside world grows. The boy “wants to know what things are made of and how they work . . . girls become interested in sewing and cooking” . . . “both like to work in the graphic and plastic arts. They are freer in creative expression.”

But the problem of “I” and “We,” of freedom and disciplined control, becomes more intense, and with it the danger of miseducation and mismanagement by grownups — even, at this stage, to rejection of the children. Child and adult wishes seem to be sharply in conflict. Grownups are always ordering them about. Taboos are frequent and emphatic. Adults worry over the slovenly habits of children, and many in this period are hurt by what seems to be a rejection of themselves. This is a dangerous period of emotional tensions and insecurity; only sensitive maturity and understanding on the part of the adults will solve the problem of appearing to give the child freedom but really holding him firmly “on leash.” With the center of authority moving from the home to the gang, the parent confronts the subtle problem of allowing the weaning from home to go on but at the same time having the home remain the guiding force. Throughout these younger years the problem of maturation is of great significance; elders simply must learn to wait for this process to take place. The key to

¹ *Third Yearbook of the John Dewey Society: Democracy and the Curriculum* (1939), page 324.

success is interest in what the child is thinking, his activities, his games, jokes, hobbies, make-believe, organizations. Above all, the parent and the teacher must know that the boy and the girl are now markedly widening their "community" and changing their loyalties. These gangs must not be broken up except when they are actually physically or morally dangerous. And once again, echoing the consensus, now is the time for more men to step in as leaders in the intermediate and upper grades of the elementary school.

4. *Adolescence and Youth:*
the Junior-Senior High School

Finally, the period of sharpest transformation — the long period of adolescence, extending from ten, eleven, or twelve, depending on the individual, to the age of sixteen or eighteen. Out of its Latin derivation adolescence means literally the period of growth. Now the interests shift again, this time away from the gangs and toward new individual and group loyalties. Intense interest develops in particular boys and girls and older persons — another important phase of weaning from home, another stage in extending the Self out into the larger world. Significant physiological changes occur with mysterious, even terrifying suddenness — the development of sex characteristics, menstruation, other glandular developments, all of which change emotional and sexual needs. The curves of physical and emotional growth no longer keep pace with one another, emotional maturity lagging behind physical development. On some the devastating experience of "falling in love" bursts with tremendous force. As this happens, more slowly developing mates look on with astonishment, amusement, even nagging and teasing. Every individual must be watched carefully but unobtrusively by parents and teachers to discover exactly at what stage of development he is. The intellectual work of the school, the use that a youth makes of his intelligence, will depend critically on his social and emotional patterns of behavior and development. No period in the school program is more crucial than that of the seventh to tenth grades as the young people pass through the difficult years of adolescence.

The problem of "I" and "We" enters another stage. There is still more intense competition for social approval; new friendships are formed, especially with the opposite sex. The attitude of "I am grown up," the spirit of independence of parents, of the teacher, develop.

THE PSYCHOLOGY OF PERSONALITY

For some it is the "show-off" stage. Plans are made for adult life — fantastic plans, egocentric plans, all subject to the pressures of social approval and disapproval. The Self now extends even further into the Other with its three basic components — "self-assurance, self-reliance, and self-esteem." Mead calls it "generalized Other." The youth generalizes more and more the roles he has played. "Character," the moral self, emerges. We can visualize a new conception of building the moral self at this time; witness James's and Dewey's conception of the moral Self as the guiding, organizing, impelling force. Interest grows in religion, in politics, in occupations.

As competition and conflict increase, the individual has internal struggles, trying to establish the status of his Self, to build up his integrity as a Person. It is indeed a period of self-consciousness, of inferiority, of shame even over his own aspirations. Now the I and We relationship in the home becomes very delicate; antagonisms easily develop. More than ever he needs comfort and security, for he tends to withdraw into himself, to make himself "inaccessible to adults." In many cases the sense of shame and guilt is accentuated. Hence the necessity of great wisdom on the part of the home and the school. If the manifestations of security are not given by his elders, he turns inward more than ever before, protects his own personal ideas and standards.

FREUD AND PSYCHOANALYSIS:

A DEPTH PSYCHOLOGY OF PERSONALITY

To be best equipped to deal with the emotional problems that arise in the growth of the child and youth, educators have found that an understanding of the work of Sigmund Freud and his psychoanalytic colleagues — Adler, Jung, and Rank — is indispensable. Concurrent with the later work of James and all of Dewey, it was the earliest, most revolutionary, and so far as personality is concerned the most influential of all the psychological approaches. It is perhaps by far the most important of the Self-Wish psychologies. It dug down so thoroughly to the depths of personality that it is frequently referred to as a "depth psychology." To understand it, we should have a brief sketch of its history.

Sigmund Freud (1856–1939), its originator, was a Czech who lived in Vienna from early life until the seizure of the city by the Nazis. As the reader can see from the sketch of Freud's early work

on the adjoining page, he was the bridge between Charcot and Janet and French psychiatry of the nineteenth century and the mental hygiene, guidance, and personality analysis of twentieth-century America.

The use of hypnotism in the earlier work of Europeans had been regarded as charlatanism. Charcot and Janet had, by 1880, reestablished its prestige as a valid method of exploring earlier events in the life of hypnotized patients. They showed that although such events were inaccessible while the patient was normally conscious, they could be reached through hypnosis and, by the report of the subjects, could be connected as causal factors in the waking behavior. Psychological difficulties were found to be due to states of lowered "mental tension"; because of the latter the subject was unable to command the necessary will and activating power to cope with the harassing problems of life. It was in the 1880's, when Charcot and Janet were developing tentative hypotheses about the neuroses, that Freud studied with them and from them got the cues to the analytic method which he developed in the next fifty years. In Paris he heard Charcot stressing the ever present role of sex in neurotic behavior which, later in life, he made into one of the three pillars of the structure of psychoanalysis. At Nancy he got Janet's theories and therapy concerning lowered mental tensions, the elimination of neurotic fears, obsessions, and paralyzes through reeducation.

On returning to Vienna he formed a partnership with Joseph Breuer that lasted several years. Dr. Breuer, a physiologist and physician of considerable scientific attainments and creative ability, employing hypnosis originated the interview or "talking out" method of treating the neurotic patients. Using the method on many patients, Breuer and Freud published *Studies in Hysteria* (1893 and 1895) — a scientific work which enjoyed considerable prestige. The method was a retrospective technique which eventually became the elaborate "standardized interview" of the psychoanalysts of today. When, in the 1890's, Breuer gave up the technique, Freud, although recognizing that its use frequently led to complicated emotional problems, went on with it and built up the theory and the treatment with such rigor that it was taken up in many countries.

Thus Freud and Watson assumed exactly opposite positions. Watson insisted that, in order to become a science, psychology should have nothing to do with the past experience of the subject; it should concern itself only with observable present behavior. But to Freud

the most important thing about an individual is the experiences he has lived up to the present moment, especially the critical emotional ones; present behavior was definitely pushed into the background. Watson ridiculed introspection as a method; Freud made it the very essence of his technique. In the handling of "consciousness" the two men were also diametrically opposed. Watson said that the concept of consciousness was of no use to the scientist; you could neither observe it nor measure it. To Freud it was all-important; in the fringe phases of consciousness especially we find the true explanation of behavior. So he broke the residual deposit left by the past experience of the individual into two great areas: (1) the preconscious or foreconscious and (2) the subconscious. Thus Freud's psychology became a "depth psychology" because it primarily explored the unconscious "depth" of the subject's life up to that moment. Moreover, in sharp opposition to the characteristic intellectual German trend in the late nineteenth century it was a psychology of the emotions.

Stating succinctly Freud's total contribution: (1) He was concerned with the whole Self. (2) He used retrospection and out of a vast body of cases developed the standardized interview. (3) He was concerned with the past experience of the individual, which he regarded as holding the factors which caused normal as well as abnormal behavior. (4) He conceived the preconscious and the unconscious as depositories of past experience which continued to operate on the on-going life of the individual.

Out of this came the development of the earliest personality psychology and the most important motivation or "wish" psychology of our time. While other "Self-Psychologists" — James, Baldwin, Cooley, Thomas, Calkins, and Dewey — all ascribed some importance to *motives*, Freud makes it — in the form of *the repressed wish* —

"the main pillar upon which rests the edifice of psychoanalysis. It is really the most essential part of it, and is itself nothing other than the theoretical expression of an experience that can be repeated at pleasure."

As a result of "very numerous experiences," . . . "but of much later days," he developed what he called the *three-point theory of "infantile repressed sexuality."* He traced the effect of impressions back into the earliest years of childhood when he found the auto-erotic activities that he claimed accounted for the patient's fantasies. Finally he says,

"the whole sexual life of the child made its appearance behind these phantasies. . . . Years later, my discoveries were successfully confirmed for the greater part by direct observation and analyses of children of very early years."

Thus Freud bases his conception of the neuroses on frustration in past and infantile experience. Where Janet had said that the neurotic patient is weak, has a "feeling of inadequacy," Freud said it was due to *wishes which had been long repressed*; his behavior was merely a symptom of "wish-fulfillment." To Freud unfulfilled wishes are "causes" in the psychological sense. The Freudians built up the explanation that *behavior is wish-fulfilling*. This seems far-fetched indeed when applied to such extreme deficiencies as blindness, loss of hearing, various paralyses, but some psychiatrists have interpreted these as ways of escape from insistent problems. Freud explained them as "conversions" of earlier repressed wishes, residues of energy which have remained in the patient's system and express themselves in overt forms of distorted behavior. In Freud's book, *The Psychopathology of Everyday Life*, he gives many instances from his own experience of lapses of memory, many examples of "motivated forgetting" — slips of the tongue or the pen — and explains them as the fulfillment of earlier repressed wishes. Years were spent likewise on the analysis of dreams¹ which are also explained as wish-fulfillments.

We see, then, the essence of his theory: the disturbance of the individual by infantile and repressed wishes persisting in identical form throughout the many years of life; for the patient to be cured, a systematic treatment must be devised. Out of the countless psychoanalytic treatments which he himself conducted, he developed the psychoanalytic therapy, which included at one point a step that he regarded as of supreme importance — namely, "transference." Since the wish-fulfillment is infantile in source — even though one can only recover scattered and isolated fragments of early childhood experiences — the cure lies in devising a way to get the patient to relive the infantile period. His technique for doing the latter — built up out of many difficult, baffling, and harassing experiences with subjects — was to use himself, the analyst, to help the subject to "repeat as a current experience what is repressed," to live over again the forgotten experience. It frequently happened that the patient, having at last given up all resistances to laying bare his past, "reveals all" and is left with a

¹ Published in a widely discussed volume, *The Interpretation of Dreams*.

THE PSYCHOLOGY OF PERSONALITY

weak, childlike dependence upon the analyst himself, in some cases having fallen in love with him. It was at this point, it is said, that Breuer gave up the use of the method; but Freud went on, insisting that this was, in some cases, a necessary intermediate step in the treatment. His problem was to find a way to make another transference, namely from himself, the analyst, to a mode of independent normal, strong, balanced behavior. This led to the prolonged and expensive psychoanalytic technique, which could be used successfully by only the most astute and experienced of professional practitioners.

Having traced the causes of the neuroses back to early childhood, Freud went a step further. Following Charcot — a step which most psychologists today will not take — he found most of the causes of disturbance to lie in sex and sexual desire experiences. A careful study of Freud's works shows that he really regards any infant behavior which gives sensuous pleasure as a form of sex gratification. One could therefore say, using Freud's own language, that the three pillars of his psychology are "repressed infantile sexuality."

/ / /

This, very briefly sketched, is the chief Self-and-Motive-Psychology of our times. During the first twenty years of Freud's work with "normal" patients — let us say until the early 1920's — the academic psychologists paid little attention to it.¹ The profession of psychiatry, however, took it up and within a short time the psychoanalytic technique was being widely used. Since 1920 a number of progressive educators, the late Dr. Caroline Zachry in the lead, have built a strong program of mental hygiene and guidance upon it.

/ / /

As a result of this digression to Freud's contribution, we return for a final look at the psychological problems that arise over the conflict of "I" and "We."

THE CONFLICT OF "I" AND "WE" CREATES A FEELING OF INFERIORITY AND THE SELF-DEFENSIVE MECHANISMS

An almost inevitable outcome of the social pressures which mold individuals in our society, especially during childhood and youth, is a deep-laid feeling of inferiority. This may become so powerful that

¹ When Freud came to the United States in 1912, G. Stanley Hall was the only prominent psychologist to welcome him.

it hampers the effectiveness of their work and their social relations throughout life. This is the "inferiority complex" made famous by Freud and the psychoanalysts. Studies show that practically all people have to combat it during the years of growing up. In one investigation of 175 college men and 100 college women, 92 per cent of the men and 98 per cent of the women reported that at one stage or another of their development they were harassed by a marked feeling of inferiority; nine tenths reported that even at the college age they were bothered by it. While a sense of social inadequacy was predominant, half of the students were depressed by feelings of physical inferiority and a third by feelings of moral inferiority.¹

How does this inferiority complex that affects so many human beings develop while they are growing up? The consensus seems to run somewhat like this: Youth grows up assailed from every angle by social and economic pressures everlastingly putting each one in his place. Growth is a constantly intermittent process, a readjustment between tensions, an intrusion into established equilibriums, of changes in physical conditions, of altering demands of the social world, or other upsetting factors. Consider, for example, the way in which the culture sets up dangerous pressures and strains by its impositions of moral codes. The concept of socially "proper" conduct is drilled into the child in his relations with others. The "conscience," or, as Freud called it, the "super ego," develops. Youth learns to develop patterns of control, which take the form of self-punishing mechanisms, "one set of Me's or roles which counteracts or blocks another." Early in his development the individual encounters situations of inhibition and frustration in which a sense of guilt arises. He degrades himself, builds a sense of inferiority. Pressures accumulate upon him from parents and other adults who are stronger; there are constant reminders of dependence and lack of achievement, undervaluing of his opinions, ridiculing of his questioning. These and other forms of adult behavior steadily destroy the child's self-confidence and help to produce the growing sense of inferiority.

Thus, life goes on as a kind of alternation of imbalance and balance. But as Walter Cannon has shown,² the human being is

¹ Such investigations must not be interpreted as measures of actual inferiority; these inferiority feelings may be subjective states or matters of relative rank in one's social group. The second best in the world might still be inferior to the first best, while being better — and he knew it — than all but one in the world.

² See his *The Wisdom of the Body*.

equipped with delicate mechanisms to meet the imbalancing tensions. The process is "homeostasis." In the multitude of ongoing situations, many of the resulting imbalances are restored by a satisfactory adjustment and in a variety of ways. But many are not adjusted. These may be repressed or ignored, or escaped from. As a consequence, feelings of uncertainty, instability, or some other deep-lying sense of deficiency may develop. When this happens, we have an "inferiority complex."

The Chronic Tendency: Psychological Self-Defense

What do we do about these feelings of inferiority? Some people — and educators could wish their numbers legion — attack the problem directly and remove the true source of the actual inferiority. But instead of meeting and solving their problems, many people try to "escape" — to deny the situation or ignore it. Consider the many people in the social world who refuse to accept their responsibilities and to face the realities of their situations. Unable to react appropriately to actuality, they create and live in an imaginary world and eventually such an individual lives entirely in a world of fantasy. Escape in its most complete form, of course, results in insanity.

But more normal people are driven by egocentrism and a sense of inferiority into some form of "defense." Alfred Adler¹ has given wide circulation to a general term for all such forms of behavior — "compensation." Examples of compensation abound on every side; one bilateral organ of the body compensates for defects in others, one sense for another, as touch for sight in the blind. Little men walk straight; tall men stoop. Undersized men tend to avoid dancing, because they flinch from dancing with girls taller than themselves. In some people apparent snobbishness, misinterpreted and punished by unpopularity, is a mask for shyness. My files record many instances of phenomenal achievements by persons who, deficient in certain traits, overcorrect them because of the criticism of parents and elders. To give a single example, in Lincoln School we had a boy who later completed his college work in three years because his father had sneered that he might not be able to get through even in five. Habits of persistence, hard work, and self-control develop as compensation for the

¹ See Alfred Adler: *Individual Psychology*; see also Otto Rank: *Will Therapy*, and Jessie Taft: *The Will Therapy*.

inferiorities and the belittling attitudes of those about them. The child with the greatest sense of inferiority often puts on the boldest front and rushes into the limelight.

And so we either find a way of compensating for our deficiencies or we take refuge from the objective world by retreating into a world of phantasy.



One of the most obvious forms which the defensive mechanisms assume is "rationalization." All people resort to it, perhaps daily. This, as James Harvey Robinson once wrote, is the tendency to give the good reasons instead of the real reasons. According to Dewey, the social sciences are filled with rationalization, and Veblen said the same of politics. Emerson expressed it: "That which we call sin in others is experiment for us." Scientific writers defend their convictions by creating "metaphysical absolutes." Most people defend their deeds by supplying themselves with high-sounding motives. As self-justification, perhaps without knowing it, we rationalize to fool ourselves as well as others. Witness the "sweet-lemon philosophy": "Well, I'm slow — but I am sure!" . . . and the "sour-grapes philosophy" — when we find that we can't have a certain thing: "Well, I didn't want it anyway." Thus feelings of tension and unrest are released by finding alibis, excusing our incompetence.

There are still other ways in which the egocentric human being attempts to defend himself. "Substitution" is one — the tendency to "kick the cat or swear at the stenographer" if one is prevented from talking back to the boss. Another is "projection," the name given to the tendency to attribute one's own undesirable traits to others. Groups do it as well as individuals; witness the mudslinging of any political campaign. There are others, but these that we have referred to briefly are the principal "defense mechanisms" and will serve to establish our point.



These, then, are the chief psychological data needed in the education of the Person:

- The raw materials — physique, temperament, and intelligence
- The data on their improbability by education: the great issue over nature and nurture

THE PSYCHOLOGY OF PERSONALITY

- The growth process – from competitive individual to mature and coöperative Person
- The parallel developing conflict between I and We
- The rise of inferiority and the self-defensive mechanisms, a better understanding of which we owe to Freud and the analysts

With these in hand we can define:

THE GREAT GOAL OF EDUCATION: DEVELOPING THE PERSON

From birth to death the human *Individual* endures the struggle to become a Person. Through his interplay with other Selves, he builds an equipment of conditioned responses, grows in understanding and feeling for the world about him, and becomes a Self equipped with dispositional traits and guiding sentiments. He lives in the stereotyped actual world of his own responses, struggling to make it approximate some hypothetical “real” world. But always, whether or not he consciously phrases it, the goal of growth and hence of education is the development of himself as a Person.

THE CHARACTERISTICS OF THE PERSON

The concept can perhaps be clarified if we make the Person synonymous with the “mature personality” and ask: What are the characteristics of the latter, according to our rich consensus?

1. *The Person as “I”*

I find that the mature personality sets before himself the old rule, “know thyself,” especially his emotional characteristics; being intelligent, he never forgets the pitfalls in the way of achieving it.¹ The Person knows full well that his knowledge of himself is inescapably the product of his appreciative insight into the excellences of his peers. They are the sources of the yardstick of his self-knowledge. As Gordon Allport reminds us, one should learn to measure himself by the ratio of the second to the first of the three characters given in the old adage: “Every man has three characters: that which he has . . . that which he thinks he has . . . that which others think he has.”

¹ Studies show a marked correlation between self-knowledge and intelligence. See P. E. Vernon, in Vol. V of *Social Psychology* (1933), pages 4 and 42–57.

Closely related to self-knowledge is a sense of humor, with special reference to oneself; the attitude of amused tolerance toward oneself is frequently asserted as the mark of the mature man. Here, too, scientific studies show a high correlation between self-knowledge and being able to laugh at oneself.

/ / /

I find, second, an obdurate insistence on one's integrity as Person; the conviction that nothing outside oneself can destroy one's concept of the worth of his own life. On the creative side it means the unswerving determination *to say what he sees his own unique way* — rejecting all copying, all slavish worship of standard styles. But it means more than the honest job: in addition it is an adamant personal competence of statement, a measuring up to the most rigorous self-imposed norms of "form."

2. *The Person-as-part-of-"We"*

I find, third, *an awareness of others as Persons* and of our basic interdependence with them. A recognition and acceptance of the dignity and worth of every other human being. An implicit acceptance of the integrity of every other Person. The Person is a believer in the validity and value of every thought-out personal philosophy. He admires the honesty and beauty that emanate from another mature personality. He lives a deep-rooted belief in the necessity of frequent communion with others, that life is worth while only when lived in true cultural groups.

/ / /

Finally, I find one other measure of the Person: a consistent philosophy of living which consciously relates him to a hierarchy of increasingly wider groups. This philosophy of life serves to give his behavior consistency, and steadiness of direction. This provides the ballast that our critics of the immaturity of our expressive life have bewailed so frequently in the past generation.¹ Such ballast guarantees direction along a *socially good gradient*. This means, among other things, that the Person has confronted basic questions of value for his Society as well as for himself and struggled to make his

¹ See especially Van Wyck Brooks's *America Comes of Age*; 1915.

THE PSYCHOLOGY OF PERSONALITY

own statement in answer to them. He asks himself: What kind of life do I call Good? What kind of man am I? Do I show that I know what I want in life and that I work my way steadily toward it? Do my goals and those of my people measure up well on the social yardstick of The Great Tradition? But more than that: On what does morality rest in our special industrial form of social order? What kind of man are we producing in our society?

CHAPTER VII

The Psychology of the Act—Reinterpreted: How Does Man Know?

The conceptual materials of the psychological foundations of education have now been gathered. One step remains — to organize them into a living psychology of experience. I have no illusions that I can do that for my readers; that can, indeed, be done only by each person for himself.¹ A psychology of experience must be created from the experience of the person himself. We know something only as we have experienced it internally, only as we have made its terms our own terms. So I cannot give my readers a psychology; I can only state my own in such words as may stimulate them to create theirs. In a sense that is what I have been doing throughout the preceding chapters. Every page has, of course, been *my interpretation* of men and ideas, loaded with all the biases of my experience and my psychology and sociology.

In this last chapter of psychological foundations I shall attempt, therefore, to do two things: First, I bring together in a compact synthesis the key ideas that seem to me to be established by the great consensus of the last fifty years. Second, in my own interpretive frame I shall incorporate with them several others that seem to me to be of very great importance. In doing so I shall, for economy and effectiveness, minimize certain concepts to which much attention has been paid and emphasize others which have largely been ignored.

First, in concept form, What have we learned about the psychology of the act?

¹ I find a similar expression in Charles Peirce's *Collected Papers*, Vol. I, pages 94 and 98.

“These Things We Know”

- Experience
 - *First*: That human experience is the only valid source of psychology . . . all authoritarian concepts and systems are false.

- Democracy
 - *Second*: That while all human beings differ greatly among themselves, each has a unique experience and some original power of thought, all but a negligible few have some capacity to see, think, and feel expressively and to state their own views of life . . . hence democracy is the only proper government for family, school, community, nation, or world; the people together distill judgment and decision out of their collective experience.

- Operational Interpretation of Meaning
 - *Third*: That we can now assume the operational interpretation of meaning; namely, that *we react with meaning* . . . that, with Dewey, we “know” only as we make practical responses . . . that, with Peirce, “differences in meaning are but differences in action,” “our conception of an object” consists of the “practical effects . . . we conceive the object to have.”

- Growth — and the Person
 - *Fourth*: With Dewey, that growth is the basic characteristic of life . . . that the course of growth follows in general the shape of the parabolic growth curve as experimentally documented by Thorndike and others . . . that growth from the egocentric, aggressive, self-defensive Individual of childhood to the coöperative Person of mature adult life is the greatest goal-setting idea of education.

- The Self in Expression
 - *Fifth*: That the Self is the unifying, motivating, directing, and inhibiting agent and its purposes constitute the most effective drive for learning and growth . . . that the complete human act is the Self in expression.

- Organism ...
 Organization
 ...Wholeness
- *Sixth*: That every human act is organic, general, the organism tending to act as a whole ... hence that the act of knowing is organized, that stimulus and response are one, *that we know as we generalize* ... that the concept of organism is central to man's conception of the physical universe as well as in the realm of living creatures ... that all mechanistic-atomistic explanations of natural or human behavior (as documented in Chapters II, III, and IV) are invalid.
- The Social
- *Seventh*: That mental development as well as the individual human act is a social process ... that the Self is social ... that education, therefore, is "a freeing of individual capacity in a progressive growth directed to social ends."
- The Problem and Problem-Solving Thinking
- *Eighth*: That much of life is problematic, – "the problem" is central in human life – and *one* of the profound intellectual aims of education is training in *thinking of the "problem-solving" type*.
- Force-Energy ... The Field
- *Ninth*: That great promise for the future clarification of human psychology lies in the force-energy-field concept ... that the "raw materials" of personality – physique, temperament, and intelligence – should be interpreted as forms of kinetic energy ... that we stand at the threshold of a new intellectual era in which the concept of the field-of-force promises to provide the cue to vastly increased understanding.
- Permanence of New Materials of Personality
- *Tenth*: That the raw materials with which education builds the Person – physique, temperament, and intelligence – are basic and relatively unchanged throughout life ... that they "are genetically determined through structural inheritance and are only slightly altered by conditions existing subsequent to birth ... (but) if the genes are altered, the personal characteristics are altered."

PSYCHOLOGY OF THE ACT — REINTERPRETED

- Forces in Our Culture Tend to Create a Sense of Inferiority in the Individual
- *Eleventh*: The social pressures which mold the individual create deep-laid feelings of inferiority, frustration, repressed desires, which, deposited and persisting in subtle ways below the threshold of conscious awareness, bedevil the smooth functioning of accumulating experience . . . create the alternation of imbalance and balance, tension and release, and produce a vigorous body of self-defensive responses.
- “I” and “We” . . . Individual and the Culture . . . Freedom and Control
- *Twelfth*: That the problem of “I” and “We” — of the Self and Other, of Individual and the Culture, of Freedom and Control — is the basic psychological and sociological problem of life.



Many additional minor concepts could be assembled in this general framework of our new psychology, but these are the major ones. In all that I say in my reinterpretation of the psychology of the act I shall assume the validity of the foregoing.

The starting point is the generally accepted principle that the act of knowing is an organized, whole affair, that we know as we generalize; the consensus agrees and we can build on it. Yet the nature of this generalizing act of the organism has been all too little explored. James undertook it and I am convinced set us upon a fruitful line of inquiry, but the outstanding students that followed him shunted us onto other special trails. As we have seen, the influence of Dewey and Gestalt gave educational psychology a deep intellectual and problem-solving emphasis. Thorndike buttressed the skill side. A few psychologists, however, and, independently of them, practicing artists and students of esthetics, kept alive other concepts that I am convinced are of first-rank importance.

I wish first, therefore, to develop one of these. It was actually one of James's most provocative ideas; namely, that *the human being generalizes through the felt-relations of body-response*.

THE PRIMARY ROLE OF BODY-MOVEMENT
IN THE ACT OF KNOWING

James gave us the cue to three related concepts; stated in sequential order they are: *body-movement ... felt-relations ... generalization*. In the half century following the publication of his *Principles*, many creative workers confirmed James's hypothesis. Some of these were professional psychologists, others were expressive artists. I shall assemble from their studies a few supporting types of evidence and logic. It might be of profit to turn back to Chapter III and note again what James said.

Body Gesture and Verbal Language

Illuminating data came from the anthropological study of the development of language, the classic work of which is the monumental *Voelkerpsychologie* of Wilhelm Wundt. Charles H. Judd, for many years the leading exponent in America of Wundt's "social" psychological ideas, reminds us that verbal language evolved out of body gesture; noting that primitive languages are close to gesture language, he illustrates its characteristic features:¹

"Wundt has brought together a long array of facts to prove that the earliest words invented by the race are those in which the organs of speech make a natural movement from which the sound flows as a secondary rather than a primary consequence. What he means can be illustrated by such an English word as 'zigzag.' *The movement of the tongue* in producing this word is in a very direct sense an *imitation of the idea expressed*. The sound comes to have meaning *because in making it the tongue puts one in the zigzag attitude*. There are other examples, such as the words 'crack' and 'explosion.' The naturalness of these sounds is readily recognized, but it *comes from the muscular sensations which the making of the sounds induces*." . . . [My italics.]

"The grammar of gesture language, like its vocabulary, is altogether concrete [body-response]. If one wants to say 'the tall strong man' in gesture language, the first sign to be used must represent the man, not his attributes. The attributes have nothing to which they can attach themselves if they are depicted before the object to which they belong."

¹ Charles Hubbard Judd: *The Psychology of Social Institutions*, pages 191, 197. The Macmillan Company, New York (1926).

*The Watson Behaviorists:
"We Think with the Whole Body"*

John B. Watson was very explicit in his agreement on the role of the total body-response.¹ In the revised edition of *Behaviorism* he says:

"When an individual reacts to an object or situation, his whole body reacts. For us this means that manual organization, language organization (after it begins), and visceral organization all function together — each and every time the body reacts."

Granting that there are some exceptions, he adds:

"These three forms of organization could not function together in mutually supplementary . . . ways unless we put on these organizations simultaneously as parts of one complete and integral function."

Similarly in discussing language organization as a type of behavior, Watson says that thinking "is nothing but talking to ourselves," emphasizing that *he does not mean merely laryngeal movements; on the contrary, "we think with the whole body."* [My italics.] Throughout his analysis of the experiments on infants he notes that the three forms of organization — the manual, the verbal, and the visceral — operate as a "part of a total bodily organization."

Lipps's Theory of Empathy Confirmed It

Another contemporary of James and Dewey who agreed was the German psychologist, Theodore Lipps (1851–1914); his special interest was in the nature of human response in activities related to the arts. He too insisted that act and object, all the elements of the whole situation, constitute a unity. The human being not only makes himself one with the entire situation, "he feels himself into" the object he has contemplated. Out of the analysis of many kinds of human response to *expressive objects* Lipps recorded his *motor-identifications with the functions* which the artist is stating. With respect to the function of a column in the structure of a building, Martin paraphrases Lipps:

"The observer could recognize the function of a column only in terms of his own experience . . . his perception of the column"

¹ J. B. Watson: *Behaviorism*, page 252 (1930). [My italics throughout this section.]

as such depended on his vicarious muscular performance of the columnar function." [My italics.]¹

Lipps called his theory "einfühling," generally translated "empathy."

Body-Response in Esthetic Appreciation

John Martin, an outstanding student of the modern dance, confirms these comments on *the role of body-response in appreciation* in the movement arts:

"The dance exists exclusively in terms of the movement of the body, not only in the obvious sense that the dancer moves, but also in the less apparent sense that its response in the spectator is likewise a matter of body movement. If we are to get any pleasure or profit from a dancer's performance, we cannot merely watch his patterns with our eyes but must *actually participate vicariously in his movement.*"

He speaks of "a sixth sense," which is

"primarily a muscle sense and is called kinesthesia — 'movement perception.' Embedded in the tissue of the muscles and in the joints there are *sense organs which respond to movement* much as the organs of seeing respond to light."

It is through such organs, moreover, that

"we are able to judge weights, dimensions, resistances; to recognize shapes, forces, distances; to institute categories of the aspects and qualities of objects. An object does not weigh pounds . . . an object weighs the amount of muscular exertion required to lift it."

And later:

"When we look at a ball and call it round, at a rope and call it long, at an eggshell and call it fragile, the pronouncement in each case is the result of a particular motor pattern." . . . "There is *no experience of one's emotional life which is without its motor-concomitants.*"

Similarly in the theater:

"When we watch a pantomimist, without scenery or properties, we are in no wise perplexed by his actions provided he is a

¹ John Martin: *America Dancing*, pages 119-120. Dodge Publishing Company, New York (1936).

PSYCHOLOGY OF THE ACT — REINTERPRETED

good pantomimist. We know perfectly well that he is now knocking on a door, though there is no door there for him to knock on; now writing a letter, though he has neither ink nor paper; now counting his money, though his hands are actually empty. They are all movements so closely attached to experiences of our own that it requires no effort for us *to reproduce the memory of the experiences at sight of the movements.*"

Finally he gives a recipe for the enjoyment of the modern dance:

"Merely relax and *let the muscles do the thinking* . . . leave as much of the intellect as possible in the checkroom with the hat."¹ [My italics.]

Irving K. Pond — an architect who, as an avocation, had developed skill as an amateur acrobat — became also a student of the psychology of body-response. We not only adopt bodily attitudes appropriate to the nature of the building at which we are looking;² he said that architects "echo" their own physiological ways of responding to the characteristics of the structures which they design.

Movement, Body-Response: A Central Concept in Expressive Painting

John Marin, regarded by many students as one of the greatest expressive painters of our time, wrote a psychological description of the problem that confronted him when he undertook his paintings of New York City in 1913, toward the beginning of his creative work.³

"We have been told somewhere that a work of art is a thing alive. You cannot create a work of art unless the things you behold respond to something within you. Therefore, if these buildings move me, they too must have life. . . .

"It is *this 'moving of me' that I try to express. . . .*

"I see *great forces* at work; *great movements*; the large buildings and the small buildings; the warring of the great and the small; influences of one mass on another greater or smaller mass. *Feelings are aroused which give me the desire to express the reaction of these 'pull forces,'* those influences which play with one

¹ *Ibid.*, pages 107-124.

² *The Meaning of Architecture.* Marshall Jones Company, Boston (1918).

³ *Camera Work*, Nos. 42-43, April-July, 1913; see also *Letters of John Marin.* An American Place, 509 Madison Avenue, New York (1931).

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

another; *great masses pulling smaller masses*, each subject in some degree to the other's power. . . .

"And so I try to express graphically what a great city is doing. Within the frames there must be a balance, a controlling of these warring, pushing, pulling forces. This is what I am trying to realize. But we are all human." [My italics.]

Louis Danz, in an elaborate analysis of the way *the painter paints "movement,"* says:

"*in the real world the things seem to move, but in the canvas world, you move.*" . . . "Every picture which attains Form, makes a movement-demand upon the spectator. This movement-demand is the result of organization."¹

Both Duchamp's "Nude Descending a Staircase" and Balla's picture of his moving dog are mere tricks producing the illusion of movement; the expressive painter, however, arranges planes, colors, lines, so that they *produce movement in the observer.*

Danz says that the painter paints with the "organism as a whole," as the musician in action plays with his whole body:

"Does the magnificent 'cello player Piatigorsky play his instrument with his hands only? See him before you — his whole body in rhythmic motion; the expressive eyes, the head tossed in emphasis; one shoulder draped over his beloved 'cello; his fingers vibrating on the strings; the other hand flashing in the light as it draws the bow; the buttocks squarely on the chair; his knees firmly, but not too firmly, holding the instrument; and the feet like steel springs which grow from out the platform. Does he play his 'cello with his hands only? Does he? — when every tiny pore exudes perspiration — when even the saliva in his mouth undergoes chemical modification. And what colloidal changes take place throughout his entire physical organism only an imaginative chemist could appreciate. This is how a painter paints."²

Sheldon Cheney,³ in one of our most profound current analyses of modern art, devotes several chapters to the painter's problem of producing "movement in the canvas." He summarizes his discussion thus:

¹ Louis Danz: *The Psychologist Looks at Art*, pages 110–111, 115. Longmans Green & Co., New York.

² *Ibid.*, pages 73–74.

³ Sheldon Cheney: *Expressionism in Art*, page 160.

“In creative painting, control of movement of interrelated plastic means, is the first secret of formal design. From the opening of a picture with a partitioning of the field, through a main thrust into deep space, back to a stabilization or equipoise, with *innumerable minor thrusts, tensions, recessions, and returns* along the way, the artist must foresee how the *movement skeleton* will be coiled within the picture enclosure.” [My italics.]

Countless modern paintings illustrate this moving role of the juxtaposition of color and of lines, planes, and volumes. In Cézanne’s “Card Players,” “the great, bulky man in a blue coat sits before a yellow curtain . . . (the) blue-coated man comes magnificently forward, while the yellow curtain keeps its place in the scheme.”

Body-Response and Meaning

These inner movements of the body constitute the human instrument by which we respond to a vast range of qualities in the outside world. These are the inner tensions, the stresses “felt” in the shoulders or other parts of the body. But these inner movements are more than the specialized “felt-movements,” “felt-abstractions,” “felt-expressions,” of our poets and painters and musicians and architects. *They comprise the very body instrument by which we respond with the meaning of traits and qualities of objects;* note examples of one’s physical response to concepts — the rigidity of the motor-set of the body to “hardness” . . . its resilience in the response to “softness” . . . its expansiveness with the concept “breadth” . . . its contracting movement as we think (feel) “narrow” . . . and the corresponding body reactions for smoothness, roughness, nextness, remoteness, height, depth, heat, cold, sweetness, sourness, anger, love, etc. Note the appropriateness with which the sound and tone of the voice are adjusted to the meaning to be conveyed in speech; for example, when one says “giant,” “elves,” “fairies,” “witches.” The basic gathering together of the total organism is always motor.

/ / /

But enough of illustration. Many students during the past fifty years have provided impressive support for the hypothesis not only that the act of knowing is generalizing, but also that the actual process of generalizing goes through the felt-relations of body-response. These felt-relations *are* the body-tensions — the stresses “felt” in the

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

shoulders, throat, head, chest, torso, and other parts of the body. They are the basic instrument by which we respond with meaning.

This conception takes us a bit further on our way toward understanding the act of knowing.

THE ROLE OF THE ORGANISM AND OF THE SEPARATE SENSES IN THE GENERALIZING ACT OF KNOWING

There is still much to be explored. It is not enough to say: Knowing is generalizing. We still continue to ask the original question: How do we know? What is the process? Another step forward can be taken if we sharpen our question and ask, more specifically: *When* do we know? More precisely the crucial question is: In the act of generalizing, what is the role:

- of the reports of the separate senses?
- of the report of the organism-acting-as-a-whole?

I know no more definitive question before the students of human response than that. For twenty-five centuries the students of knowledge have divided on this issue; they still are divided on it today. To get the consensus before us, we must see the two positions.

I. GENERALIZATION VIA THE REPORT OF THE SEPARATE SENSES

One group, represented today by the scientific world, had long insisted that we can know only through the reports of the separate senses. We “know” only as we observe and we observe by means of the perceptual channels — visual, auditory, tactual, olfactory, and the like. From time out of mind — certainly until the fifteenth century — observation had consisted of the subjective use of the human being’s sense organs, unaided by instruments. Then, in the fifteenth and sixteenth centuries was launched a period of spectacular instrument making and mathematical and statistical methods of treating data. By the seventeenth century the process and the thinking that resulted from it was called *the scientific method*. As a consequence, an increasing body of “philosopher-psychologists” became absorbed in the channels of sense perception, and came to see these as the sole means through which communication passes and understanding

develops. The joint contribution of the philosophers, early physicists, and psychologists prior to the nineteenth century established the role of the five more obvious senses. Then came Weber and Fechner and Wundt and his associates, and they, before the twentieth century arrived, with great precision had extended our knowledge of the structure and the functioning of these standard five perceptual channels. All of this we have noted in the preceding chapters.

In the half century since their day our knowledge of the sensory media has been still further extended; today we have some awareness of the functioning of more than a dozen senses. In addition to the standard five, there are: *the kinesthetic or space-distance sense* which enables us to live in a world of moving objects, to appreciate expression in athletics, the dance, the theater, and other movement arts ... *the muscular sense* — used, for example, in judging weights ... *the articular sense*, revealed in the self-regulatory functions¹ of the body under the constant periodicity of tension, imbalance, and balance of life processes ... *the temperature sense* ... *the pain sense* ... and others. Thus in a century a dozen channels of report between the individual and the outside world have been opened up and their physiology and psychology explored and documented.

The spectacular scientific revolution of the last fifty years had tremendous effects on man's view of his own acts of response. In the physical realm the epoch-marking discoveries of Oersted, Faraday, Maxwell, Hertz, and others and the improvement of physical means of observation and of statistical methods laid the foundation for the Second Technological Revolution that has swept industrial society since the close of the nineteenth century. The beneficial gains to mankind are enormous, and we can well understand the heightened prestige of the "scientific method of inquiry."

But it produced troublesome psychological effects also. By the twentieth century it had not only won its battle with supernaturalism; *it had in addition become accepted by most of the leading students of behavior as the only "way of knowing."* Under the pioneer impetus of Peirce, James, and Dewey, the unique American philosophy of *pragmatism* or *experimentalism* became, as a study of "knowing," *essentially the articulation of the scientific method of thought.* The bulk of Dewey's writings, assembled and interpreted after fifty years, really constitute a library of what he is fond of calling "the scientific method

¹ See Walter B. Cannon's classic discussion of homeostasis in his book, *The Wisdom of the Body.*

of inquiry."¹ As we have shown, its central concept is problem-solving thinking. So clearly and effectively did Dewey do this that Kilpatrick, Bode,² and their students completely ignored the issue of the relative roles of (a) the separate senses and (b) the generalizing act of the organism as a whole. Curiously, they wrote and lectured constantly on what Kilpatrick, following Wheeler and Perkins, called "organismic psychology." *They accepted the "generalizing" concept of behavior. But nowhere can I find any commitment to the implications of that position that will show the respective contributions to the act of knowing (1) the reports of the separate senses and of (2) the "generalizing" response of the total organism.*

So, it seems to me important to bring into clear relief against the position of the experimentalists that of distinguished students of the act who *do* assign a *prior* role to the awareness of the *organism as a whole*.

II. GENERALIZATION VIA THE REPORT OF THE TOTAL ORGANISM

Do We "Know" before the Reports of the Separate Senses Make Sense?

A wide-ranging group of philosophers of experience, psychologists, and students of esthetics, semantics, and the history of cultures have long insisted that "knowing" consists of two phases:

- first, always prior, the primal awareness of the organism-as-a-whole
- second, its more precise sense-perceptual and verbal "documentation"

What I shall call primal awareness — a name suggested by Miss Wild's³ careful study — has been badly called "intuition." Badly, I say, not only because it has been given a horrid connotation by the

¹ See especially *How We Think*. See also *Human Nature and Conduct, Democracy and Education, The Quest for Certainty*.

² See especially Bode's *Conflicting Psychologies of Learning* (1929), and his *How We Learn* (1940), *Modern Educational Theories* (1927). See Kilpatrick's *A Reconstructed Theory of the Educative Process* (1935).

³ Students of this problem have been greatly helped by the exhaustive research and careful interpretation by Miss K. W. Wild in her *Intuition* (1938).

world's contemptuous ridiculing of Adolf Hitler's "intuition," but because the pragmatic critics have almost invariably assumed that it implies a supernatural source of knowledge, that it is "esoteric," "transcendental." There is not the slightest justification for that interpretation, as can be seen from references to Whitehead, Croce, Poincaré, Jung, Richards, and other students. The approach of everyone is based on naturalistic studies of *human experience*. Bearing definitely in mind the caution that we use the term "intuition" only in the naturalistic sense, let us review the record.

*The Record of the Prescientific
World's Creative History*

The most obvious witnesses are the products of the world's history of creative thought and expression. Talented men in all centuries before the "scientific method" became a conscious formulation in the seventeenth, used intuitive methods of creative expression and reflective thought. With these methods they produced works of art that history has pronounced great — the Parthenon, the temples of Amerindia, the Taj Mahal, the Gothic cathedrals, the Sistine Chapel,

SELECTED SOURCES OF THE STUDY OF PRIMAL AWARENESS

From the modern philosophers of experience:

Henri Bergson: *Creative Evolution* ... See also *Introduction to Metaphysics*

Benedict Spinoza: *Ethics* (Everyman Edition) ... *Short Treatise on God and Man and His Well-being*

A. N. Whitehead: See especially *Adventures of Ideas* ... *Process and Reality* ... *Religion in the Making* ... *Science and the Modern World*

From the students of esthetics:

B. Croce: *Aesthetics*

Waldo Frank: *Chart for Rough Water* ... *Salvos* ... *America Hispana*, "The Atlantic World"

From the students of "semantics":

Ogden and Richards: *The Meaning of Meaning*

From the students of history:

P. Sorokin: See the full documentation in the four-volume *Social and Cultural Dynamics*; a briefer interpretation in *The Crisis of Our Age*

From the students of psychology:

Jung: *Psychological Types*

W. Stern: *General Psychology, from the Personalistic Standpoint*

Gordon Allport: *Personality*

B. B. Bogoslovsky: *The Ideal School*

the *Iliad*, the *Books of Confucius*, the *Sermon on the Mount*, the *Divine Comedy*, the Shakespearean sonnets and plays, the world's great state papers and principles of government. *These were all works of profound organization.* The creators of these masterpieces *used the total human organism* as a sensitive instrument for design and construction *throughout fifty generations before they perfected the higher mathematics and that systematic way of experimentation and investigation known today as "the scientific."* This was the "intuitive" method of combined thinking and feeling that I have referred to as "primal awareness." It was the fusion of body, mind, and spirit that today biopsychology calls the "organism acting as a whole."

I find definite confirmation of this interpretation of man's creative history from Pitirim Sorokin, who says¹ that in the philosophical, humanistic, and social science disciplines

"almost all the principal philosophies and humanistic and social science theories were formulated long ago when neither laboratories nor statistics nor systematic data of observation nor any other facilities for empirical or rational generalizations existed. A study of the relevant data shows that a large percentage of the achievements in this field were initiated by intuition . . . (even though) the intuitional revelation was preceded by a strenuous exercise of the sensory or discursive mind."

This intuitive method has indeed been the primary method of inquiry and work for several thousand years. It has been sponsored by a distinguished company of scientists, mathematicians, speculative philosophers, poets, novelists, critics, social engineers, students of society, architects, industrial designers, playwrights, musicians, dancers, painters, sculptors. Irrespective of which medium creative men worked in, each one worked as "man-as-artist," as imaginative worker, molding a miscellany of materials into the one best organization which stated his own unique view of life and the world.

The Affirmation of the Philosophers

Many students of philosophy, from Spinoza to Whitehead, agree. Miss K. Wild, in her careful search of the writings of Spinoza, Whitehead, Bergson, Croce, and Jung, brought together an imposing body of documentation that "intuition" is "a more convincing and more

¹ *The Crisis of Our Age*, page 110. See the full documentation in *Social and Cultural Dynamics*, four volumes. American Book Company (1937-1941).

certain method of approaching the problem of reality than the mere method of reason." At the conclusion of her elaborate study she draws fifteen "positive conclusions"; I quote eight of them:

- (1) There is undoubtedly an intuitive method and immediate intuitive awareness on which reason and all other forms of knowing are dependent.
- (2) No form of intuition other than this *fundamental act of knowing* is universally acknowledged.
- (3) Intuition is *not alternative to reason*: its minimum function is to form a basis for reason, and its wider functions (if any) to deal with what is inaccessible to reason.
- (4) There is no necessary dependence of intuition on reason.
- (7) The objects of intuition are wholes or particulars of any degree of simplicity or complexity.
- (10) The knowledge brought by intuition is reliable, though it may subsequently be misused by reason. The absence of any deductive or interpretative or other steps between subject and object renders this reliability not only possible but exceedingly probable.
- (12) An intuition is not attainable at will.
- (15) There is (so far) no sure method of distinguishing between ideas acquired directly through immediate intuition and those acquired through reason or perception working on an intuitive foundation."¹

In drawing her study to a close she gives 31 definitions and descriptions of intuition. Numbers 1-8 and 13 describe the normal functioning of the mind in the process of realizing, and all strive to name a "primal mental fact" which is not explained by conditioned response, but involves real mental activity and initiative. "There is undoubtedly something which takes place when facts become knowledge. And this something undoubtedly requires a name."

She sums it all up:

"Primal awareness has a place in perception, conception . . . and what is common to all knowing. . . . Premises certainly lead up to the conclusion of a judgment, but they do not provide the mental act by which the conclusion is understood; that act is in itself immediate; it is the spark from heaven, it is the flash of lightning that makes clear what has only been partially understood. . . ."

¹ *Op. cit.*, Wild, pages 227-229. [My italics.]

Alfred North Whitehead¹ builds his "philosophy of organism" upon the concept of the intuitive powers of man. He speaks of "our direct intuitions which we enjoy prior to all verbalization."² ... "All knowledge is derived from and verified by direct and intuitive observation."³ Repeatedly he insists that "the one fundamental fact of knowing" in the case of works of art and ideas and memories, in general, is that *intuition is prior to any form of expression*. He says, for example, "There is first a stage of primary expression into some medium of sense expression which each individual contributes at first hand."⁴

His conception of intuition is built up in an important theory of "prehensions" that he says is "a constant flux which is due to the 'feeling' of one occasion for another or many others." Miss Wild says of it:

"Such a 'feeling' or 'subjective tone' he conceives is answered by physical response of occasion to occasion ... not only on the human or organic level, but throughout nature in all its manifestations. So sun and stone may be said to *prehend each other*, not only physically but with a parallel mental feeling tone." ... "He states categorically that *there is ... no 'first principle'* which the mind is incapable of grasping in some flash or insight."⁵ [My italics.]

There is undoubtedly an intuitive method of knowing "on which reason and all other forms of knowing are dependent."⁶

From Autobiographies of the Creative Act

The search of the autobiographical writings of philosophers, scientists, mathematicians, poets, musicians, artists, documents the ever present role of organic awareness both in new intellectual discoveries and in creative statement. To cite a few:

Mozart, for example:

"When I am in particularly good condition — perhaps riding in a carriage or on a walk after a good meal — or during a sleepless

¹ Especially in his *Adventures of Ideas ... Process and Reality ... Religion in the Making ... Science and the Modern World*.

² *Adventures of Ideas*, page 177.

³ *Ibid.*, page 228.

⁴ *Religion in the Making*, page 117.

⁵ *Op. cit.*, Wild, quoting Whitehead's *Process and Reality*, page 5.

⁶ Whitehead's more detailed explanation of his theory of prehension can be found in *Adventures of Ideas*, pages 226-227.

night, then the thoughts come to me in a rush and best of all. . . . Those which please me I retain in my head, and hum them perhaps in my head."

Later on he describes how the "crumbs" spontaneously join one another into a whole, grow, and finally assume a finished form in his head: "All the finding and making only goes on in me as in a very vivid dream." At last he goes to writing because "it is nearly ready in his mind"; it gets down on paper very quickly.

Autobiographers who discuss the intuitive act agree that it is sudden, a "flash," short-circuited. Isaac Newton's biographers characterize his three great discoveries — namely, the mathematical method of fluxion, the law of the composition of light, and the law of gravitation, which he achieved in two years' time, as nothing short of miraculous: "As a mathematician he . . . seemed to grasp the solution to a problem immediately." Archimedes is said to have exclaimed "Eureka" as he came out of his bath so excited over a sudden grasp of concept that he forgot to put on his clothes. Galileo formulated the law of the oscillation of the pendulum from the swinging of a lamp at a church near Pisa — the "law" coming to him by a process of "short-circuiting." Peirce says:

"Galileo appeals to *il lume naturale* at the most critical stages of his reasoning. Kepler, Gilbert, and Harvey — not to speak of Copernicus — substantially rely upon an inward power, not sufficient to reach the truth by itself, but yet supplying an essential factor to the influences carrying their minds to the truth.

"It is certain that the only hope of retroductive reasoning ever reaching the truth is that there may be some natural tendency toward an agreement between the ideas which suggest themselves to the human mind and those which are concerned in the laws of nature."

Peirce, explaining this process that I call primal awareness and which he out of Galileo is calling "natural light," says (in 604, Vol. V, page 421):

"In this way, general considerations concerning the universe, strictly philosophical considerations, all but demonstrate that if the universe conforms, with any approach to accuracy, to certain highly pervasive laws, and if man's mind has been developed under the influence of those laws, it is to be expected that he should have a *natural light*, or *light of nature*, or *instinctive insight*, or

THE HUMAN FRONTIER: A NEW PSYCHOLOGY

genius, tending to make him guess those laws aright, or nearly aright. This conclusion is confirmed when we find that every species of animal is endowed with a similar genius. For they not only one and all have some correct notions of force, that is to say, some correct notions, though excessively narrow, of phenomena which we, with our broader conceptions, should call phenomena of force, and some similarly correct notions about the minds of their own kind and of other kinds, which are the two sufficient cotyledons of all our science, but they all have, furthermore, wonderful endowments of genius in other directions."

Henri Poincaré, the mathematician, illustrates the manner in which each of his mathematical problems seemed finally solved "instantaneously"; the act of "knowing" was marked always by "brevity, suddenness, and immediate certitude."

An inventor testifies that when the need for a certain invention arises, he puts it out of "the objective side" of his mind. . . . "I cease to labor over it and assign it to the subjective side"; there it evolves, ripens, and finally spontaneously "comes out." Another inventor says: "Ideas come when I least expect them, often when I'm half asleep or daydreaming." Still others "wake with a new idea, suddenly and quite unexpectedly . . . in a flash . . . either in a period of relaxation or when the inventor is engaged in a different kind of work."

I am reminded of a story of the creative methods of work of Charles Peirce's famous father, Benjamin Peirce — the source of which I am unable to recover. After struggling for years with a given mathematical problem, Professor Peirce "solved" it in one of these intuitive flashes of meaning. Next morning he went into his college class, announced his "discovery" to his students, developing the mathematical derivation briefly with the comment: "It is obvious that this follows from that." When challenged by a student who told him that it was far from obvious how "this follows from that," he is said to have spent several weeks in the endeavor to clarify and document with the precise mathematical steps the meanings needed to fill the gap. His intuitive flash was right, he "knew," but the "reports of the senses" did not "make sense."

/ / /

Waldo Frank brings the estheticians and the psychologists and philosophers together: ¹

¹ "Our Guilt in Fascism," *New Republic*, May 6, 1940, page 605.

“Reality must be apprehended before the report of the senses can *make sense* . . . a prehension (to use Whitehead’s word) must infuse *the entire process of experience*, qualitatively giving it life. This prehension is not transcendental in the cant meaning of supernatural or supersensory; it is simply the method of awareness of the organism as a whole. Its best name is the intuition. . . . The true intuition, having the whole man as its organ, includes the reports of the senses and what is rationally induced from them. *But the intuition’s immediate quality is as different from these reports as a life is different from its chemic elements.*” [My italics.]

/ / /

The literature of the creative act in the schools abounds with references to the “intuitive flashes of insight” which artist-teachers find revealed in the expressive work of young people. One of the most striking came from the Dewey School itself; I cite Mayhew and Edwards:

“There are *occasional flashes of insight*, like those of the laboratory worker, *when he intuitively knows how to do what he wants to do or what he should choose, although he cannot explain why*. This realization that he has both impulses to action and insights for action make him sensitive to similar processes in others. He also becomes conscious of resources outside of himself in the achievements of other persons, in values that already exist — the values of the stored knowledge of the race, of customs and traditions. It was a *fundamental principle of the school to await the dawning of these directive insights, to trust their arrival, and to provide the conditions that foster their awakening.*”¹ [My italics.]

I am unable to find in any writing of Mr. Dewey’s a description of how these “conditions” which they “provided” do foster the awakening of these “flashes of insight.” In their 1936 book (*The Dewey School*) there is no reference to the important library of material dealing with the intuitive process. Neither is there any study of fifty years’ work on the psychology of feeling beyond such brief statements of Mr. Dewey which I quoted a few pages earlier. I shall comment more fully later on Mr. Dewey’s failure to explore the psychology of “feeling,” to discriminate it from emotion, and to show its relation to the

¹ Mayhew and Edwards: *The Dewey School*, page 423 (1936).

“intuitive flashes of insight” which Mayhew and Edwards say were the crucial step in problem solving. The steps of problem solving were clearly delineated in fifty years of writing, but the critical process of primal awareness was left without a theoretical explanation.

✓ ✓ ✓

This is a bare sampling of the large body of testimony that is available from creative artists and students, but it must suffice. I cannot escape the conclusion that *the act of knowing* consists of two phases: the primal awareness of the organism as a whole and the documentation via the separate senses with specification and clarification *through verbalization*. Teachers must become alert to them, distinguish them carefully, and use them in education. Two methods of inquiry and work are important: the chief method of the artist and the principal method of the scientist. And it is highly significant that both artists and pragmatic students agree on the essential characteristics of the act of response.

✓ ✓ ✓

III. THE “CUE CONCEPT,” EMBEDDED IN APPROPRIATE ATTITUDE, EXPLODES THE MEANING

Granted, *that the total organism knows*, before the reports of the separate senses make sense, the precise reports of the senses are also indispensable to “understanding”:

What is it that touches off the meaning and builds understanding?
What makes the reports of the senses make sense?

I suggest that there are two central steps:

First: The organism adopts a general attitude, or mental-motor set, that is appropriate to the meaning; in Thorndike’s terms, a “readiness” to respond, in Lewin’s “a field” of meaning.

Second: “Cue” concepts, magnetizing this “field” of readiness or attitude, explode the meaning. We respond with the verbal concept, which is the generalization. The concept is our “stereotyped” response.

I get the first point from the consensus of the past half century of work. The second is my own principle drawn out of the study of learning during the writing of my fourteen-volume *Man and His*

Changing Society. That entire program of learning and teaching¹ was built, after 1922, around the principle that the cue concept, embedded in appropriate attitudes, explodes the meaning, and hence that the curriculum must be organized around the concepts and that day-by-day teaching be built around it. I offer the principle now out of a quarter-century of operational documentation; it stems from the Wright-Peirce principle and builds upon the accumulation of findings from the theoretical and experimental psychologists of the past fifty years.

But first, a brief documentation of the role of appropriate attitudes.

I. AN ATTITUDE IS THE "SET" OF
THE "FIELD" OF MEANING

The chronic "connectionists" as well as the "generalists" — Thorndike *et al.* as well as Dewey, Gestalt, *et al.* — agree that the attitude or set or adjustment of a man determines what he thinks and feels and how he behaves. No less a critic of the various generalist positions than Mr. Thorndike commits himself definitely:

"It is a general law of mental action that the response to any external situation will depend upon *the condition of [1] the person as well as upon [2] the nature of the situation.* If the situation is itself an inner one, that is, a part of the person's mind, the response will depend not only on it but also on the rest of him. What a person learns as a consequence of any situation is a consequence of his nature as well.

"The condition of the person is conveniently considered as consisting partly of rather permanent and fixed mental sets such as are commonly referred to by the words *instinct, temperament, purpose, and ideal, attitude,* and partly of more temporary and shifting sets such as are named fatigue, sleepiness, the disposition to add rather than subtract, and the intention to be as unfriendly as is consistent with good manners. . . . The attitude or set or

¹The story was told in my *That Men May Understand.* Doubleday, Doran & Co. (1941); also in my *American Life and the School Curriculum.* Systematic explanations and a large body of concrete illustration are given in a series of Teachers Guides; especially the *Directed Study Guides* accompanying the following volumes:

Changing Countries and Changing Peoples

America's March toward Democracy

Changing Governments and Changing Cultures: Dictatorship vs. Democracy

adjustment of a man is a chief determiner not only of what *he thinks and does but also of what he will welcome or reject — of what will satisfy or annoy him.*"¹

This statement of the constitution of situation-response (S-R Bond) behavior seems to me "general" enough to satisfy any of Thorndike's traditional opponents.

Although our science of psychology has not yet matured to the point of standardizing the nomenclature of these general dispositions, there are important agreements among the students. Whereas Thorndike uses the terminology of "mental sets," "attitudes," "adjustments," "purposes," "total minds," Hartmann² uses the terms "attitudes," and Allport speaks constantly of "general dispositions" such as traits, attitudes, master sentiments, defining them in the very words Thorndike uses:

"A trait is a form of readiness for response; so too is an attitude, etc. . . . Are trait and attitude therefore equivalent concepts?" There are great similarities, but three real distinctions: (1) "an attitude has a well-defined object of reference" . . . (2) "attitudes may be specific as well as general; whereas a trait may be only general" . . . (3) "ordinarily attitudes are favorable or unfavorable; well-disposed or ill-disposed; they lead one to approach or withdraw, to affirm or negate. Traits as a rule have no such clear-cut direction." . . . *Both attitude and trait are indispensable concepts.* Between them they cover virtually every type of disposition with which the psychology of personality concerns itself.³

¹ Thorndike hastens to make clear, however, that there may be possible disagreements over "the constitution and development of these attitudes, sets, purposes, or selves."

"What is any given set or attitude or disposition of mind made out of? More broadly, what are a person's interests and purposes made out of? Still more broadly, what is his *total mind* or *self* or *entire system of tendencies* that may cooperate with the external situations?" Thorndike reiterates the position he has held for a generation: "The answer which I must in honesty give, though aware of the difficulty which I should have in defending it, is that *all these are in the last analysis made out of connections and readinesses, original or acquired*, including those multitudinous connections whereby satisfyingness and annoyingness are attached to certain events *in the mind.*" He illustrates with both specific and general reactions, and finds the solution in his twofold formula — connections and readinesses. But they are general, not specific.

— E. L. Thorndike: *Human Learning*, pages 119–122 (1929). [My italics.]

² *Educational Psychology*, pages 388–399.

³ *Personality*, pages 293–294.

Hartmann also uses "preparation to act" and says of its documentation:

"This 'readiness-to-respond' theory of attitudes is not a speculative matter, for it has been experimentally confirmed by precise measures of the time taken to react to words that awaken different attitudes."¹

A dozen other contemporaries, writing in the same vein, make the consensus so clear that I shall use the term **ATTITUDE** to denote the set, adjustment, or feeling of "readiness to respond" with which the person approaches every situation.

The Attitude Is the Total "Gesture" of the Organism

I interpret the consensus on attitudes to mean that they are accepted as serving the all-powerful function of *carrying, framing, and determining the meaning with which we respond*. *Fifty years of functional psychology affirms that we respond with meaning*. We do not "get" meaning by some mysterious *hocus-pocus*; *we create it*. *We make the gesture of the entire organism and thereby create the meaning*. The organism "knows" by getting appropriately set. We "strike" appropriate physical attitudes: witness the bodily recoil in fear and the tendency to flight . . . the outstretched arms of love and sympathy . . . the clenched fist of anger. These are overt and physical sets.

But our psychological attitudes are inextricably fused with them. If meaning is to be clear, our mental and emotional attitudes must correspond to the physical ones; all must be appropriate to one another in order to give clear meaning. Attitudes determine the "gesture" the organism will make. They amount to a gathering of a "field" of meaning — to use a current application of physical scientific terminology. Taken all together they are the "set" of the organism. Thus *the attitude, or set, is the frame or carrier of meaning*.

Now we connect this concept with that of the primal awareness of the organism. The instantaneous flash of insight that permits the organism to say "I know" consists first of *this tonal gathering together of the Self* — physically, mentally, emotionally; in John B. Watson's vocabulary it is a fusion of "manual, visceral, and verbal organizations." This is the total body-response through which the Self is expressed.

¹ See "General and Specific Attitudes," *Psychological Monographs* (1932), 42, No. 192.

The act of knowing is first, then, the total gesture of body, mind, and spirit — the gesture of the hands, face, torso, autonomic system, nervous system. Taken all together — integrated, fused, not added — they make the total gesture. A careful scrutiny of William James's *Principles* will, I think, show convincingly that this is what he meant by his constant reference to the role of the body and to *Self-feelings*. Moreover, the reader will find additional confirmation if he will turn forward at this point to my documentation of *the role of feelings as body-response in the esthetic act* in Chapter XIV.

In this gesture of the organism in creating meaning and in communicating, words play a minor part. The larynx struggles to find words appropriate to the amazingly complex process — fails perhaps more often than it succeeds. Little wonder that words often seem to get in the way of clear meaning! *The clearest grasp of meaning the organism ever achieves is in these flash-like fusions of unpremeditated expression of the whole being. This is what I mean by "gesture,"* and I give it a twofold connotation — the creation of meaning as well as the communication of it. I use the term "gesture" as another conceptual attempt to touch off a clear meaning. I use it in the sense of all the organic examples we have assembled from expressive craftsmen; in the sense that Isadora Duncan meant when she said: "All my life I've struggled to make one *authentic* gesture" . . . "one primary or true movement," one movement that would truly *state* her view of life. This is precisely the goal of every major expressive artist today. This is what the painter paints, the poet writes, the musician composes. Every scientist struggling to state his basic hypothesis, every inventor striving to "make the thing work," every teacher trying to find out how to make his student understand, is struggling with the same ordeal of making the *authentic* gesture.

An Example: The Role of Feelings of Insecurity

One brief illustration which involves the concepts of attitude and temperament. It seems to me that the generalized and deeply emotionalized "moods" of temperament play the same role as attitudes in determining the meaningful nature of our responses. Attitudes are in reality the momentary overt forms taken by the deep-seated temperamental dispositions. Absolutely foundational to all these dispositions are *feelings of security and insecurity*. These take various forms — insecurity of job, of money income, of home and other possessions,

of prestige among one's fellows, of personal relationships; they all have their roots in *some psychological insecurity*. It is in such a mood of emotional security or insecurity that most of our responses are made.

Now, *the most definitive thing the human being knows intuitively as he responds in any human situation is the degree of insecurity or danger that is potentially inherent in that situation for him*. Every person could probably arrange his acquaintances on a scale of such potential security — be it support or threat, trust or distrust, defense or attack. At one end, for example, would be an image of the man or woman with whom you would trust anything, any time, anywhere; at the other end, the image of the one with whom you would trust nothing, at any time or any place. In-between would flash up pictures of people to whom your taste and fortunes could be trusted in varying degrees of security.

Every human response is made in the organic grip of a definite attitude and temperamental mood of security or insecurity. I speak to my lifelong friend, who is to me the essence of integrity and who has never failed me, with the gesture of complete trust. So deep-seated is my mood of trust that every phase of my expression and response is molded in a naïve flash-like feeling of security. The attitudes and gestures that I strike are molded by and convey a feeling of *trust* and these color every phase of my response. These are tremendous forces molding my meanings.

But to the man of whom I am not sure, I speak very differently. Every phase of my response is framed by *the feeling of insecurity* that I naïvely register in my own response. I speak with alert caution, scrutinizing in his responses the overt signs of the play of meaning my "gesture" is producing in him. Inevitably *my meanings are different* from those I have when dealing with my friend, even though we may be communicating about the same topic, theme, idea, or problem. Thus, consciously or unconsciously, we appraise the relative security to us of the factors of each human situation.

/ / /

2. THE CONCEPT EXPLODES THE MEANING

Finally we turn to the true role of the concept. Altogether too long we have assumed that concepts are merely summarizers of meanings. How many of the books on psychology have passed on the

dictum: we have perceptions of this and that particular chair, and the concept "chair" enables us to generalize them into a "class of chairs"? The statement had enough truth in it to send us off on a generation of partially false and unclear commitment to a process of learning by induction — the assembling of many particulars and their summarization in the "concept."

The process of meaningful response is actually very different, and if psychologists had read Chauncey Wright and Charles Peirce we should have recognized it long ago. As they suggested eighty years ago — *the concept finds the meaning, it does not merely "sum it up."* It "explodes" the spark of potential meaning in miscellaneous residues from earlier responses. The concept serves the attitude — the "field" of force of potentially scattered but interrelated meanings — as the physical magnet does when introduced into a "field" of force potentially in scattered steel filings. It organizes the meanings around itself as a clear nucleus. It gives them order, puts them into relationship; hence my phrase for it — "cue" or "key" concept. It is the cue to the meanings; it is the key that unlocks the baffling confusion of scattered meanings. We *respond with* the cue meaning and the hidden relationships become "clear."

Meaning by Concept: An Example

One example I shall give, from an episode in a war year, 1944. The day's newspaper lies before me. My eye falls on the 20-point headline of the leading editorial: PREJUDICE AGAINST PRODUCTION! Startled, I read it, baffled by the meaning I read into the caption. Now who, in the war crisis, can be prejudiced against production, when above all else we need *all-out production* to win the war? Yet the headline conveys that meaning: "Prejudice Against" production. "Prejudice" means "aversion to" ... "an intolerant mood of opposition." But — really? Opposition to producing for war? I read on.

The editorial is analyzing the reported lessening of production of munitions and supplies by the war industries. Various "facts" are reported: statistics of production ... statistics of workers leaving war industries ... statistics of workers needed ... statistics of potential man power in the country — evidence that the total is big enough, if put to work, to produce all needed goods. Each of these "facts" can be accepted as approximately true, because it is reported by "government officials."

PSYCHOLOGY OF THE ACT — REINTERPRETED

Every line is packed with “concepts” and “generalizations.” Suddenly as I read from the twelfth line on, the blockage in meaning clears:

“In the country as a whole there is a reservoir of man power ... 30,000,000 Catholics, Jews, and Negroes ... which is not being fully tapped for war production.”

“Why?” “Because of ... racial or religious prejudice.”

Ah! A hierarchy of clarifying concepts stands between the two — “Prejudice Against” and “Production” — the prejudice is against certain minority groups of Americans. I read further:

“An official said publicly, ‘War industries call employment agencies and order: “Send me the kind of workers we usually use.”’”

In the next sentence “the word ‘kind’ usually means ‘white, Protestant’; ‘no Jews, no Negroes, no Catholics.’” The concept “prejudice against” flashes up again; the reader reacts with the feeling of “discrimination against Negroes” — much in the public prints and mind these days.

Step by step the clouded meaning of “Prejudice Against Production” clears; finally it becomes: “We are failing to produce enough war goods — not because workers are refusing to work in war industries — but because industries will not employ minority groups. The prejudice is against them.”

✓ ✓ ✓

The point I am making is that in any complex body of meanings crucial concepts (stereotypes) explode the meaning of the whole, while serving also as “class” meanings, summarizing, standing for a body of lesser meanings. But each in turn touches off our reaction to the total; each gives us a “cue.”

Another illustration comes to mind from the morning’s struggle with Professor Whitehead’s writings. Suddenly, out of the darkness of stubborn meaning comes a flash of illumination; this is a “philosophy of organism.” The phrase blasts open walled-up meanings. I at once associate Whitehead with the “generalists,” the organism-as-a-whole psychologists. I settle back and scrutinize his sentences with renewed vigor, but now with my mind *oriented for generalist meanings*. His term “prehension” and the complex hierarchy of concepts he has built

into place to document it instantly take meaning from my own concept of "intuition" as "primal awareness."

✓ ✓ ✓

These few examples could be multiplied n -fold to make the point clearer and more convincing, but I must leave that task to the reader. In conclusion I merely restate my thesis: *It is the concept, in the field of attitude and mood, that explodes the meaning.* In later chapters we shall see how this becomes a powerful educational instrument in the hands of the well-informed teacher.

ADDITIONAL CONCEPTS FOR THE NEW EDUCATION

Three of James's concepts were confirmed and new ones established in the following half century:

- The primary role of body-movement in the act of knowing; we now conclude that inner movements — tensions — comprise the body instrument by which we respond with the qualities of objects and the meanings of traits.
- We can now conclude that the act of knowing consists of two phases: (1) primal awareness of the organism-as-a-whole; (2) documentation via the separate senses, with specification and clarification through verbalization.
- The cue concept, embedded in appropriate attitude (which is the set of the field of meaning, or the total "gesture" of the organism) explodes the meaning.
- The reports of the senses make sense through two central steps:
 - First: the organism adopts a general attitude appropriate to the meaning, that is a readiness to respond, or a "field" of meaning.
 - Second: cue concepts, magnetizing the field of meaning, readiness, or attitude, explode the meaning. We respond with the verbal concept, which is our generalized or stereotyped response.

Part Three

THE SOCIAL FRONTIER: A NEW SOCIOLOGY FOR A NEW EDUCATION

In Part III we turn from the psychological foundations that determine the organization of the school to the sociological foundations that determine much of its program of work. In the opening statement of this book the declaration was made that enough is known of our culture to design the content of the new education; the data of Part III will document that statement. To the best of our ability we shall answer seven major questions:

What have we learned about —

- the nature of the industrial-democratic society, its economic and political factors, its structure in groups and classes? (Chapters VIII, IX, X, and XI)
- the nature and rate of social change? (Chapters IX, X, and XI)
- the dominant ontology (traits, beliefs, values) of our people and the characteristic patterns of American culture? (Chapters X and XI)
- the factors and forces bringing about race and other group unrest and conflict? (Chapters IX and XI)
- how the culture molds the individual and the individual modifies the culture? (Chapter XII)
- the stage on the curve of cultural change at which our society now stands? (Chapter X)
- the prediction and control of social change? (Chapters X and XI)

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

In 1890 little was known of the nature of our society, its economic and political forces, the factors that caused the periodic waves of prosperity and hard times in industrial countries. The succession of widening and deepening depressions was accepted as an inexorable law of what was later called the business cycle. The prevailing philosophy was a dual one of scarcity and *laissez faire*; the professors as well as the people generally believed that there was not enough to go around and that the division of what there was should be based on the consequences of competition in the open market. All classes defended a "natural right" to property and income which was secured by inheritance or by brains and hard work — defended it even above the social right to life and health. There were perhaps not a dozen men in America who could successfully deny these social-economic axioms of 1890 with logic and evidence.

Today the situation is very different. The philosophy of scarcity — natural rights-and-*laissez faire* — is giving way to a growing belief in the potential abundance of our social system. The right to work and to health — in fact, to life itself — is increasingly ranked ahead of the right to property. *Security via public conscience* is taking its place beside that of "the private." The function concept — "for the use of the people" — is beginning to grip the minds of the general population, and clear light has been turned on the factors involved in the domestic and world crisis. As a consequence, we know vastly more about industrial society and culture than we did in 1890.

In the five chapters of Part III, I shall attempt to bring into one synthesis the essence of this knowledge, organized around the seven questions which have just been given. First, in Chapter VIII we shall recall quickly the social changes that transformed the isolated provincial America of the 1890's into the United States of the 1940's — the No. 1 nation of the power world. This account of the world's swiftest and most domestic social transformation will provide the background of the work of two generations of students who built the science of culture as we are carrying it on today — and thereby created the social content of education.

American Society and Social Change: 1890's-1940's

OUR FATHERS' WORLD: THE 1890'S

"The Little," in the Mood of "Make It Bigger"

In 1890 our America was still a land of little things — little farms, little towns, little factories, little houses, little schools, little colleges. The characteristic town had some six to ten thousand people. There were several thousand chartered communities of less than ten thousand inhabitants, few cities of more than a million. While there were a few million-acre ranches, the typical farm was an eighth of a section. The characteristic merchandiser was the butcher, the grocer, the news-dealer, the apothecary, the tobacconist; with their wives and older children they tended their little stores. Some factories were large — witness the billion-dollar corporations in the making; Andrew Kloman's \$5800 forge of 1858 had just become Andrew Carnegie's Steel Company — capitalization of \$25,000,000 . . . eleven years later it would be United States Steel at a billion and a half. But in most the machines and their "power" were little. Both power and mechanical efficiency were "little"; they were in the muscle, wood, and leather stage.

On the population curve we stood likewise at a verge. The new nation of 4,000,000 souls in 1790 had multiplied to 63,000,000 by 1890. The human stock? Of the 63,000,000, 57,000,000 were Indo-Europeans — white, Christian, and Nordic, their roots in Northwest Europe, and of these 90 per cent were British — 80 per cent Protestant. About 6,000,000 were African and 1,000,000 were Orientals, American Indians, and Latin Americans.

Perhaps most important of all, our America in 1890 was one of the twenty-five new countries that had been thrown off from western

Europe after 1600. New, like Canada, South Africa, Australia, New Zealand, and the twenty Latin American "Republics." The land on the Atlantic seaboard had been lived on for only eight generations — in regions west of the Appalachians for no more than five. In cultural infancy, the environment was still virginal . . . virgin soil and forests, virgin coal and oil. It was still pretty crude, in the mighty throes of preëmption and construction, surging forward in a frenzy of tragic waste. The rights to property had just been staked out for the first time . . . the right to patent engines and machines . . . the right to mine metals and fuels and to sell at the seller's price . . . the right to move goods and people on the rivers and lakes, in and out of our great harbors, the right to build the first roads, bridges, canals, railroads, and telegraph systems.

The human hand was still the key to work, the handcraftsman the typical workman. Four out of five of the "breadwinners" were men; of the women, only one in ten "went out to work." The ten-hour day was common in many industries, and the nine-hour day was the mode. Fifty-eight hours a week in the textile industries, seventy-two to eighty-four in steel. Hard work, long hours, little leisure, and worry lest they get laid off.

Life, being in the little, was intimate, face-to-face. Few "business blocks," even in the larger cities, rose more than seven stories above the street. Dwellings were little, nine tenths were one- and two-family houses; a few rooms in a rambling two-story-and-attic. Set in lots 62 by 125 feet, middle-class houses ran eight lots to a block, separated by good-sized lawns, "yards," flower gardens, or apple trees. But the workers crowded into bare little one-story packing boxes of two, three, or four rooms.

Families were still fairly large, more than half of them having three or more children. The interest of both father and mother in what their children did in the school and the town was at high pitch. It was customary for parents and children to spend their evenings, week ends, and mealtimes together, and the dining table was the general headquarters for the family. There were few organizations to take the parents out of the home. The church played a large role, and all went there together. In the evenings, people usually stayed at home and talked, read the papers, or dropped in on their neighbors to chat.

In 1890 leisure was personal, intimate; the tempo of life quiet. While there was little creative life among the people as a whole, there

was much neighboring. There was talk everywhere, over the back fences and on the lawns and in the barber shops. Talks, speeches, in the churches and town hall, in the lodge rooms and the lyceums.

/ / /

Life being in "the little," face-to-face, men were absorbed in politics. In 1890, 86 per cent of the men voted for President. Elections were joyous, hilarious combats. Family conviction decided a man's vote: "I've always been a Republican (or a Democrat) and I vote the straight ticket." Republicans and Democrats "fit, bled, and died" over high versus low tariffs. "Free Silver" was the devastating issue of the day, and the Republican industrial North was determined to keep the Democratic farming South subdued. It was difficult to find either an important issue of American life or a fundamental philosophy of life or government among the political leaders of the two major parties. Both swore by the principle of every man for himself, although no one called it "*laissez faire*." There was no questioning of property rights; freedom was conceived as absence of restraint. The business cycle was a law of destiny: "The poor are always with us — and always will be."

But there were young, lusty "third parties" and they had Issues. The Populist convention asked in no uncertain terms for such things as: a graduated income tax ... the popular election of United States Senators ... the initiative and the referendum ... the Australian secret ballot ... government loans on real estate ... a postal savings bank ... an eight-hour law for government employees. An epidemic of strikes swept the country coincidental with the great Stock Market Panic.

In 1890 the struggle over government was still a struggle between large and small property owners. The industrial expansion had run its course and had put the rising manufacturers, businessmen, and bankers of the North into the political as well as the economic saddle. Democratic as well as Republican machines were financed by the "economic royalists" of those days. The little owners and the workers organized, the farmers of the Middle West joining with the labor leaders of the Eastern cities. Although fifty years had passed since the first formation of the Knights of Labor, out of 20,000,000 gainfully employed workers only a million were organized. Samuel Gompers and his A. F. of L. were few in number, but high in respectability, perhaps

because they were not an economic or political threat. The National Association of Manufacturers was just being organized.

✓ ✓ ✓

In 1890, as in every decade of American history before that time, the activities of the individual were still a private matter. But the principle of "every man for himself" worked two ways. Not only was every man free to compete with his neighbors, to drain the land and to exploit other people if he could; he was also responsible for himself. "Every man for himself" meant every man had to look out for himself. Keeping well, guarding against accidents and disease, getting a job and keeping it, bargaining for wages and hours and conditions of work, these too were private matters — up to the individual. If a man fell upon evil days, that was "his own lookout"; that was what insurance was for. The idea of public health had hardly taken hold; medical service was private. Most important of all, employment was regarded as a private matter. In 1893, as in other major nineteenth-century depressions, national, state, and local governments kept hands off and left relief to the consciences of those with surplus income. The conception of community responsibility was lacking. So it was that democracy, long after the 1890's, took care of millions of its unfortunates who faced starvation in the midst of plenty. Personal security, in 1890, depended upon the private conscience of the wealthy.

✓ ✓ ✓

This, much too brief perhaps for clarity, is the picture we get when we recall our fathers' world of 1890:

- Everything in "the little," but in the mood of "make it bigger."
- A new country, in cultural infancy, not yet having thrown off the grip of the mother culture, not yet having begun to make its own indigenous expressive statement.
- A face-to-face culture, isolated and isolationist, provincial, lacking a world view or world interest.
- A handcraft culture, just moving out of the first crude stage of industrialization ... standing at the verge of the Second Technological Revolution.
- The world's outstanding individualistic people ... a private-enterprise country ... apparently progressive, actually one of the most conservative peoples on the earth.

A NEW WORLD IN FIFTY YEARS

Then, in a half century, came the most startling transformation of modern history. The epoch-making discoveries in electromagnetism of Faraday, Oersted, and Hertz, with Maxwell's great theoretical achievement in writing the equations and laying bare the laws of the field of force, produced in the next fifty years undreamed-of acceleration in technological and social change. Looking back upon it, we can label it — the Second Technological Revolution. As a consequence a new world was brought into being.

*Most Things Were Moving
from the Little toward the Big*

Consider the changes in population. The 63,000,000 of 1890 doubled in the next half century to 132,000,000. The character of the stock changed also. Up to 1890 the stream of immigrants that flowed into our ports came chiefly from northwest Europe, especially from Great Britain, Germany, and Scandinavia. But after 1890 the expanding industries called for laborers and a New Immigration took the place of the old one. In fifteen years, from 1899 to 1914, 3,000,000 Italians, 6,000,000 Slavs, and 1,000,000 Jews entered the United States. Eighty per cent of them concentrated in the Northeast industrial zone, creating islands of alien culture and difficult psychological problems. Cities grew quickly, and the urban concentration in the East was augmented by a great drift from the farms and villages. In 1880 only a quarter of the American people lived in communities larger than 2500; by 1940 almost three fifths had moved in. The 1290 "Middletowns" of 1890 had become 3000. There were more than 300 small cities, 100 large ones. Eight had a population of over a million. So concentrated had the population become that in the 1940's nearly half the people live huddled together in ninety-six "metropolitan regions."

/ / /

Families crowded together. Realtors multiplied. Building lots became smaller — fourteen instead of eight to a block — lawns and yards dwindled. One- and two-family houses became the eight-family blocks and tenements of the lower-middle classes; tall apartments housed the well-to-do. As the people crowded together, rents increased, apartments became smaller. As the cities grew, centers of

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

work moved away from the sections in which the workers lived. Families moved from neighborhood to neighborhood, from town to town, even from region to region. Factories and stores invaded residential districts. Old families moved out, new ones moved in, the neighborhood spirit broke down. Forty years after 1890: "Mother couldn't understand when she came to live with us, why people didn't run in to visit and 'neighbor' as they used to do."

/ / /

The traditional activities of men and women shifted. Housework changed and more wives helped to earn the living. Some were homemakers whose work had been taken out of the home or who did not feel that housework was important enough to engage a large amount of their time. Houses became smaller, easier to take care of. Clothing became lighter; more ready-made clothing was worn. Labor-saving devices increased. Meals were lighter and women used more canned goods, more frozen foods, more bakers' products. All this compensated for the lack of domestic help.

But menacing changes appeared in the family, formerly the social, moral, and civic center of the nation. Every decade it dwindled in size. In 1890 the average was 4.9 persons ... in 1900, 4.7 ... 1910, 4.5 ... 1920, 4.3 ... 1930, 3.9 ... 1940, 3.8. Several factors contributed to this: the rapid rise of the standard of living, the uncertainty of regular work, the swift increase in knowledge of sex and birth control, the growing sense of responsibility for the better care and development of children, the education of women and their entrance into business and the professions.

The technological and social changes made it increasingly difficult to keep the family together. 26,000,000 automobiles took the Americans away from their homes. Instead of conversing with next-door neighbors, 50,000,000 people a week rushed off to darkened movie houses to watch the latest thriller. The telephone took the place of the back fence and the front porch. In 1890 there were only seventy-one subscribers in Middletown; today two thirds of the people have telephones.

In the 1890's it was a date at home for the young people; fifty years later the date was in an automobile speeding to a near-by town, drinking at a bar or dancing to a jazz band or a juke box. Juvenile organizations and events drew the children away from the home — athletics, dramatics, the Y, Boy Scouts, Girl Reserves, the movies, auto

riding, club meetings, dances, church societies. All these things broke into the family life and created friction with the parents. Home became a dormitory and a lunch counter. Fathers became too busy and mothers too tired to work and play with the children as they used to do.

Most threatening of all was the consequent sharp acceleration in broken homes. The divorce rate advanced rapidly: in 1890, less than 60 divorces per 1000 marriages . . . in 1929, more than 160. The role of the family as the social and moral center for the nation was seriously endangered. In our greater metropolitan centers this trend steadily undermined the morale of young people and seriously handicapped the education of some of the best progressive schools.



As the physical changes came, there was an accelerated desire on the part of the people for bigger and better things. The tempo and intensity of life increased. Swift transportation and communication accelerated the rhythm of the people. 1890's shocking speeds of fifteen to twenty miles an hour gave way to legalized forty-five miles on cement highways, and an adventurous sixty when the law was not in sight. The slogan of efficiency resounded through the land. Houses and trains — and automobiles too — were heated in winter, refrigerated in summer. The pulse beat demanded service, swifter communication, condensed time schedules — “instant” coffee . . . three-minute cereal. Work became faster and noisier. The atmosphere was marked by high-speed nervous tension; a consuming interest in making and breaking records — non-stop transcontinental flights in seven hours . . . eleven miles into the stratosphere. The theater, the movies, the press, the radio, all revealed the quickening.

Paralleling this hectic acceleration was the advancing demand for immediate profits, accentuating the age-old desire to get rich quick. The people ignored the Sustained-Yield Principle, reaping and harvesting without a thought of putting back into the soil the nourishment that they took out — the forests were wasted, half the coal lay locked in the earth, oil was pumped too fast, industries stalled as the business cycle brought deeper and darker depressions.



Thus, life moved from the slow to the swift, from the little toward the big. A thousand, even five thousand, lived in a single city block,

unacquainted with one another and uninterested in one another. Life became impersonal . . . anonymous . . . irresponsible. And the menace to the abundant life grew.

By the early '20's the students of society were insisting that this change in American culture was truly deep-seated. Could schooling, even in the eternal verities, counteract these nation-wide phenomena? During these very fifty years we subjected 20,000,000 youths between sixteen and twenty-four to the "enduring values of a liberal education." Apparently that education was powerless to divert or to counteract the trends.

Why?

Studying the problem, the new sociologists said: "We must dig deeper down to the roots of our social transformation, if we are to find the reason."

PROBLEMS OF A CHANGING POPULATION

In no other respect did industrial society record its social transformation more graphically than in the changes in population. These expressed themselves in the facts of the total number, the rate of growth, the "racial" and "national" composition, the growth by natural methods and in relation to immigration and emigration, the changing

SELECTED SOURCES ON POPULATION

Of the scores of authoritative studies that have been made by government bodies and competent individual students of population problems, a dozen form the core of the library. The historic original study is of course T. R. Malthus's famous *Essays on the Principle of Population* (1809). The better contemporary ones are:

W. S. Thompson: *Population Problems*

N.R.P.B.: *Problems of a Changing Population* (1938)

H. P. Fairchild: *People*

R. Pearl: *The Natural History of Population* (1939)

J. D. Black: *Food Enough*

Karl Sax, in Linton: *The Science of Man in the World Crisis*. "Population Problems." (1945)

Lorimer, Winston, and Kiser: *Foundations of American Population Policy*

A. M. Carr-Saunders: *World Population* (1936). See his earlier *Population Problems* (1922)

S. J. Holmes: *Human Genetics and Its Social Import* (1936)

J. B. S. Haldane: *Heredity and Politics*

E. M. East: *Mankind at the Cross Roads*

regional distribution, and the drift from farm and village to town and city. Throughout the past half-century the statistical students in the Bureau of the Census and their contemporaries among the sociologists of the universities have constantly improved their methods of studying the population changes. Steadily students of production, employment, race, the family, urbanization, housing, leisure time, have come to see that practically every phase of the culture is here functionally related to population changes. As their inquiries become more intense, a voluminous library of data and interpretation piles up.

*The Americans Becoming
a Static and Mature Population*

For a century and a quarter, from the first census of 1790 to World War I, the rate of growth of the population of the United States was positively and sharply accelerated in every decade; in some stages it doubled every twenty years. It was the most dynamic social state of all history. *But in the second decade of our century its rate of growth changed from positive to negative, and it quickly tended to become a static population.* This is a fact of great significance for the future of our nation. The studies of W. S. Thompson, Bassett Jones,¹ and others showed that such a "point of inflection" appeared on the population curve about the time of the war. Since that time the rate of growth has definitely continued² to slow down and at the present time is approaching zero. Specialists, notably Thompson and Whelpton, have estimated that our population "will continue to grow for fifty years *but at a constantly decreasing rate.*" Making certain maximum assumptions as to fertility and immigration and emigration, they estimate that the population will stand in 1980 at a peak of 158,000,000. This estimate is fairly conservative, but no students put the maximum population by 1980 at more than 170,000,000. Karl Sax's estimate agrees approximately: "If recent trends in growth continue, the United States will have a maximum population of perhaps 150 to 160 million by 1975, after which the population will remain about stable or begin to decrease."

The declining trend of total population is of great importance, but *the change in the age distribution of the people is even more arresting.* I quote the National Resources Committee's statement:

¹ *Debt and Production* (1933).

² With the exception of a current war-acceleration in the past three years.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

"In 1900 there were 90 persons under 20 years of age for each 100 persons aged 20 to 60 years, whereas the corresponding ratio in 1935 was only 68 and by 1972 will be about 48. Conversely, where there were 13 persons over 60 years of age per 100 persons aged 20 to 60 years in 1900, the corresponding ratio in 1935 was 17 and in 1975 will be about 34."

Thus two population facts of great importance have emerged: *First*, the Americans as a people are getting markedly "older." They live longer; the typical expectancy in 1905 was forty-nine; today it is approximately sixty-five and is rising rapidly. We shall soon have a very large "old-age" group.

Second, the culture increasingly puts a high value on youth. For example, the "old-age dead line" in industry in 1900 was sixty; today the slogan is a "middle-age dead line" at forty.

On the problem raised by the concurrent emergence of the related changes in industrial technology and population, the National Resources Committee speaks plainly:

"Problems relating to the welfare of persons past middle life are becoming increasingly urgent. In addition to provisions for insurance and other old-age benefits, attention should be given to opportunities for and conditions of employment of older workers not ready for retirement. There should be consideration of further possibilities for adult education and other measures for enhancing the usefulness and increasing the joy of persons in the late middle and last years of life."

Sharp Regional Changes in Population

Moreover, regional problems are arising. While immigration is now a minor factor, growth by natural increase is a major one, especially in some regions. The National Resources Committee report generalizes:

"In 1930, about 23 per cent of the total native white population and 25 per cent of the total native Negro population were living outside the States in which they were born. There has been a constant interchange of population between different areas, but two main movements have predominated: (1) the movement to new lands, mines, and jobs in the West — across the Alleghenies into the Ohio and Mississippi valleys, the prairies, the Pacific coast, and finally to dry-farming areas in the Great Plains; (2) the movement to industrial and commercial op-

portunities in various parts of the country but most notably in the Middle Atlantic, southern New England, Great Lakes, and Pacific areas."

The Movement from Farms to Cities

In the past two generations the dominant population trend has been from farm to city. Due to the technological changes in our society, the occupational life of our people has drastically altered. The Committee on Population Problems said about this marked shift:

"Between 1880 and 1930 the proportion of gainful workers employed in the extractive industries (agriculture, mining, forestry, and fishing) declined from over 45 to under 25 per cent, the proportion in manufacturing and mechanical industries increased from 20 to 29 per cent, and that in the distributive and service trades from 34 to 47 per cent. Movement out of agricultural areas has also been forced, in part, by the high reproductive rates that have been and still are characteristic of rural communities. *Contrary to a popular impression; this movement has continued even through the depression. There was a net migration of more than half a million people from farms to cities and villages between 1930 and 1935.*"

Are the American People Declining in "Quality"?

Since Boas' illuminating studies forty years ago, this question has been investigated intensively. Some facts concerning it are now established; for example, that persons of higher incomes and of greater education and social understanding have fewer children.

Studies made in all industrial countries show that wherever the practice of birth control is widespread, the poorer economic group reproduce much faster than do those of the more well-to-do levels. In the United States, white families with annual incomes of more than \$3000 have a reproductive index of 0.46; that is, they have less than half enough children to maintain a stationary population. The reproductive index of those with incomes of \$1500 to \$2000 is 0.70; for those with earned incomes of less than \$1000 it is 0.93. Those on relief only exceeded replacement levels with a reproductive index of 1.43. As Sax says: "the third of our population least able economically to feed, clothe, and educate children, produces two thirds of the next generation."

Dr. Raymond Pearl reported the results of a survey of thirty thousand women in city hospitals; while there was no difference in actual

fertility in varying economic social classes, there were vast differences in the practice of contraception; 83 per cent of well-to-do white women with more than one child practiced it, 62 per cent of those in inadequate economic circumstances, 50 per cent of those in lower groups. Birth rates rose proportionately. "Less than half of those with an elementary education used birth-control methods, while 76 per cent of the college graduates practiced contraception."

Dr. Pearl said of the present status of contraceptive knowledge: "What these women, taken as a group, know about contraception is mainly what has been passed on to them by mothers, husbands, friends, or drugstore attendants, who in turn derived it from precisely the same kind of sources, back to the debarkation at Ararat."

But, is the quality of the population of industrial countries declining? Sax says: "There is no truth in the statement by an 'eminent psychologist,' that 'morosity has a biological trend to eliminate itself,' either in a primitive society or in a modern civilization."

J. B. S. Haldane, world-renowned biologist, admits that the IQ may be expected to decline at the rate of 1 to 2 per cent per generation if the social classes continue to differ in the control of birth. Sax sums up: "We are not yet in a position, either scientifically or socially, to do very much to improve the genetic constitution of the human race."¹

¹ *The Consensus, Since Boas,
Concerning Problems of Race*

In the three decades after the publication of Boas' documented studies of the races of mankind, the scaremongers of racial conflict continued to create hysteria in all Nordic countries, and the myth of Nordic supremacy gathered millions of adherents. (See such examples as Madison Grant's *Passing of the Great Race* and Lothrop Stoddard's *Rising Tide of Color*; see also Aurel Kolnai's *War Against the West*.) Yet the generation of studies on race differences tended to confirm Boas in nearly all respects. In recent years Benedict and other anthropologists have given great publicity to the assembled scientific facts. The consensus is clear; I quote a representative sample from Benedict and Weltfish, and Krogmen: (See Benedict and Weltfish: *The Races of Mankind*, Public Affairs Pamphlet, No. 85; see also Krogmen, in Linton, pages 39-62.)

- "All the peoples of the earth are a single family and have a common origin . . ." "The fact of the unity of the human race is proved in its anatomy." (*Op. cit.*, Benedict and Weltfish, pages 3-5.)
- "All races of men can either plow or fight, and all the racial differences among them are in non-essentials, such as texture of head hair, amount of body hair, shape of the nose or head, or color of the eyes and the skin."
- "All human blood is the same" (irrespective of "race" or nationality); "there are four types of blood, called O, A, B, and A.B. . . . all races of

CULTURAL LAG IN ACTION:

TECHNOLOGY OUTDISTANCED POLITICAL DESIGN

Many powerful factors turned our fathers' quiet world of the 1890's into the dynamic America of the 1940's, but one provided the chief impetus for all the others. This was *the astonishing speed and efficiency with which the engineers perfected machine technology, and the business and financial men of six industrial countries built the modern corporation and organized a world-wide system of efficient enterprise.* Although most of the primary factors necessary for industrial capitalism had been known and practiced for several centuries, three key ideas were put to efficient work after 1800 A.D.; indeed, the spectacular phase of the development had come after 1860:

- power-driven machine technology
- the modern vertical and integrated corporation
- the mass application of the idea of freedom as "absence of restraint"

The physical record is clear. Consider inventions: in 1860 the United States Patent Office granted only 5000 patents. After 1900, more than 25,000 patents were issued per year. Hundreds of machines and attachments were devised — power-driven lifting machines, crushing, rolling, shearing, stamping, loading, and unloading machines. Machines to start and stop machines, and machines to repair machines. Measuring instruments were improved. These new inventions sharply changed ways of manufacturing. The central factory, driven by the distant central power station and owned by the central corporation, integrated all independent industries and processes under one efficient central control. Economy and efficiency in production quickly advanced. Of the many factors that contributed to this unabated ac-

man have all these blood types. The color of their skin does not tell at all which blood type they have." (*Ibid.*, pages 5, 8.)

- No single satisfactory classification of "races" has ever been achieved, say Benedict, Montague, Krogmen, *et al.*, but all are agreed that mankind can be divided into *physically discernible* groups. (*Ibid.*, page 11.)
- Customs are "learned behavior," not matters of race.
- A generation of studies asserts the approximate equality of intelligence in the races — differences that may be found are due to "differences in income, education, cultural advantages, and other opportunities." (*Ibid.*, page 18.)
- The differences within a natural or regional group are greater than those between such groups.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

celeration in productivity, none was more important than the skill and vigor with which the driving masters of capital built the great corporate industries. Concentration and integration of control became the chief characteristic of the social system; *in a single generation ten billion-dollar corporations emerged. In 1945 there were thirty-four.* By 1913 the Pujo Committee of Congress could report that a vast proportion of the nation's capital and credit was controlled by a few leading banks in New York City. In 1932 Berle and Means reported that our productive national life was controlled by two hundred corporations.

/ / /

Then came the First World War. Premonitions of a new social order had been felt for two decades, but it was the coming of the war that gave the great push into the new epoch. Under the enormous demand for goods during the four war years, the new systems of heavy industry and mechanized agriculture more than tripled their production and exporting of goods and materials; total export trade increased from \$2,300,000,000 to \$6,000,000,000; the manufacture of goods from \$24,000,000,000 to \$62,000,000,000; the tonnage of American-owned ships engaged in foreign trade grew from 1,500,000 (1914) to 11,000,000 tons (1918). The value of farm products doubled, and the export of agricultural products quadrupled in five years.

Overnight the United States changed from a provincial, isolated debtor country to the leading manufacturer and creditor nation of the world. Our whole economic life was geared to a higher speed. Invention itself became subjected to mass production. Corporations employed thousands of inventors to devise new machines and attachments, and efficiency engineers arranged factory work to save the labor of men. A vast hierarchy of workers, from executives and managers down through level after level of superintendents, designers, and foremen, to skilled workers, technicians, office employees, and salesmen — all learned how to work as an efficient team.

/ / /

By the 1920's *the American economic system was becoming organized for efficient production.* The volume of goods produced increased enormously; the curves of production rose, almost uninterrupted, from 1870 to the beginning of the Great Depression. To recall a few breath-taking examples of our economic expansion:

AMERICAN SOCIETY AND SOCIAL CHANGE

- Pig iron: 1870, 4,000,000 tons ... 1929, 41,000,000
- Manufactured products: 1860, \$1,885,000,000 ... 1929, \$68,000,000,000
- Number of wage earners: 1870, 12,500,000 ... 1930, 48,000,000
- Miles of railroad: 1860, 30,000 ... 1930, 250,000
- Automobiles: 1900, 8000 ... 1930, 26,000,000
- Value of farm implements: 1860, \$250,000,000 ... 1920, \$3,500,000,000
- Farm crops: 1870, \$2,000,000,000 ... 1920, \$21,500,000,000

Here was huge productive capacity ... *a hint of coming technical efficiency*. Apprehensively, the Old World began to watch the awakening of the young industrial giant to the West.

↑ ↑ ↑

But *the increase in the productive capacity of the individual worker was even more astounding, and it altered his whole life*. Out of years of costly patient research, experimental machine making, and factory organization, the nearly automatic factory came into existence in the heavy industries. Through the integration of power machines, men, and processes in continuous-straight-line design, the capacity of an individual to accomplish work increased almost incredibly. Wizards of electricity devised energy converters and methods of long-distance transmission of power. By 1929 there were single generators that produced 9,000,000 times as much useful work as a muscle-tool worker, who could produce only 1/10th of one horsepower in an 8-hour day. In 1890, the industry was only 5 per cent electrified, total horsepower in electrical motors 492,000 ... by 1927, it was 78 per cent electrified — total horsepower 30,000,000.

Increasing output per worker, as shown by decreasing man-hours per unit of production, doubled, then tripled, in fifty years. The Hoover Committee on Recent Economic Changes estimated that although the national productivity per worker increased in the twenty years from 1899 to 1919 only 4.7 per cent, in the eight years from 1919 to 1927 it rose 53.5 per cent. But that is an average for all; there were industries in which the capacity of the individual to do work had increased since 1890 ten ... twenty ... thirty fold.

By the 1930's the more thoughtful engineers were convinced that we were *well advanced into a new stage of industrialism*. The students of democracy began to say that the next great task of education was to make its characteristics clear to the people. There were some

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

educators among the progressives who had been trying to do that, since the First World War had awakened them to the real nature of our times.

/ / /

In the summer of 1929, America appeared to be standing on the threshold of an era marked by a high standard of living for all. In that summer, so certain were President Hoover and Secretary Mellon of these developments, that they assured the American people "prosperity would be permanent." "We shall soon," Mr. Hoover said, "with the help of God, be in sight of the day when poverty will be banished from this nation." American workers were coming to believe that they would never be without jobs and high wages. To them our America was indeed the best of all possible worlds.

/ / /

Then, October 1929, impending collapse! Between October 24 and 29, shocking things happened in the stock market. Prices of stocks and bonds tumbled precipitously. Panic seized the people who had been speculating in stocks; some said two million Americans had been drawn into the mad orgy of trying to get something for nothing. Most of these speculators lost all that they had made in the 1920's. Crazy men, made poor overnight, killed themselves. Fear and bewilderment spread over the country. The people began to save what money they had, withdrawing it from banks, and buying only necessary goods. The business of stores and factories dwindled and orders to wholesalers and manufacturers declined. One by one the factories closed; a general and rapid fall in the production of goods resulted. Such unemployment prevailed as America had never known before. The normal figure of 2,000,000 for the prosperity year of 1929 became 5,000,000 in 1930 ... 12,000,000 in 1932 ... and was variously estimated at 13,000,000 to 17,000,000 when President Roosevelt went into office.

MASS UNEMPLOYMENT AND THE NEW DEAL FAILURE TO DISPERSE IT

Thus by the winter of 1932-1933 the country was at the very depths of what the historians soon began to call "The Great Depression." The people were beginning to mutter "poverty in the midst of plenty!"

We need not recall at length the efforts of the Roosevelt government to build up the morale of the people, to give millions of them a dole, to bolster up banks and utilities, to create schemes of temporary made-work, and finally a huge Federal program of public works. Whether President Roosevelt really understood that industrial capitalism had run into an impasse which constituted a novel problem in human history only later historians will be able to show. But certainly he acted as if he did and history will honor him for seeing that government had to take far more vigorous leadership than it had ever done before. The competitive conditions of private enterprise had failed to keep the system going; now let government try its hand. And try it did, creating a score of governmental agencies—FERA ... NRA ... AAA ... WPA ... FHA ... FEC ... HOLC ... RFC ... etc. ... etc. These are now in the record of contemporary history and need not be detailed here. Many of them were quickly shown to be unwise, and popular opinion as well as the Supreme Court killed them. Some of them, such as the TVA, the Soil Conservation Service, the NYA, and the CCC, the building of the great land-reclamation projects, were magnificent permanent contributions to the reconstruction of our country and today are functioning better than ever. Others were important contributions to our civilization; for example, the National Resources Planning Board, the National Youth Administration, and the various Federal Projects in the arts. But these were killed by a determined anti-Roosevelt bloc in Congress.

For the first time in fourteen great depressions, the Federal government had made a bold and serious attempt to “prime the pump” of a potentially efficient and productive but actually inefficient and stalling economic system. This continued, with a letdown only in 1937 and a consequent so-called major “recession,” until 1939, when World War II began in Europe.

But the consequences were baffling. The volume of production did revive; it was, indeed, practically as large in the spring of 1937 as in the summer of 1929. The number of people employed, however, did not rise in proportion. Even in the autumn of 1939 there were still 10,000,000 employable workers out of work in America.

Apparently the economic pump simply would not prime! “Why?” asked the technical students of the social system: “Can it be there are new factors in the situation that we have never confronted before?” “Why?” asked intelligent people generally. “We have had depressions before, and without government pump-priming we eventually recov-

ered. What is there in the present situation that is so drastically different?"

As we shall see, even by the early 1930's a few profound students on the social frontier had a pretty clear and sound answer to these questions.

In the Summer of 1939

Succinctly summarized, this was the situation in the summer of 1939: with the production-system far more efficient than in 1929, there stood out the basic, baffling, inescapable fact that there were still 10,000,000 people out of work. We seemed no nearer to solving the problem of employment than we were when President Hoover first confronted it — and failed, and when President Roosevelt took up the task for six years more — and failed.

TOTAL WAR AND THE TIME OF THE GREATEST LEARNING

Then, in September, 1939, Hitler and the Nazi armies debauched Poland. France and Great Britain declared war. World War II, long predicted, was on; appeasement was at an end. The Nazis took Norway and Denmark. Armies confronted each other around the famous Maginot Line. In the spring of 1940 came the dreadful realization of the consequences of two decades of fearsome appeasing inertia! Panzer-mobile Germany by-passed the Maginot Line, in swift succession devoured little Luxembourg, the Netherlands, and Belgium, drove the British to their Dunkirk evacuation. And *unemployment in the United States began to decrease — for the first time in ten years.*

In June, while a stunned world watched, France fell. The British, waiting for Hitler to cross the Channel, muttered, "We'll evacuate to Canada!" Fear swept across Africa . . . across the Atlantic to Brazil . . . up through Latin America to the Rio Grande . . . apprehension increased in the United States. 50,000,000 startled Americans listened to their radios, imagining a Nazi conquest of all Europe. The President, foreseeing some of it, had urged armed preparedness. Now the people — all but our vicious Axis-Press — knew he had been right.

The whole government sprang into action and moved the country with it. Quickly the production of armaments speeded. More millions of unemployed went back to work. A year passed; Britain, blitz-bombed, waited for the blow. But Hitler stood still in France. Ob-

essed with the richness of the Ukraine and Russian oil, he missed his chance forever. *Drach nach Osten* dashed his Empire of the World. In June, 1941, the plan unfolded. In six months the Nazis stood before Stalingrad and the oil fields. But they did not take them — or Moscow. In 1941 Mother Russia wrote one of the epics of world history.

December 7, 1941 . . . Pearl Harbor. In a burst of national anger most of America awoke and went to war. The temporizing time was over. The isolationist McCormick-Patterson-Hearst press still hated but was momentarily self-silenced because being too vocal would mean being silenced by government. The potential power in America became actual. The bewildered giant rose in its might and threw off its lethargy. From being soft it became tough . . . from being unregenerate it became energized . . . from the mood of license it took on discipline. Giving up part of its treasured Bill of Rights — *but only for the duration* — it dropped peacetime work and girded itself for war.

American youth, trained and toughened in six months, conquered the mud of tropic jungles, sent the Jap Zeros crashing into the Pacific, and cleared the European skies of the Nazi Messerschmitts.

Businessmen and labor, burying the hatchet just below the surface, pulled together well enough to design and build ships, planes, tanks, guns, and to transport seven million men overseas. It all gave the lie to the shouts of the President's puny antagonists that it "couldn't be done." Figures are not yet available to give us more than a glimpse of the drama of Gargantuan war production after January, 1943; it probably is so astronomical as to be beyond our statistical understanding.

I called it "total war" — that was only a cliché of the current political vocabulary: what proportion of our economy and social system we organized in 1942–1944 we shall perhaps never know. Certainly we did not put all of it to work. Perhaps we never shall; not unless the danger to our lives and to our beloved "American way" were as great as was the Nazi menace to Russia in 1942 and 1943, would we approximate "total" organization for war. I doubt if more than 60 to 70 per cent of our potential effort was harnessed and put to work. If I am right, our total effort, measured in 1939 dollars, could produce now a \$250,000,000,000 national income, instead of the \$170,000,000,000 which the statisticians assured us we achieved in 1945.

/ / /

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Scanned quickly, the total transformation of our country seems tremendous; for economy and clarity I resort to parallel tabulation of the contrasting conditions of the 1890's and the 1940's.

A FEW SHARP CONTRASTS IN THE WORLD'S MOST DRAMATIC SOCIAL TRANSFORMATION

AMERICAN SOCIETY IN THE 1890'S

1. Covering 1/16 of the earth's land area.
2. The people — 63,000,000 ... multiplying swiftly ... predominantly Northwest European and British ... with corresponding language and basic religious attitudes ... widespread feeling of "Americanism."
3. Lusty, young, second-rank industrializing, but debtor country ... marked by startling growth in economic development ... promise of first-rank status in a generation ... economic standard of living as high in most respects as those of Britain, France, and Germany.
4. Labor practically unorganized ... not regarded as a threat by finance, industry, and business ... to keep out of politics, an avowed policy.

AMERICAN SOCIETY IN MID-TWENTIETH CENTURY

1. Land area relatively unchanged ... no sign of popular desire to increase it.
2. 140,000,000 people ... second most populous industrial nation ... small birth rate and immigration, approaching static population at perhaps 160-170 million ... enormous mixture of Southern and Eastern Europeans, settled especially in cities ... increasing racial mobility and dangerous friction ... concept of "equality" not yet implemented ... remarkable degree of "American" assimilation, greatly nourished by World War II.
3. No. 1 economic and military nation ... creditor to the world ... possessor of predominance of earth's developed natural resources and of a producing technology ... for the first time in human history, a country capable of producing an abundant life for all its people.
4. 13,000,000 of 57,000,000 workers tightly organized ... participating definitely in the struggle for power ... constituting potentially a powerful political force of the nation.

AMERICAN SOCIETY AND SOCIAL CHANGE

5. Popular interest high in minor superficial political problems, but not in fundamental issues — except in the case of small “third” parties . . . “less government the better” still the characteristic view . . . popular organization for the education of the people *re* social issues.
6. Mood of The Little throughout the culture . . . decentralization characteristic of the culture . . . growing spirit of “make it bigger.”
7. Much of social life, including communication, face - to - face problems, including those of economic and political life, personally felt . . . social interest and sense of responsibility at fairly high level.
8. General public educational structure built . . . rigorous system of education in private schools and colleges for upper middle classes . . . state institutions beginning to grow . . . six or seven years of schooling characteristic of the population . . . curriculum and teaching entirely imitative of European “liberal arts” . . . completely aloof from social-economic-political culture, avoiding all controversial issues . . . level of creative production and appreciation very low — essentially imitation of classic Britain and Europe.
5. Interest in politics, which had declined, partly revived after 1929 because of the grave crisis . . . swiftly growing organizations for the public study of economic and political issues via business, labor, and government . . . corresponding tendencies to political action . . . new agencies of communication involved in the struggle for power.
6. Mood of Bigness . . . concentration of population in cities and regions and of industrial wealth and power in a few hands . . . grave danger of increasing monopoly.
7. For half the people, face-to-face characteristic of social life disappearing . . . urban life increasingly anonymous and *un*-responsible and modern agencies of transport and communication tending to break down personal interest and responsibility in small communities . . . dangerous trends in lack of social discipline and responsibility.
8. Universal “secondary” education practically established . . . colleges and university attendance and democratization growing . . . tentative and temporizing attitude of most schools and colleges toward controversial social issues . . . definite trend toward stimulating original and indigenous creative life . . . trend slightly “progressive” rather than reactionary or status quo . . . but little sign of determination to use schools vigorously to educate the people for post-war “reconstruction.”

*The Result: The United States of America:
No. 1 Nation of the Power-World*

One fact is clear to all of us: the country for which we must now build a fitting educational system is the most powerful national producer of industrial goods and services in the world. We are now No. 1 economic and military power. Whether or not Russia will take our place in the coming decades, the present generation of American youth will live out their lives, not only holding in their grasp the possibility of living an abundant economic life, but also bedeviled by the most staggering and complex problems and responsibilities of world leadership that any people ever faced.

✓ ✓ ✓

While these social changes were taking place and while these resulting problems were being created, two generations of competent students on the social frontier were analyzing the issues and piling up the data which we must use today. To the first of these students we turn in Chapter IX.

CHAPTER IX

The Study of Industrial Culture and Society: Veblen and After

A FUNCTIONAL STUDY OF INDUSTRIAL CIVILIZATION

The Second Generation of Students

Between 1852 and 1874 several Americans were born who, after 1890, were to build a new study of modern culture and of American industrial society. In the sense that Comte, Spencer, and Ward led the first generation of students, these nine led the second. Grouped merely in terms of the institutions in which they did their major work, they were: ¹

At the University of Chicago:

Thorstein Veblen (1857-1929) ... At Chicago between 1894 and 1906

William Isaac Thomas (1863 —) ... At Chicago between 1895 and 1918

At Princeton and Hopkins:

James Mark Baldwin (1861-1934) ... At Princeton from 1893 to 1903 ... At Hopkins from 1903 to 1909

At Columbia:

James Harvey Robinson (1863-1936) ... At Columbia from 1892 to 1919

Franz Boas (1858-1942) ... At Columbia from 1898 to 1942

Charles A. Beard (1874 —) ... At Columbia from 1907 to 1917

¹ In the life histories of these men I have listed their principal publications and given other illuminating facts about them.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

At Wisconsin and Harvard:

Frederick J. Turner (1861–1932) ... At Wisconsin from 1885 to 1910; at Harvard from 1910 to 1924

At Pennsylvania:

Simon N. Patten (1852–1922) ... At Pennsylvania from 1888 to 1917

At Michigan:

Charles Horton Cooley (1864–1929) ... At Michigan from 1892 to 1929¹

I have found it impossible to attach conventional academic labels to these men. In a sense all were social psychologists, even though they called themselves, and were catalogued in the academic world, philosophers, economists, political scientists, sociologists, or anthropologists. Veblen, commonly regarded as an economist, was our first social psychologist. Baldwin was psychologist, sociologist, and philosopher, Thomas sociologist and psychologist, Patten both economist and sociologist, Turner historian, geographer, and economist. Beard, commonly called a historian, has always regarded himself as a student of government, but he was also an authority on the history of industrial civilization. Robinson, styled historian, was a student of the psychology of society. All were broad students of the culture of industrialism. All used the historical approach. In a sense all were sociologists and all were historians, for they all at one time or another analyzed the rise of modern society with the methods of those disciplines. All were influenced by the action-psychology of Peirce, James, and Dewey.

Their Common Psychological Interest

Although they produced logical and research studies in each of the separate disciplines, they were bound together in a common psychological fellowship by their direct interest in human nature and be-

¹ My documentation of Part III has stretched over thirty years of study, from the four years in Edward Cary Hayes's sociology seminar while studying sociology as my first minor at the University of Illinois (1911–1915), to the writing of the present volume since 1942. Perhaps the most effective and economical record of the principal sources upon which I have depended is made up of the separate titles given at various places in my text. These have all been used, either in the preparation of the fourteen-volume *Man and His Changing Society*, 1920–1940, or of the present book.

havior. Working together in their learned organizations, they created a new psychological body of concepts for each of the two great factors — Self and Society. They were concerned with man and his changing society; they saw that only when one included both did one truly embrace “the situation.” Hitherto the philosophers, psychophysicists, and the Wundtian elementarist psychologists had ignored one half of this total situation — Society, the Group — concentrating on the other half — the Individual. So great was the absorption of the nineteenth-century students in the mechanism of the human Individual, that they were unable to see him in action with his neighbors; they ignored the psychological forces playing on him in society. This myopia is understandable, for their own culture was still aristocratic, a society ruled by an elite; hence they had ignored “the social.” With the exception of Rousseau and a few other great heretics, the ministers of the churches, the literary lights, the college presidents and professors had been, almost to a man, the native spokesmen of the ruling class.¹

But happily for Veblen and his contemporaries, students preceded them who had a primary interest in society. In the nineteenth century Comte, Spencer, Ward, and other social pioneers had created a pre-scientific study of society at the very moment that the industrial expansion precipitated startling technological and social trends. As a consequence “sociology” as well as “psychology” was in the academic air.

THE INTELLECTUAL FORCES THAT MOLDED THEIR MINDS

That the young American students had great creative power is shown by their success in rising above the encompassing climate of opinion of the colleges and universities which they attended in the 1870's and 1880's.

The Negative Effect of Their Colleges

Thorstein Veblen was at Carleton College in the latter 1870's, at Hopkins and Yale between 1880–1884, at Cornell from 1889 to 1892. Dewey was at Vermont, Mead at Oberlin, Turner at Wisconsin, Cooley

¹ For documentation in American history see such elaborate studies as Joseph Dorfman's *Thorstein Veblen and His America*, Ralph Henry Gabriel's *The Course of American Democratic Thought*, the Beards' *Rise of American Civilization*, Merle Curti's *The Course of American Social Thought*, and Vernon L. Parrington's *Main Currents in American Thought*.

at Michigan, Robinson at Harvard, Baldwin at Princeton. But irrespective of where they studied, the intellectual climate was dominated by an authoritarian mixture of the supernaturalism of theology and the mechanical concepts of the physical sciences. In the older Eastern institutions much of the teaching was carried on in an atmosphere marked by a genteel withdrawing from the crass realities of American life and a good deal of contempt for American creative thought. Not only in the small denominational colleges but also in Harvard, Yale, and the new "scientific" universities — Johns Hopkins, Clark, and the University of Chicago¹ — the youth were taught what Veblen called "the received tradition." Veblen's older brother, Andrew, spoke of Carleton as "conceived and organized on the Dartmouth-Amherst New England tradition by Yankees, led by the clergy" . . . "thoroughly Christian, and distinctly and earnestly evangelical." Classes in science and mathematics were opened with prayer and the "fundamental creed" was "the spirit of God immanent in all His works." At Yale the teachers of philosophy "were still taken primarily from the ranks of the divinity students." At Johns Hopkins, G. Stanley Hall, possessor of a theological degree, was building a new psychology — "Christian to its root and center," . . .

"the Bible is being slowly revealed as man's greatest text-book in psychology — dealing with Him . . . in all larger relations to nature and society — which has been so misappreciated simply because it is so deeply divine."²

Joseph Dorfman, describing the University of Chicago in the 1890's,³ said that it "followed the American theological tradition of higher learning." "Moral philosophy" was still in the curriculum, but

¹ "Out of the original thirty-one full professors in residence [at Chicago in the '90's] ten were professors of theology and two others had attended theological seminaries. There were also a number of professors like Laughlin, who spoke on the 'Spiritual Life' before the Christian Union, and like Thomas Chamberlain, who believed that there 'was a divine mind which directed and an earth which executed; the result was good.' A department of 'Christian Apologetics' was established in the college, and courses were given on 'Apologetics' and 'Evidences of Christianity.' Harper offered the devout George Herbert Palmer of Harvard a salary of three times what he was receiving if he would head Chicago's department of philosophy, but Palmer refused."

— J. Dorfman: *Thorstein Veblen and His America*, page 92.

² G. Stanley Hall: "The New Psychology," *Andover Review*, March, 1885, pages 247-248.

³ *Op. cit.*, Dorfman, page 91.

INDUSTRIAL CULTURE AND SOCIETY

under the new name "sociology." Veblen and his contemporaries were studying the world about them bombarded by "two incompatible habits of thought." One was the scientific, Darwinian, evolutionary, and materialistic trend that was clamoring in every center of thought. The other was the "personal, animistic point of view," colored by the utilitarian philosophy in economic life, the chief slogan of which was "*laissez faire*" . . . "unrestrained human conduct makes for the general welfare." As Veblen said, "Its ultimate axiom is an uncritical natural law which inscrutably coerces the course of events." In the nineteenth-century history of America it appeared everywhere in the culture, and in many styles. Veblen, Dewey, Turner, Robinson, and the others felt it on every side — in the lecture rooms of the universities, in the pulpit, in the press, in the business life of the community and the nation, in the legislative chamber, the courts, and the schools and colleges.

When I began my own teaching in a small Illinois denominational college in 1909, the preachment of the professor of Natural Philosophy was still marked by the same obsession in "predestined forms"; the uniformities of nature were seen as the same "final causes," divine harmony of interests, teleological order arranged by the unseen hand of an overruling Providence that Veblen had described as "the received tradition" in the 1870's.

What, Then, Launched the New Study of Society?

Broadly conceived, five factors discussed in the earlier chapters were the chief influences on the young students:

- The social and functional climate rolling up across America
- The widespread discussion of the Darwinian views of man
- The beginning of a shift from mechanistic to organismic views of human nature and behavior, climaxed in James's *Psychology*
- The influence of the newer European biopsychology
- The expressionist trend among the creative artists

The Second Technological Revolution and the social and functional climate of opinion that was beginning to grip America molded Veblen, Turner, Robinson, and the other social scientists as it did Dewey and the psychologists. Frederick Turner, at Wisconsin, was appraising two and a half centuries of land and human exploitation in his *Significance of the Frontier in American History* in 1892, while all around him the public press and forum resounded with the Populism

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

of the rebelling farmers. Government reform movements were getting under way in the years that Veblen was writing his *Theory of the Leisure Class* (1899) and *The Theory of Business Enterprise* (1904). Cooley was publishing his *Human Nature and the Social Order* and *Social Organization* (1909), Baldwin his *Individual and Society* (1910), and Patten the *New Basis of Civilization* (1910). Beard published the *Economic Interpretation of the Constitution of the United States* (1913) in the midst of the passage of important regulatory laws; viz., the Hepburn Act (1908) regulating the railroads, the Federal Reserve Act (1912), and the Adamson Eight-Hour Law.

The coincidence of these events in the intellectual and political-economic worlds was not fortuitous. These new students of the culture were no longer living in ivory towers of academic isolation. With William Dean Howells — to the consternation of his Brahmin literary friends — they were reading Karl Marx and Edward Bellamy and Henry George; they were being persuaded that *the right of man to property was not prior to the right to life*. Waves of popularly demanded legislation and socially minded executive action were imposing controls upon the license of the exploiting individual and through social changes were changing the people's definitions of ownership of property, freedom, and equality. Not only did psychology become social, the study of society became psychologized. James had felt it, even if vaguely, and had given his two-volume *Principles* that turn. His friend of the former Metaphysical Club, Wendell Holmes the Justice, felt it, too, and gave his decisions from two Supreme Courts the same turn. Dewey expressed it vigorously and fully.

THORSTEIN VEBLEN: THE DIRECT STUDY OF THE FACTORS OF INDUSTRIAL SOCIETY

While John Dewey was documenting the social nature of the Self and the human act of knowing, his sociological colleagues were applying the action-psychology to the changing industrial society itself. *Their leader was Thorstein Veblen — the fourth of the great seminal minds that stated the American philosophy and psychology of experience*. Among a score of major students of our social institutions he stands first, comparable in the field of social analysis to Peirce and James and Dewey in the psychology of behaving and knowing. As Dewey led his group in the study of the psychology of *the individual*

act of behaving and knowing, Veblen led students in applying the new action-psychology to the study of *the behavior of human beings in societies*.

The Conflict over Property in His Milieu

From the years of his youth Veblen's mind had been centered on one concept as fundamental to the development of industrial society — the struggle over the ownership and control of property. His analysis was of the *economic* anatomy of the society, but, even more basic, *it was psychological* — a study of the drives of men that lay beneath that struggle. Born of Norwegian landowning farmers who had been dispossessed of their lands several times in several generations, America's first social analyst was brought up in a milieu of rebellion. It was a mood of revolt against the theological dogmatism and superior attitudes of the transplanted New England Calvinists who lived in the North Central towns near by and against the exploitation of the farmers by these very Calvinist lawyers, bankers, and finance-promoters. Even by his college days he had turned his back on the personal animism of classical economics and adopted as his intellectual instrument the Darwinian concepts of modern science. From his young manhood this essential conflict between the agrarian producers and what he always called the "predatory" urban exploiters stood out in Veblen's mind.

The Origin of "Social Psychology"

At the age of thirty-six Veblen got his first job, going to the new University of Chicago with A. Lawrence Laughlin in 1893. There he was given a tentative appointment of "fellow," with the opportunity to give courses of economic bearing, but most important of all he became the real behind-the-scenes managing editor of the *Journal of Political Economy*. It was through this latter work, and especially through the writing of scores of critical reviews of economics books that he began to exercise an important, if anonymous, influence.¹ His easy command

¹ The chronology of his book reviews during the decade from 1894 shows his primary interests; see Joseph Dorfman's *Thorstein Veblen and His America*, pages 519–524. In each year of the *Journal* he published several reviews of the writings of Karl Marx, Karl Kautsky, Emile Lavasseur, Gustav Cohn, Enrico Ferri, G. De Molinari, Anton Labriola, Werner Sombart, Max Lorenz, and Gustav Schmoller. Paralleling these, he reviewed such American publications as Robert Flint's *Socialism*, Garnier's *History of the English Landed Interest*, and Simon Patten's *Development of English Thought*.

of European languages made him the leading reviewer of French and German economic and agricultural studies. His courses on "American Agriculture" and "Socialism" prodded him to assemble his ideas on the economic foundations of the new industrial society. These two jobs served as a direct stimulus to put his twenty years of encyclopedic study to work in phrasing the theory of industrialism that was beginning to grip him.

But this stimulation of critical work was only one of the factors that led to the great written contribution which Veblen eventually made. In joining "the Chicago Group" he had come into the midst of the most creative environment for "social study" in the country. The central idea he had heard Charles Peirce elucidating at Hopkins in his lectures on "Elementary Logic" — namely, that "the whole function of thought is to produce habits of action" — he saw evolving into a rounded theory by Dewey, Thomas, and William Caldwell. Dewey soon after published his "Reflex-arc Concept" article. The action concept and the organic circuit idea were in the center of discussion. Thus Veblen's interest in the psychological roots of behavior was greatly strengthened by the new functional psychology.

At the near-by Chicago Exposition (Field) Museum, Franz Boas, the curator in anthropology, was making studies of the economic institutions of primitive peoples. Veblen was learning from the anthropologists and sociologists the role of "interest-bearing investment of property," even among primitive peoples, as the fundamental way of achieving ownership and prestige in the society. According to the students who took Veblen's own course in Socialism, he talked "as much about the practices of the Hopi Indians, the Samurai, the Hebrews of the Old Testament, the Andaman Highlanders, and the trading pirates of the North Sea as he did about Populism and Karl Marx."¹

At the age of forty-two, six years after he came to Chicago, Veblen published his first book, *The Theory of the Leisure Class*. This book was widely reviewed and much discussed as a brilliant satire on the social institutions of industrial society, and secured him a tenure appointment at last as "assistant professor." What was not seen clearly about it for many years was that it was a profound *psychological* analysis of economic society, the first psychologizing of economics. Although the book was published in 1899, there was little psychologizing of economics by economists for another decade and a half — not

¹ *Op. cit.*, Dorfman, pages 118–120.

until Carleton Parker began his brilliant but short-lived study. During the next ten years of Veblen's life, with the exception of the appraisal of business domination of the universities, his writing was devoted to the economic system.

In 1919 Veblen, called to New York to write for *The Dial* and to collaborate with the organizers of the New School for Social Research, gathered around himself a group of distinguished minds in the special fields of engineering. The group, called The Technical Alliance, included several prominent engineers, notably Charles P. Steinmetz of the General Electric Company, Bassett Jones, consulting industrial engineer and mathematician, Richard Tolman, now Director of the California Institute of Technology, Frederick L. Ackerman, consulting architect, Stuart Chase, the publicist of later years, and Howard Scott. As a result of these first round tables, Veblen published in *The Dial* a new series of essays on the state of our economic system. These were printed in book form in 1921 as *The Engineers and the Price System*. Two years later, 1923, he issued his last book — *Absentee Ownership and Business Enterprise in Recent Times: the Case of America*.¹ Thus most of Veblen's published studies were analyses of the factors involved in the control of the economic system; to the present day, his chief influence on other creative minds has been in that field. Only today is his leadership as America's first social psychologist being recognized.

¹ The complete list of his major books is as follows:

- 1899 *The Theory of the Leisure Class: An Economic Study of the Evolution of Institutions*; title changed in 1912 to *The Theory of the Leisure Class: An Economic Study of Institutions*
- 1904 *The Theory of Business Enterprise*
- 1917 *An Inquiry into the Nature of Peace and the Terms of Its Perpetuation*
- 1918 *The Instinct of Workmanship and the State of the Industrial Arts*
- 1918 *The Higher Learning in America, A Memorandum on the Conduct of Universities by Business Men*
- 1919 *The Vested Interests and the State of the Industrial Arts*; title changed in 1920 to *The Vested Interests and the Common Man*
- 1919 *The Place of Science in Modern Civilization and Other Essays*
- 1921 *The Engineers and the Price System*
- 1923 *Absentee Ownership and Business Enterprise in Recent Times: the Case of America*

For a full chronological list of his writings see J. Dorfman, *op. cit.*, pages 519–524.

Veblen's Appraisal of Modern Capitalism

In his third book,¹ Veblen made a summary of his own appraisal of the industrial system. I quote it in full:

- “(a) It is a competitive system: that is to say it is a system of pecuniary rivalry and contention which proceeds on stable institutions of property and contract, under conditions of peace and order.
- (b) It is a price system; i.e., the competition runs in terms of money, and the money unit is the standard measure of efficiency and achievement; hence competition and efficiency are subject to a rigorous accountancy in terms of a (putative) stable money unit.
- (c) Technologically the situation is dominated by the mechanical industries; so much so that even the costs of husbandry have latterly taken on much of the character of the mechanic arts.
- (d) Hence consumption is also standardized, proximately in mechanical terms of consumable products but, finally, through the mechanism of the market, in terms of price.
- (e) The typical industries which set the pace for productive work for competitive gains — and for competitive consumption, are industries carried on on a large scale; that is to say they are such as to require a large material equipment.
- (f) This material equipment — industrial plant and natural resources — is held in private ownership, with negligible exceptions.
- (g) Technological knowledge and proficiency is in the main held and transmitted pervasively by the community at large; but it is also held in part by specially trained classes and individual workmen. Relatively little is in any special sense held by the owners of the industrial equipment, more especially not by the owners of typical large-scale industries.
- (h) It results that the owners of this larger material equipment, including the natural resources, have a discretionary control of the technological proficiency of the community at large.
- (i) In effect, therefore, the owners of the necessary material equipment own also the working capacity of the community and the usufruct of the state of the material arts.”

¹ *The Instinct of Workmanship and the State of the Industrial Arts* (1918), page 220.

The Factor of Pecuniary Control

Brought together when Veblen was fifty-seven, twenty years after his coming to Chicago, this summary reveals the novel and profound nature of his *non-partisan* study of industrialism at the turn into the twentieth century. He was a true "radical," making a study of the *foundations*. Those foundations were psychological, resting on the irreducible drive for men of security, and power and glory. The history of modern culture, he said, duplicated those of primitive ones in this respect. Men of ability cornered the best land, the strategic natural resources, and in modern terms the *technology* that was the key to production and wealth and therefore security. A *new society* had emerged in recent times and men must achieve new ideas, new ways of thinking to deal with it. Thousands of years of agrarian-craft culture had given way to another and totally different way of life. It was not only *industrial* capitalism, it was *pecuniary capitalism bringing in its train economic-social changes that demanded the new political-economic design and control*. Nothing in Veblen is more important than this realization that the social dangers around him constituted nothing less than a social revolution, that new problems were being presented to mankind and that new ideas must be created to deal with them. John A. Hobson, one of the most astute British analysts of industrialism, said in his essay on Veblen that the crux of Veblen's interpretation was

"to perceive that the change from craftsmanship to capitalism and from early capitalism to pecuniary capitalism, *requires a corresponding change in thought and sentiment regarding rights of property and the control of industry.*"¹ [My italics.]

And again

"the application of economic determinism in a novel form to the human conduct of men in his own country, as the typical capitalist country, may be regarded as the essential contribution Veblen makes to the thought of his time."

Veblen's central criticism of industrial capitalism is

"that the pecuniary rulers of our economic system are so remote from the technicians, managers and workers who operate it, as to impede technological and managerial improvements from sheer

¹ See his *Evolution of Modern Capitalism*, published 1918, the same year as Veblen's *Instinct of Workmanship*. J. A. Hobson: *Veblen*, page 209.

ignorance, while their interests, which lie in profitable prices, are opposed to such increase of output as would come from the lower cost of technical advance.”¹

Economic power carried with it political power, Veblen and the “new sociologists” were all beginning to say, but Veblen’s great contribution was to point out that it took the special form of *pecuniary control*. Our Western civilization was a money civilization. It was the “business community,” the bankers and controllers of money and credit, who had usurped control even from the new industrial manufacturers. *Their interests and knowledge lay not in the production of goods and services, but in financial manipulation, promotion, and organization*. In the *Instinct of Workmanship* Veblen (page 224) shows:

“That the business community is so permeated with incapacity and lack of insight in technological matters is doubtless due proximately to the fact that their attention is habitually directed to the pecuniary issue of industrial enterprises; but more fundamentally and unavoidably it is due to the large volume and intricate complications of the current technological scheme, which will not permit any man to become a competent specialist in an alien and exacting field of endeavour, such as business enterprise, and still acquire and maintain an effectual working acquaintance with the state of the industrial arts.”

And on page 346 he stresses the *pecuniary* issue: Even “the efficiency engineers” are primarily the agents of the financial controllers of credit, he says:

“workers of all kinds and grades — labourers, mechanics, operators, engineers, experts — all [are] *imbued with the same pecuniary principles of efficiency and go about their work with more than half an eye to the pecuniary advantage* of what they have in mind.” [My italics.]²

Thus Veblen was doing for America what Marx had started earlier to do for Europe: making an analysis of the *economic anatomy of American society*. But, basing his study on the *felt-psychology of our culture*, he arrived at very different conclusions from those of Marx. While accepting Marx’s general principle that social events were largely determined by economic conditions, he rejected, for America,

¹ *Op. cit.*, Hobson, pages 65 and 203.

² *Ibid.*, pages 204 and 205.

Marx's conclusion that the struggle was fundamentally materialistic war between the owning and working classes. Driving the parties to the economic conflict are motivating desires and passions, he said. "It is a sublimated materialism, sublimated by the dominating presence of the conscious human spirit; but it is conditioned by the material facts of the production of the means of life."¹ Thus he saw no self-conscious "class struggle" of our people similar to that which Marx had postulated for Europe. He saw no proletarian revolution coming in America. Under the novel conditions of industrialization the real problem was not the class struggle; it was *the lag of the rate of consumption behind production and that this was due primarily to the constant increase in the accumulation of capital*. He and Marx were both economic determinists and agreed that the producers of things are exploited by the owners. But whereas Marx thought that the productivity of the workers depended primarily upon their energy and interest, Veblen saw that in a technically efficient society "*the state of the industrial arts*" was the crucial factor, not the workers' energy. *American history has tended to support Veblen rather than Marx.*

Moreover, Veblen insisted, the crucial interest of the owners in profits would lead them to withhold the system from operation whenever profits could not be made — thus again running counter to the needs of the social order. He called the system of absentee ownership a "predatory system." In such a predatory system he prophesied as early as 1914, in *Instinct of Workmanship and the State of the Industrial Arts*, that a decay of the productive arts was highly probable. Why? Because we live in a social order which is at the mercy of a small group of owners whose interests are at variance with the general social improvement of the producers (the workers); a system in which the productive plant must be withheld from use when profits are not assured, and hence cannot deliver enough purchasing power to keep the system running. Ringing out in his economic writings is his concept of "financial sabotage":

"that is to say, strategic unemployment at the instance of the owner-employers or of the workmen — becomes a swifter and more widely corrosive agency of miscarriage and decay."

In his last book (1923)² he predicts that it would bring about a

¹ *Annals of the American Academy of Political and Social Science*, Vol. II (1892), page 415.

² *Absentee Ownership*, page 421.

strangulation of the productive arts, and whatever remedial measures are taken will be "of a business-like nature." It will be

"designed in all reason to safeguard the facts of absentee ownership in the natural resources involved and in the capitalized overhead charges which have been incorporated in the business."¹

What will be the future course of events? We do not know enough of the facts to foresee the direction of events that the people may take if they get exasperated enough. But if things get sufficiently difficult:

"some sizeable element of the underlying population, not intrinsically committed to absentee ownership, will forsake or forget their moral principles of business-as-usual and will thereupon endeavour to take this business-like arrangement to pieces and put the works together again on some other plan, for better or for worse."²

/ / /

Thus America's first social psychologist examined calmly, and with a faint sardonic smile, the operation of the economic and psychological forces of the new industrializing society.

/ / /

Meanwhile several other first-rank minds were working at the social-economic problem, some using Veblen's hypotheses and some building their own. The central British group — those at the London School of Economics and Political Science — the former Fabians, especially Hobson, the Webbs, Tawney, and later Laski and Cole, were confirming him by their own analysis of industrial and financial capitalism. By the time the Great Depression overwhelmed the American people and their politicians, these competent students of the social system had piled up an imposing body of knowledge of our new society. But more than that of any other student, Veblen's analysis guided the younger students of the Great Depression onto the trail that enabled them to understand America's Economic Problem No. 1 — namely, *the problem of uninterrupted employment in a technically efficient industrial society*.

He was not alone in centering attention on ownership and other economic factors. Several of the historians were arriving at the same conclusions by different routes.

¹ *Ibid.*, page 425.

² *Ibid.*, page 425.

THE HISTORIANS AND GEOGRAPHERS
CONTRIBUTE TO THE NEW STUDY OF SOCIETY

The pioneer work of the historians, the geographers and anthropologists, and the students of political economy led to the rapid formation of the learned disciplines that by 1900 became the "new" social sciences. That they had taken clear form in America even by the 1880's, is shown by the dates of the founding of seven national learned societies.¹

The New History

I illustrate the trend from the developments in history. Three of those whom I have grouped with Veblen contributed most to the construction of the new history — James Harvey Robinson and Frederick Jackson Turner, and their younger contemporary, Charles Austin Beard. Robinson devoted his energies largely to the long-time European phase, Turner and Beard to the American. The group around Professor Robinson, according to one of their distinguished students, Dr. Harry Elmer Barnes, made a profound "study of the actual nature and changes in the prevailing opinions and attitudes in Western society from Oriental times to the present day, without any commitment to a special type of interpretation or any rigid prearranged scheme of organization."² Robinson, like Veblen, was digging into the social and psychological phases of the culture. He saw a new society emerging, and new bodies of knowledge being assembled to understand it. The New History is to embrace the evolution of the entire culture:

¹ The first was the Association for the Advancement of Science (1848) ... there followed The American Geographical Society (1852) ... The American Social Science Association (1865) ... The American Historical Association (1884) ... The American Economic Association (1885) ... The Geological Society of America (1888) ... The American Statistical Association (1889) ... The American Academy of Political and Social Science (1889) ... The American Sociological Society (1892) ... The American Political Science Association (1904) ... The Association of American Geographers (1904) ... The American Society of International Law (1906). Through the organs of these new societies the geography, economics, government, law, and history of the culture all began to be reinterpreted.

² During the same years Dr. James H. Breasted contributed corresponding foundational studies to the scientific literature of the ancient roots of our Western culture. For a lay synthesis of his contribution see his *Ordeal of Civilization*.

"It will come in time consciously to meet our daily needs; it will avail itself of all those discoveries that are being made about mankind by anthropologists, economists, psychologists, and sociologists — discoveries which during the past fifty years have served to revolutionize our ideas of the origin, progress, and prospects of our race."¹

Most of Robinson's interpretive writing was not published in his lifetime. At his death in 1936 he left more than a thousand pages of manuscript which his literary executor, Dr. Harry Elmer Barnes, is now editing and publishing. One volume, *The Human Comedy*, appeared in 1937. He influenced the building of the new history in America directly by his school and college textbooks and by the nationwide influence that he had on the young historical students who came to Columbia for instruction between 1892 and 1917. During that quarter century he gave a course entitled "An Outline of the History of the Western European Mind." Through this course he stimulated a vast group of younger associates and students who went out to the universities and colleges of America and spread the concepts and filled in the details of the new history for the teachers of the high schools. A brief outline of the chief concepts was published in Robinson's best-selling *Mind in the Making* in 1921 and others in his little essay, *The Humanizing of Knowledge* in 1923.²

The "New History" Dealt with the Entire Culture

Thus the history of the United States and of the Western world written after 1890 was really new — new in its content, in the phases of the culture that it dealt with, new in its organization, new in its daredevil crossing of academic boundaries. *For the new historians took their material from any area of the culture in which it happened*

¹ James Harvey Robinson: *The New History*, page 24. The Macmillan Company, New York (1918).

² Through his "new" histories Professor Robinson's influence on the undergraduate colleges and high schools of America was more important up to the close of World War I than that of any other single writer; witness his *Introduction to the History of Western Europe* (1903) . . . *Readings in European History* (two vols., 1904–1905) . . . *The Development of Modern Europe*, with C. A. Beard (1907), which was read by millions and is being read to the present day. This book was the first school and college text to include a chapter on "The Industrial Revolution," even though a chapter was utterly insufficient even to describe the outlines of the industrial order. Fifteen years later, in writing the historical volumes of my own *Social Science Pamphlets* (1922–1929), I found it necessary to devote hundreds of pages to the economic, industrial, and social themes.

to be located, regardless of prior academic proprietorships. If the geographic facts of natural resources, of river valleys or climate, were needed to make the story of what happened clear, these were included — as Turner and Schlesinger and others did — even though the geographers shouted robbery.¹ If, to make clear the factors that contributed to the building of the American Constitution, the *economic* facts of property-ownership of the delegates to the Convention were needed, they were used — as Beard did in his *Economic Interpretation of the Constitution of the United States*. If the data on immigration were needed, history invaded the population area of sociology. Similarly psychology and anthropology were constantly combed for the content of the New History. In short, *the total culture was the source of the data of the New History*. I shall give two illustrations — from Turner and from Beard.

TURNER AND THE "GEOGRAPHIC" FACTORS IN AMERICAN HISTORY

At the meeting of the American Historical Association in Chicago July 12, 1893, Frederick Jackson Turner read a paper that turned out to be one of the most influential essays in our history of history. Its central theme is stated in the title of the essay: "The Significance of the Frontier in American History."² Its obvious structure was based on the moving frontier, passing stage by stage from the first, on the Atlantic seaboard in the seventeenth and eighteenth centuries, to those of the Middle and Far West in the nineteenth century. It was an elaborate primary documentation of the economic, social, political, and intellectual factors in the preëmption, settlement, and exploitation of the land of America. To Turner the frontier was "a form of society rather than an area." The frontier culture was a new culture based on a virgin continent isolated from the quarreling intrigues of Europe. *Hence its history was colored in every stage by the geographic and economic factors*. The traits and the social life of the people, and the nature of the government that they developed, can be understood only by reference to them.

¹ Important beginning had been made, as early as 1884 and 1891, by Harvard's professor of geology, Nathaniel Southgate Shaler, to show the geographic factors in American history; see his article on the "Physiography of North America" in Winsor's eight-volume *Narrative and Critical History of America* and his own notable *Nature and Man in America* (1891).

² Published as the first essay in his now famous *The Frontier in American History* (1921), together with twelve other essays written between 1892 and 1918.

"Economic Power Secures Political Power"

In his essay, and in his later book, Turner showed how the conditions of the frontier had promoted "democracy here and in Europe"; but his major contribution is the analysis of economic life as basic to the social and political culture; witness:

"So long as free land exists, the opportunity for a competency exists, and economic power secures political power." (page 32)

"Economic power secures political power." A truism of today, Turner documented this in many ways; for example, in the account of the huge land grants to favored individuals, throughout 250 years of our history, and their influence in government. Central to the history was the continuing struggle over property — land, taxes, fees, court privileges:

"The creation of this frontier society — of which so large a portion differed from that of the coast in language and religion as well as in economic life, social structure, and ideals — produced an antagonism between interior and coast . . . In general this took these forms: contests between the property-holding class of the coast and the debtor class of the interior . . . contests over defective or unjust local government in the administration of taxes, fees, lands, and the courts; contests over apportionment in the legislature, . . . contests to secure the complete separation of church and state; and, later, contests over slavery, internal improvements, and party politics in general. These contests are also intimately connected with the political philosophy of the Revolution and with the development of American democracy." (pages 110–111)

As time passed and cities grew, the great landlords tended to go to the cities to live. Turner, like Veblen, brings out that they became "absentee landlords."

"The frontier settlers criticized *the absentee proprietors, who profited by the pioneers' expenditure of labor and blood upon their farms, while they themselves enjoyed security in an eastern town.*" (page 56) [My italics.]

In his successive papers on the history of American life presented to the American Historical Association, Turner dealt with the emerging industrialism and the transformation of the society. With Veblen and Robinson and Beard he was convinced that the changes in America and in all industrializing nations were so great that one could only

conclude that the Western world was passing through an actual revolution. He studied the "New Immigration" from southern and eastern Europe that was supplanting the "Nordic" of northwestern Europe and was a student also at the great theme of concentration of population, wealth and political power.

"The familiar facts of the massing of population in the cities and the contemporaneous increase of urban power, and of the massing of capital and production in fewer and vastly greater industrial units, especially attest the revolution." (page 317)

The New "Human" Geography and Its Interdependence with History

By the 1890's the "Anthropogeography" of mid-nineteenth century had subdivided into the separate learned disciplines of geography and anthropology, under the increasingly scientific study of a score of distinguished students. As geography became more scientific, it too subdivided itself into two parts: (1) physical geography, which emphasized the study of the earth's structure and its physical elements . . . (2) human geography, which concentrated upon the effect of climate, topography, and other physical features upon the behavior, thought, and feeling of human beings.¹

After 1900, inspired chiefly by Turner, A. B. Hulbert and other younger American historians filled in the details of his thesis.² Meetings of the learned societies were devoted to the "relation of geography to history."³ In 1907 was published what proved to be the single

¹ Several French scholars played a vigorous part in the investigation of the effect of physical environment on human living: the historian Hypolite Taine (1828-1893), the French social reformer Frederic Le Play (1802-1892), Paul Vidal de la Blache, and Jean Bruhnes. (See especially Jean Bruhnes' *Human Geography* and Vidal de la Blache's *Tableau de la Geographie de la France*.) These geographer-historians documented the influence of the soil, climate, land configurations, and other physical factors on movements of trade, population, manners, character, and traits of the people, groupings of peoples, their occupations, location of their industries, their cities, etc. In Switzerland, in selected places in eastern Europe, in Scandinavia, and in the English-speaking countries, the study of human geography thrived after 1900. Important developments took place in the United States under the leadership of Ellen Churchill Semple, follower of Ratzel, who began to publish as early as 1899, showing (in her *Geographic Influences in American History*, 1903) that historical development was definitely influenced by geographic features.

² See Hulbert's sixteen-volume series; for example, *Historic Highways of America* (1902-1905).

³ See the *Bulletin* of the American Geographic Society, Volume XI, pages 1-17.

most influential interpretive volume — namely, Professor Ellen Churchill Semple's *American History and Its Geographic Conditions*. More and more the historians came to include "map studies" in their texts; witness the fine *Harper's Atlas of American History*, by Dixon Ryan Fox (1920).

But it was not until after World War I that the effect of the new syntheses of human geography was felt in the schools and colleges. Then the new trend of integration of geography and history advanced swiftly. Isaiah Bowman and Richard E. Dodge initiated it in 1920 with an American translation of Bruhnes' *Human Geography*. Ellsworth Huntington's *Principles of Human Geography* (in collaboration with Cushing) appeared in 1921, and then in rapid succession his *The Pulse of Asia . . . Civilization and Climate . . . World Power and Evolution*. In 1925, J. Russell Smith produced his distinguished regional geography, *North America*. I cite but a few of the many original books that appeared after World War I, but these are typical of the authoritative volumes¹ that soon changed the geographic emphasis in the curriculum from physical to social science. *Slowly the new textbooks in "the social studies" merged geographic and historical factors*. I think that my Social Science Research Group in the Lincoln School was the first to do this systematically in the design of the social curriculum. The description of every stage of history — American, European, Asiatic — was based on the closest integration of the geography of transport and communication, of clearing and settling of land, of developing industries, even of special characteristics of government and social and esthetic life. Although conventional historians fought the new trend — *and they were joined by a few younger students of the teaching of history in the schools who later embraced the very same "social studies" and wrote their own books that way!* — the movement slowly gathered headway.

/ / /

Thus, by World War I the economic and geographic interpretation of history, which Turner joined with Veblen, Robinson, and Beard in making, was definitely established. Witness the generalization of

¹ Students of geography in the schools should not miss Bruhnes' "Recapitulative Classification of the Subjects in the Field of Human Geography" in his chapter "Human Geography" in H. E. Barnes's *The History and Prospects of the Social Sciences*.

Arthur M. Schlesinger, one of the younger generation of historians, in his *New Viewpoints on American History*.

"The first historian who perceived the importance of economic influences in American history was Frederick Jackson Turner. . . . Under Professor Turner's influence, a new direction was given to American historical research; and many articles and books have been written by students who sought to apply his viewpoint to particular periods or aspects of American history." (pages 69-70)

Beard and the Economic Interpretation of Political History

In the midst of Wilson's era of the "new freedom," studies were being reported of the forces playing on American life. For twenty years historians had been digging into the economics of government. Then in 1913 came an epoch-marking monograph — Charles A. Beard's *Economic Interpretation of the Constitution of the United States*. Several studies had anticipated Beard, but he did something the others had not done and he reported his findings in a book that was widely read and reviewed. The new thing he did was to establish the relation between economic power and political power by analyzing the economic standing and interests of every member of the Constitutional Convention of 1787. So well did he do his work that in spite of a storm of protest that arose on its publication, Schlesinger could say of it a decade later: "The point of view set forth by Dr. Beard has been generally accepted by scholars who have written on the Confederation period since 1913."¹

As Schlesinger summed up the studies ten years after Beard:

"Of the fifty-five members who attended the convention . . . at least five-sixths of the membership, were directly and personally interested in the outcome of their labors through their ownership of property, real or personal, and were, to a greater or less extent, economic beneficiaries of the adoption of the Constitution . . . speculative investments in land were represented by at least fourteen members. Public security interests were extensively repre-

¹ He adds: "see for example, Allen Johnson's *Union and Democracy* (Boston, 1915), Chapter ii; Homer C. Hockett's *Western Influences on Political Parties to 1825* (Columbus, 1917), pages 27-40; and Frank Tracy Carlton's *Organized Labor in American History* (New York, 1920), pages 45-52."

— A. M. Schlesinger: *New Viewpoints in American History*, pages 189-199.

sented among the members in sums varying from negligible amounts up to more than \$100,000 . . . the names of no less than forty [public creditors] appeared upon the records of the United States Treasury Department . . . Personalty in the form of money loaned at interest was represented by at least twenty-four members. The mercantile, manufacturing and shipping interests had spokesmen in at least eleven members. Fifteen or more members were slaveholders." (pages 192-193)¹

Economists Slowly Turn to the Psychological Study of Economic Society

Fifteen years after the *Theory of the Leisure Class*, Carleton Parker rediscovered the psychological basis of the economic anatomy of society. In a provocative address on "Motives in Economic Life," before the American Economic Association in 1915, he said:

"It does not seem an overstatement to say that orthodox economics has clearly overlooked two of the most important generalizations about human life which can be phrased, and those are,

"That human life is dynamic, that change, movement, evaluation, are its basic characteristics.

"That self-expression, and therefore freedom of choice and movement, are prerequisites to a satisfying human state."

Turner, Beard, Schlesinger, and a whole army corps of social scientists had said "economic power secures political power." But Veblen and the social psychologists had dug deeper and had found fundamental motives — what men want most and fear most — largely determine their behavior. It is the drive for security and for the power and the glory — psychological concepts — that mold the economic patterns. But the rank and file of academic historians, geographers, economists, and political scientists paid little attention to psychology. Carleton Parker was the great exception after Veblen.

¹ For a scholarly but adversely critical analysis of Beard's book see E. S. Corwin: *History Teacher's Magazine*, February, 1914; for Dr. Beard's answer see his *Economic Origins of Jeffersonian Democracy* (1915), pages 1-9.

No less a commentator on the Convention than John Adams had said of his colleagues:

"The Federal Convention was the work of the commercial people in the seaport towns, of the slaveholding states, of the officers of the Revolutionary army, and the property holders everywhere."

— *Op. cit.*, Schlesinger, page 192.

At the time of his premature death in 1918 Parker had just been made head of the economics department of the State University of Washington. Although he had studied in the universities of Germany and Scotland, he had built his economics the hard but realistic way; namely, by working face to face at the labor problems of employers and IWW migratory workers on the West Coast. In an unpublished paper (New York, 1917), excerpts of which his wife issued in her biography of him, *An American Idyl*, Cornelia Parker said:

“So while official economic science tinkers at its transient institutions which flourish in one decade and pass out in the next, abnormal and behavioristic psychology, physiology, psychiatry, are building in their laboratories, by induction from human specimens of modern economic life, a standard of human values and an elucidation of behavior fundamentals which alone we must use in our legislative or personal modification of modern civilization.”

With great energy and enthusiasm Parker had started out to “psychologize” economic science, to build a “new growing philosophy” for “industrial labor and business employment.” In 1918 he had a thrilling sabbatical half-year of personal study with Dewey, Thorndike, and the psychologists of the East and plunged into the writing of his book on “labor psychology.” Out of the facts of the employer-labor situation and the psychologists’ theories of behavior, he began to state his concept of the dominant role of motives in economic life. His sudden death in 1918 cut off what promised to be a definitely new trend in the psychological study of economic society.

BOAS AND THE ANTHROPOLOGISTS DOCUMENTED NEW CONCEPTS CONCERNING THE RACES OF MANKIND

Meanwhile the social anthropologists were developing the scientific study of other concepts that were indispensable to clear thinking about modern civilization. By the turn of the twentieth century a considerable body of fact as well as theory concerning the origin, nature, and development of human cultures had been assembled by such students as Tylor, Frazier, Lang, L. H. Morgan, Maine, Wundt, Jevons, Gomme, and Durkheim. As a consequence there was beginning to be considerable agreement:

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

- that the human species was a biological and psychological unity; there was one human race, and its various branches had many characteristics in common.
- that the physical environment from its interplay with the common human stock exerts a dominating role in producing cultures.
- that these show both remarkable uniformities and widely diverse forms of institutional life.

And there was a generation-long controversy over the origin of cultures and the manner by which civilization had been invented and spread over the earth. These controversies need not concern us here, for their final resolution will be of minor importance in the education of the people generally.

But out of the work of the students of anthropology, concepts did emerge that are indispensable to the reconstruction of education, and we must bring them into our story. Conspicuous among them was the concept of "race." Decade by decade, as industrialization speeded the dominance of the small "white" race over the more numerous "colored" or darker-skinned races of the world, the problem of racial conflict had increased in intensity. Today – if it is agreed that full employment is Social-Economic Problem No. 1 – race conflict looms before the Americans and the Indo-Europeans generally as Social-Economic Problem No. 2; and unfortunately it is still one of the shunned areas of public education. Educators are beginning to recognize that they must educate the people with respect to the fundamental facts that have emerged from three generations of studies by the anthropologists.

Two generations of quacks and scaremongers, beginning with Count Gobineau in the 1850's and continuing to today, did incalculable harm to the domestic and world peace of peoples by publicizing false data concerning the inequalities of the races. The thesis of Gobineau's four-volume *Essai sur les Inégalités des Races*, which had wide circulation in the 1850's and 1860's, illustrates it – namely, that the less numerous Nordic, blond, blue-eyed race is being outnumbered by the inferior dark-skinned brunettes of the earth and eventually will be destroyed or enslaved by them. The Nordics, especially those who reside in northwest Europe, are the superior peoples of the world; they created modern civilization; they are its leaders and are the only race fit to rule mankind – yet they face extermination. This thesis was

cultivated from 1860 to today, especially in Germany, and came to its climax in the theories and practices of the Nazis after 1933.¹

Building on the work of the nineteenth-century pioneers, a new "American school of ethnology" carried on fifty years of scientific study of the problems of race. The leader was Franz Boas, who had been curator in anthropology at the Chicago Field Museum when Veblen, Thomas, and Starr began their work and who was professor at Columbia for forty years. Boas and his associates built up an impressive body of fact with which to oust the fiction that came to be known as the Nordic Myth. When he began his work, in the 1890's, the foundations had already been laid for a new interpretive synthesis of the development of cultures. Using the scientific, statistical, and historical method, Boas developed a fine critical analysis. As early as 1911 his *Mind of Primitive Man* brought into one compact synthesis the findings of the American school on the issue of the supposed inequality of the races. The evidence cleared away long-held "misconceptions concerning the comparative mental ability and characteristics of primitive and civilized men. I quote a few excerpts:

- "There is little evidence to support" our "belief in the existence of gifted races."
- In general the evidence leans toward the relative equality and uniformity in physical and mental capacity for civilization building.
- The anatomical characteristics of the people who have achieved eminence in civilization building are not better than "those on lower grades of culture."
- "Hereditary mental faculty" is not "improved by civilization."
- Studies of human types, languages, and cultures show general lack of correlation between racial types and cultural stages; in general "cultural stage is . . . dependent upon historical causes, regardless of race."
- A study of the race problems of the United States and their background in the many European groups that emigrated here in 300 years led him to say:

¹ A good measure of the philosophy can be obtained from the writings of the renegade Englishman, Houston Steward Chamberlain; in America of Madison Grant (*The Passing of the Great Race*) and of Lothrop Stoddard (*The Rising Tide of Color*); see Hitler's *Mein Kampf*. See especially Aurel Kolnai's *War Against the West*, one of the most comprehensive assemblies of the hundred years of propagandistic writings of the Germans *re* the supposed Nordic superiority.

- “*Two questions stand out prominently* in the study of the physical characteristics of the immigrant population. The first is the question of the influence of selection and environment in the migration from Europe to America. The second *is the question of the influence of intermixture. . . . the types which come to our shores do not remain stable*, but show such important modifications that many of the differences of the human types of Europe seem *rather ephemeral than permanent*, determined more by environment than by heredity.”
- “*mental traits as well as physical traits will be modified by the effect of environment*. When, furthermore, we recall that *we could not discover any proofs of the superiority of one type over another*, we may feel safe when we state that the dangers to the vigor of the American nation, due to an influx of alien European types, is imaginative, not real.”¹ [My italics.]
- With respect to the effect of mixture of races and nationalities upon the stock of the American people:
 - “no evidence is available that would allow us to expect a lower status of the developing new types of America. Much remains to be done in the study of this subject; and, considering our lack of knowledge of the most elementary facts that determine the outcome of this process, I feel that it behooves us to be most cautious in our reasoning.”²
 - “We may enlarge on the danger of the impending submergence of the northwest European type, or glory in the prospect of its dominance over all others. Would it not be a safer course to investigate the truth or fallacy of each theory rather than excite the public mind by indulgence in the fancies of our speculation?”³

He found an enormous amount of intermixture of new immigrant groups with old stock:

“intermixture, as soon as the social barriers have been removed, must be exceedingly rapid; and I think it safe to assume that one hundred years from now, in the bulk of our population, very few pure descendants of the present immigrants will be found.”⁴

¹ Franz Boas: *Mind of Primitive Man*, pages 261–262.

² *Ibid.*, page 263.

³ *Ibid.*, page 264.

⁴ *Ibid.*, page 267.

So it was that in the quarter century after the first studies of Veblen, a functional study of industrial civilization had begun to take shape. There were the outlines of a new history, with economic, industrial, and scientific strands, and a new geography and a new anthropology, partly fused with the history. Tentative chapters were being written of a history of science and technology which began to light up hitherto hidden factors of our political institutions. Supporting it all was a new intellectual history — the account of men's changing ideas. Although the schools and colleges were still untouched by it, the outlines of a new social science had been roughed in.

WORLD WAR I BROUGHT NEW SOCIAL SYNTHESSES

Periods dominated by great wars are apt to be times of profound social learning. That proved to be true of both episodes of the Thirty Years War that began in 1618 and came to a close, we trust, in 1648. In the first episode, 1618–1648, the United States discovered its vast productive resources, threw off its vassalship to Europe, became world creditor and one of the six great industrial nations. But it also served the potential students of society in extremely important ways. The peace had scarcely been signed when the first of many new social syntheses appeared on both sides of the Atlantic. The war confirmed Veblen and his associates and jolted many hitherto academic minds into a more realistic view of industrial civilization. A dozen new interpretations came from the British and American presses within two years after the armistice. On the British side the former Fabians, most of them now London School men, took the lead — John A. Hobson, R. H. Tawney, Sidney and Beatrice Webb, Graham Wallas — to name only five.¹ In the United States the professors of economics,

¹ See Hobson's *Evolution of Modern Capitalism* (1916), a pioneer synthesis of the factors of industrial and finance capitalism; his *Taxation in the New State* (1920). See Tawney's little *Acquisitive Society* (1920) and his classic *Religion and the Rise of Capitalism* (1926). Wallas's *Great Society* came in 1914, and his *Social Heritage* in 1920. The youthful Harold Laski — today the intellectual leader of the left wing of the Labor party — published his *Studies in the Problem of Sovereignty in America* (1917), the *Foundations of Sovereignty* (1921), and his more influential *Rise of Liberalism* in 1923. John Maynard Keynes told the world what he thought of "the war and the peace" in *The Economic Consequences of the Peace* (1920). Twenty-five years later he had become, as Lord Keynes, the leading economist of the British world. And there were others who, with E. D. Morel, had seen, long before 1914, that the industrial race for resources, markets, and a place to invest surplus capital was bringing on a series of wars.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

history, and sociology had also been writing their new syntheses during the war years. Some of the younger economists contented themselves with assembling excerpts of economic and political documents in huge books of readings. But the more mature students produced original interpretations.¹

CONCEPTS OF ECONOMIC SOCIETY FOR THE NEW EDUCATION

Thus the second generation of students of industrial civilization documented a new body of concepts that are now important in the reconstruction of the social curriculum of school and college:

- Our industrial social order is a competitive system of pecuniary rivalry . . . a price system, with the money unit as the standard measure of efficiency and achievement.
- Technologically the situation is dominated by the mechanical industries, consumption is standardized through the market in terms of price.
- The basic industries are large-scale, requiring large material equipment and financial support — all of which is held in private ownership and tends toward monopoly.
- The large-scale owners of natural resources and technology tend to control the knowledge, skill, and craftsmanship of the workers.
- The change from craftsmanship to pecuniary capitalism requires a corresponding change in thought and sentiment regarding the rights of property and the control of industry.
- The pecuniary rulers of the system are remote from the managers and workers and are ignorant of the technology; their primary interest in profits opposes the reduction of costs for the increase of output.
- Economic power, especially pecuniary control, carries with it political power.
- The system of absentee ownership is predatory and tends toward the decay of the productive arts.

¹ Witness Walton Hamilton's *Current Economic Problems* (1914) and Leon Marshall's *Readings in Industrial Society* (1918). Harold Moulton (for the next twenty years Director of the Brookings Institution) published his big tome, *The Financial Organization of Society* (1921). At Wisconsin, John R. Commons and his associates produced their two-volume *History of Labor in the United States*.

INDUSTRIAL CULTURE AND SOCIETY

- The history of the culture is interdependent with its geographic conditions.
- The economic anatomy of society rests upon a psychological basis.
- The human species is a biological and psychological unity. There is little evidence to support the belief in the existence of gifted races.
- The physical environment, from its interplay with the common human stock, exerts a dominating role in producing cultures.
- “Hereditary mental faculty” is not “improved by civilization.”
- The anatomical characteristics of the people who have achieved eminence in civilization building are not better than those on lower grades of culture.
- Cultural stage is dependent on historical causes, regardless of race.
- There is no reason to believe that the change in the source of immigration into the United States after 1890 has lowered the strength, general health, or creative capacity of the American people.

CHAPTER X

Foundations for a Science of Culture: 1920—

THE THIRD GENERATION OF STUDENTS OF SOCIETY AND CULTURE

As the years of reconstruction advanced, a third generation of younger students appeared, to take up the creative leadership which Veblen and his colleagues were laying down. These younger men had grown up on the ideas of the older group, but they had one great advantage over their elders. They began their work just at the close of World War I, at the very moment that the facts and factors of social change could be more clearly discerned. The war had accelerated each of the major social trends enormously, *but at very different rates*. The whole material culture had changed swiftly — technological invention, mass production of goods, and export trade, the emigration of people from farm to town, transport and communication. But the nonmaterial culture — family and home life, loyalties and allegiances, education — changed much more slowly. The consequence was that comparative rates of change in different parts of the culture could be detected much more clearly.

Moreover, the war redirected the interest of many students from primitive and ancient cultures to the drastic changes that were taking place in our own industrial society. As a consequence, from 1920 on, there were few Spencerian Grand Plans and Universal Histories, or guesses about the stages of societal development, little dependence on evolutionary analogues and only a minimum of interest in remote social origins. Studies of primitive societies continued to be made, but the authors were deeply concerned with discovering facts and principles of human social living that would throw light on our baffling problems

FOUNDATIONS FOR A SCIENCE OF CULTURE

of today. It is clear now that their work marked the emergence of the third generation of students of society and the premonition of a mature science of culture.¹ I refer to such conspicuous persons as:

- William F. Ogburn and the study of the social trends
- Warren S. Thompson and the quantitative analysis of population trends and problems
- Wesley Mitchell, Harold Moulton, Alvin Hansen, Bassett Jones, Harold Loeb, and others in the quantitative study of the producing and distributing systems
- Ralph Linton, Robert and Helen Lynd, W. Lloyd Warner, Alfred W. Jones, St. Clair Drake and H. S. Cayton, Allyson Davis, Edmund de S. Brunner, Carl Taylor, and others in the face-to-face study of urban and rural community life
- David Lilienthal, Hugh Bennett, and others in the study of land and regional reconstruction
- Walter Lippmann, Harold Lasswell, Paul Lazarsfeld, Goodwin Watson, Hadley Cantril, Harold Gosnell, L. D. White, Leon Marshall, Walton Hamilton, Gordon Allport, Gardner Murphy, and others in the study of the formation and control of public opinion and in the social psychology of law and politics
- Abram Kardiner, Melville Herskovitz, James F. Feibleman, and others in the study of the ontology, dominant concerns, beliefs, values, and climate of opinion of the people
- The leaders of the Social Frontier group in the study of education and the changing culture (See Chapter XVIII)



Taken all together these persons constituted a third generation of students in a century of a maturing science of culture. The data upon which they draw are so voluminous and complex that it is very important that they be clearly organized and documented. I have, therefore, enumerated the outstanding sources, organized in eight principal divisions.

¹The best of the group today feel that their methods of work are precise enough and their concepts sufficiently approach a consensus to justify the use of the word "science"; witness the 1945 symposium, *Science of Man in the World Crisis*, by Ralph Linton and others.

Culture and Social Psychology

A further bit of characterization. These workers of the third generation, like their teachers of the second one, are students of the whole culture and the whole society, not merely of economic, political, or geographic problems. They are concerned with the interrelationships of economic and political life and the effect of physical geographic factors on ways of living, more than with the facts of separate learned disciplines. This requires a breadth of knowledge, of curiosity and interest, that had hitherto been lacking in students of sociology. Some of them are especially well trained in the quantitative study of social trends, the chief product of which consists of the new statistical methods which Karl Pearson and the British biostatisticians created after 1890, and which J. McKen Cattell, the psychologist, introduced into American universities after that date.

But perhaps their most significant characteristic is that they see that *many of the basic problems of the new society are psychological* —

SOURCES OF THE CONSENSUS ON CULTURE AND SOCIETY

- I. Studies of Cultural Change: Over-view Interpretations
 - Such studies as Ogburn's *Social Change* (1922)
 - Mumford's trilogy: *Technics and Civilization* (1931) ... *The Culture of Cities* (1937) and *The Condition of Man* (1944)
 - Such symposia as Linton's *Science of Man in the World Crisis* (1945)
- II. Studies of Recent Social Change:
 - Conspicuously the work of National Commissions and Committees, some under government auspices, others privately conducted:
 - Such reports as those of the two committees appointed by Mr. Hoover: *Recent Economic Changes* (1929) ... *Recent Social Trends* (1933)
 - The government report of the O'Mahoney Technical National Economic Committee (TNEC); see the volume summarizing the details of the 42 volumes.
 - The government reports of the National Resources Committee, and the later National Resources Planning Board, such as: *Technological Trends and National Policy* (1935) ... *Problems of a Changing Population* (1938)
 - Various Brookings Institution reports such as its four-volume *America's Capacity to Produce, America's Capacity to Consume*, etc.
 - The report of the Loeb Committee, *Chart of Plenty* ... and the accompanying documents
 - Studies of curve-fitting applied to the basic industrial data of the economic systems, such as Bassett Jones's *Debt and Production* and various population studies

not merely economic, or political, or sociological. They are problems of how the people feel and think, problems of understanding, of propaganda and censorship and the control of radio, movies, newspapers; problems caused by the rise of nations, nation-states, and the spirit of nationalistic rivalries and chauvinisms; problems of social classes within nations, of race consciousness, of superiorities and inferiorities, and of conflicts growing out of In-group and Out-group discriminations. In short, they are *psychological* as well as economic and geographic and political.

To meet these problems a new profession of social psychologists has emerged. To discriminate them from Dewey and the students of the individual psychology of the act, they are psychologists of the social processes of culture and society. Some, such as Watson, Murphy, Newcomb, and Hartmann, developed their social interest out of an original training in individual psychology. Others, such as Young, Ellwood, and Bogardus, began as students of society and increasingly came to recognize the basic role of psychology. Others, such as Klineberg, came from anthropology, and still others — witness

SOURCES — *Continued*

- Studies of the rise to power of the integrated corporation, such as:
 - Berle and Means: *The Modern Corporation* ... Robert Brady: *Business as a System of Power* ... Wesley Mitchell's *Business Cycles* ... Nourse's *Price Making in a Democracy*
- Statistical and factual (short-term) studies of social change, such as Ogburn's recurring appraisals; see, for example, *American Journal of Sociology*, May, 1942
- III. Studies of Problems of a Changing Population (Sources Listed in Chapter VIII)
- IV. Studies of American Communities since 1890:
 - Studies of specific cities and towns, Negro culture, Negro-White problems, presented in Chapter XI
 - Over-all studies of cities such as the N.R.P.B.'s *Growth of Cities* ... Mumford's *Culture of Cities*
 - Studies of Rural Communities, presented in Chapter XI
- V. Studies of Public Opinion, Communication, and Consent, listed in Chapter XII
- VI. Studies of Regional Life and Reconstruction in America:
 - The various reports of the TVA ... Lilienthal's *TVA: Democracy on the March* ... Odum's *American Regionalism*
- VII. Studies of the Culture, the Culture Pattern, Basic Personality, Dominant Ontology, the Climate of Opinion, listed in Chapter XI
- VIII. The dominant American ontology: a dozen eyewitness reports, listed in Chapter XI

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Kardiner — from psychoanalysis and psychiatry. Finally some, such as Lippmann, are astute free-lance students of politics, the press, and the psychology of the social process. Out of their combined efforts a solid body of social-psychological concepts has been built in the past twenty-five years.

These, then, are typical examples from the vast library of a maturing science of culture and society. From these I shall state my interpretation of the consensus on each of the questions set at the beginning of Part III.

THE PROBLEM OF SOCIAL CHANGE

Ogburn and "Cultural Lag"; Unequal Rates of Change in the Culture

A new leader and the recognition of a new problem emerged almost immediately at the close of World War I. The man was William Fielding Ogburn of Columbia and Chicago, and the problem was the nature of social change in modern industrial society. The special nub of the problem was the phenomenon of cultural lag and the consequent stresses and strains set up in the new society. Ogburn first pointed to the new characteristic in his much-discussed book, *Social Change*, in 1922. For a quarter-century since that time he has led in the study of its significance in the major social trends through which American life has been passing. He was the central research mind on several government-sponsored national committees — notably, the Committee on Social Trends, the Science Committee of the National Resources Committee, and the later National Resources Planning Board.

Ogburn's thesis was:

"that the various parts of modern culture are not changing at the same rate, some parts are changing much more rapidly than others; and that since there is a correlation and interdependence of parts, a rapid change in one part of our culture requires readjustments through other changes in the various correlated parts of the culture."¹

Dangerous stresses and strains are arising in the culture, and those in directive positions must do something about it. Veblen had had a

¹ W. F. Ogburn: *Social Change*, pages 200–201.

premonition of the phenomenon; Clark Wissler in earlier studies of primitive societies had definitely recognized it in 1916:

“The term culture as used by anthropologists generally includes such groups of traits as social organization, ceremonial activities, art, and material culture. Of these it appears that social organization is less rapidly changed in contrast to the last. It is food, shelter, and transportation complexes of material culture that the intruding group will take over bodily. Then the chances are that one by one the associated ceremonies always found intimately connected with food production will be taken over to displace those now made useless, and ultimately drag in their social counterparts.”¹

But it was Ogburn who first documented it for our own industrial society, showing that the “non-material” parts of industrial culture were lagging far behind the “material” parts.

The phenomenon of social change works both ways, however. Sometimes change appears first in institutions such as religion — “as in the development of taboos against the use of certain animals as food or the development of architecture as houses of worship.” We could add for 1945 such examples in the nonmaterial culture as progress in research in nuclear physics which precedes by a generation the production of atomic bombs.

The Factors: Biological ... or ... Environmental?

What are the dominant factors bringing about such drastic changes? Has the nature of man changed or has he simply learned to change his culture and society? Education seeks an answer to this question to pass on to the younger generation. Ogburn documented the modern scientific answer. Insisting that “the dogma of the pure environmentalist is as untrue as the dogma of the biologist” and that “the investigation should concern both factors, and the facts in each case will determine the relative significance of each factor,” he shows that:

“Material culture appears to grow by means of inventions which are seldom lost but which accumulate. Thus the material culture grows larger and larger [and] ... more inventions are, on the average, made ... Thus material culture tends to ac-

¹ Clark Wissler: “Aboriginal Maize Culture as a Typical Culture Complex,” *American Journal of Sociology*, March, 1916, page 661.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

cumulate more rapidly. The result is more rapid social change, increased specialization and differentiation. In very early times, material culture was small in amount and changed slowly. Such was the condition for a long time. Recently the material culture has grown to a vast amount and is changing very rapidly."

"Considering now the biological factor . . . it seem[s] probable that there has been no significant evolution in these characters in man, and certainly do not prove it conclusively. Studies of heredity show that mutations occur only infrequently. Probabilities are that some change has taken place in some of the many characters of man since the last ice age; but the incomplete record does not show them and nothing is known as to what characters may have changed nor their significance. Biological change over the last two thousand years must be exceedingly slight, if it has occurred at all."

*"But the cultural change over the past two thousand years has been extraordinarily great. Therefore there appears to be for this period no correlation between cultural changes and biological changes. Cultural evolution is thus not to be accounted for by biological evolution in man."*¹ [My italics.]

/ / /

It is evident now that many others had sensed the fact that *our young industrial society was moving out of its initial inefficient stage of development through a bewildering transitional period of a half century or more into a stage of great efficiency and maturity.* But Ogburn phrased it first and during the next twenty years was turned to by government officials as the person to lead in the periodic surveying of social change. Over a period of twenty years Dr. Ogburn reported his annual and decennial appraisals of the social trends in the *American Journal of Sociology*, of which he was an editor; his decennial survey, "Our Times," in the May 1942 issue, is typical. In these he appraised the trends in the five "great social institutions . . . family, government, industry, religion, and local community." I quote his own 1942 abstract:

"It may be that the historian of the future will not call these changes in the social order a new system . . . The historian may call it merely a war state—for the new system may not last longer than the war."

¹ *Op. cit.*, Ogburn, pages 140-141.

FOUNDATIONS FOR A SCIENCE OF CULTURE

"If, on the other hand, after the peace there should occur severe crises requiring extensive governmental direction, and the war state is only partly demobilized, then the period under review will have left a heritage of great importance to our social system, whether we like it or not. *It may have then given a tremendous push in what will be the long evolution of the economic system from a laissez faire capitalistic one to a managed economy, directed in its significant phases by the government which will then have become the most powerful of all social institutions.*"

"The all-important question is what will happen after the war in the changes of the boundary lines of our social institutions."
[My italics.]

/ / /

Professor Ogburn's was merely the first of many studies of the changes taking place in industry, cities, rural areas, families, social life, the arts, and other phases of the culture. After World War I government officials recognized almost at once that serious economic problems were beginning to confront our people. The sharp rise of unemployment led to the setting up of the President's Conference on Unemployment in 1921. Out of its discussions emerged, in the next eight years, three national surveys of the economic system:

- Business Cycles and Unemployment (1922–1923)
- Seasonal Operations in the Construction Industry (1923–1924)
- Recent Economic Changes (1928–1929)
- Four years after *Recent Economic Changes* a fourth distinguished committee published its report, *Recent Social Trends* (1933). In the following years a host of new studies of the producing and consuming capacity of America were made.

TWO OPPOSED SOCIAL PHILOSOPHIES AMONG THE STUDENTS

When the Great Depression broke on the dazed American people and its bewildered government in 1929, the century of sociology building since Comte and the generation of scientific study since Veblen had produced two groups of students of economic society and two philosophies of the economic system. Long before the depression began, both were making studies of our society. It is important that the educator shall understand these two groups and their respective views,

because he must *find a way to bring both of them before the youth of America*. The present impasse over full production and full employment is perfectly reflected in them. I shall take the space, therefore, to report their findings as they emerged in fifteen years of vigorous study.

Both groups were essentially sincere and loyal Americans. I think there were not great differences, if any, in the level of intelligence in the two; most of them were "Ph.D.'s" from distinguished graduate schools. Both acclaimed the fundamental principles of American democracy, wanting to maintain freedom and in as many areas of life as possible, and to permit each individual to rise to his highest stature. Both claimed to approve and use the scientific method. As far as I can see from their life histories, they came from the same general middle-class sectors of the American people.

Nevertheless, in spite of these apparent similarities, the *answers which they gave to the insistent questions about the social-economic system were poles apart*; there was one fundamental reason: their social philosophies were poles apart. Since that same basic cleavage exists in the million teachers of America today (although *naïvely* in most instances), it is worth some examination.¹

I. THE CONVENTIONAL ECONOMISTS

The first group consisted of at least three fourths of the academic economists of America, the faculties of schools of business, and the experts of the great banking houses and corporations. They were well exemplified in the group that produced *Recent Economic Changes* in 1929. I shall call them the conventional economists. I think that their attitudes and concepts were most subtly formed by *the ruling* conception of the authoritative leadership. The philosophy of life held by these going economists was the classical, or received, tradition of Thorstein Veblen's day with only the supernaturalism eliminated.

Down deep under the surface of their democracy these men were still exponents of the *laissez-faire*, natural rights theory of property ownership and government. They sincerely believed in the doctrine of scarcity — that there were not enough physical goods and services to

¹ Personally I think their temperaments were very different also, and that the presence of such differences in the raw materials of their personalities goes far toward accounting for their differences in philosophy; but I cannot prove it with the existing data. I hope the problem of the root factors of personal social philosophies will be carefully investigated in the coming years.

give all the people a high standard of living. They still held to the Neo-Victorian theory that the right to property was prior to the right to work, to health, to education — in short, to life itself. The nation-wide advance, *via public conscience*, of the concept of security and well-being for all the people had made little impression upon their minds and moods; they still believed in free competition in the free market, that government should keep hands off, that the Fourteenth Amendment was the proper instrument for the judicial defense of business. They were for the Individual . . . “I” . . . wherever his interests clashed with those of the Social . . . “We.”

All of this is clearly exhibited in their 1929 survey, *Recent Economic Changes*. This report¹ not only sums up the characteristics of economic life in America in the 1920's, but it also shows us how superficial was the insight of the rank and file of the scholars into the nature of social change. For one thing *they were certain that nothing very new was happening*. Their studies emphasize the central role of mechanical power in accelerating the production of goods and in the source and use of credit; these two factors go far toward accounting for what they insist is the nature of production and “prosperity.” Business leaders have begun, they said, “consciously to propound the principle of high wages and low costs as a policy of enlightened industrial practice.” They show statistically the rapid increase of production and the expansion of human wants; the standard of living is rising, leisure is increasing, and this means more arts and sciences, books, magazines, travel, sports, motoring, the movies, and radio. Mild warnings were given of the danger that “technological unemployment” will increase with the advancing efficiency of machine production. But that is minor; “wants are almost insatiable . . . a boundless field is before us . . . we have a great national opportunity”; the two volumes ring out with examples. On the whole, the report *exudes confidence in the stability of the system*. “*In the marked balance of consumption, the control of the economic organism is increasingly evident.*” But — “*to keep it producing continuously, it must be maintained in balance.*”

¹ The factual investigations for *Recent Economic Changes* and the two earlier surveys were made by the National Bureau of Economic Research, organized in 1920 in response to a nation-wide demand from business and labor leaders, university scholars, and learned associations. The directors of research were Edwin F. Gay of Harvard and Wesley C. Mitchell of Columbia. Mr. Herbert Hoover Secretary of Commerce, was Chairman of the Committee on Recent Economic Changes; later, as President of the United States, he brought about the creation of the Committee on Recent Social Trends, with Mr. Mitchell serving as chairman.

The Editors' Foreword to *Recent Economic Changes* made these statements *only five months before the collapse of October, 1929*. Such judgments seem incredible to us today; but they reflect perfectly the general run of thought among businessmen, political leaders, and economists who held the leading positions in American universities in the spring of 1929. Yet at that moment another group of students was warning that we were whirling on into the fifth major cycle of artificial American prosperity. A deeper insight showed that the basic industries were sagging badly; that the farmers had never recovered from the farm-land boom of World War I; that the coal mines were running on part time throughout the 1920's, while overtime wages and overtime profits were being paid in the automotive and electrical industries. Looking back upon the '20s, we can perceive today the boom character of the whole trend. The purchasing power which paid for these trappings of a luxury civilization was largely artificial; \$6,000,000,000 of obligations were created by installment buying in the post-war decade.

Their Analysis of the Depression

From 1929 to 1932 these men witnessed the failure of the Hoover administration to prime the economic pump and to bring relief to millions of sufferers. After 1933 they saw Mr. Roosevelt, faced by a national breakdown in the production and credit system, bring in his much cursed and discussed "Brain Trust" and try strange new theories and remedies. Deeply disturbed by the phenomenon of a government which was guided by a rival and radical philosophy, spokesmen for things-as-they-had-always-been hurried books and articles into press,¹ giving four answers to the pressing question: Why will not the economic pump prime?

First, they said: the earlier depressions — 1857, 1873, 1903, 1907, 1921 — all occurred in the initial stage of industrialism — in the "great

¹ See for example:

- (1) Ralph Robey: *We Have Recovered Before*. (Mr. Robey was, still is, an instructor in Journalism at Columbia and banking editor of *Newsweek* and the later consultant for the NAM who led the attack on so-called "radical" textbooks in the schools.)
- (2) B. D. Donham: *Business Adrift*. (Mr. Donham was Dean of the Harvard School of Business, represents a typical businessman's view.)
- (3) Arthur Salter: *Recovery*.
- (4) Dennis: *Is Capitalism Doomed?* (Frankly a "fascist" view.)
- (5) Schlichter: *Modern Economic Society*. (The standard statement of the conventional college economist.)

industrial expansion" when nothing could really stop the advance of the system. Everything was growing. The population was doubling every generation; in every decade the demand for goods was greater.

Second, the structure of the heavy industries of the new country was just being built — steel, copper, coal, oil, the first great dams and power plants, railroads, telegraphs and telephones, thousands of new manufacturing towns and cities — with their manifold small industries, a tremendous wholesale and retail buying and selling enterprise to go with them. Everything was new and expansion was in the air.

Third, it was the period when the free land of the country was being settled; even though depressions came, displaced workers could still homestead farms in the West.

Fourth, since it was the first period of industrialization, there was a recurring need for new labor to transport the new raw materials, to mine the new fuels, to repair and replace the new machines, to sell them and to do many other new things. New "blotting" industries had sprung up fairly quickly, the electrical and ship assembly industries, automobile, wireless, radio, motion picture, new alloys, new plastics, aviation, manganese, aluminum. This absorbed most of the labor displaced by the advancing technology, although with some delay and suffering to the workers. Hence it was felt that the slack of "technological unemployment" would always be taken up by the creation of new industries, and hence there would always be new jobs.



Some of the younger and less crystallized economists and sociologists among this group, having widened somewhat the academic blinders which they still wore, rebutted their colleagues, saying: *first*, the frontier had practically all been preëmpted and cleared; the unemployed in industry could no longer go West and homestead land. *Second*, because the rate of population growth had been slowing down sharply and was approaching zero, each decade after 1910 showed fewer and fewer people to make new demands for the material things of life. *Third*, the effect of enormous increase in immigration from southern and eastern European groups between 1895 and 1914, with its consequent accent on large families, was still operating in our schools and our labor market; every year nearly a million young Americans still continued to leave school to go to work.

But even these explanations did not explain why 10,000,000 workers were still without jobs after several years of unprecedented pump-

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

priming. In the early 1930's many students were insisting: "There must be something new in this situation that we have not yet discovered."

But three fourths of the country's economists continued to insist that nothing essentially new had taken place — nothing that would not be taken care of by the "natural law" of supply and demand and by new inventions and, in consequence, new industries. They agreed with the businessmen generally that government should get off, and out of, business and let the natural law of economy take its course. Some of them, and most businessmen, said bluntly that we have always had depressions and always shall have them. This is a "law" of our system. We must accept the system as we do the weather and the universe. There's little we can do about them. The American Way is "Every man for himself"; we must not restrict the individual in his freedom of enterprise. That, as President Harding had put it, was "normalcy"; let us get back to it and get on with the free expansion of America.

II. THE NEW SOCIOLOGISTS: THE PHILOSOPHY OF EXPERIENCE AGAIN IN ACTION

The Great Depression brought together from many scattered centers a second group of students of the social system. They came from the university social sciences, business and industrial research and engineering, government research and planning, social, church, and educational organizations. Some were college professors, or former professors in departments of the social sciences; for example, Alvin Hansen (Harvard), Rex G. Tugwell and Roy Stryker (Columbia). Some were distinguished industrial, civil, mechanical engineers; witness such members of Veblen's 1919 Technical Alliance as Bassett Jones, Frederick Tolman, Frederick Ackerman, and the men stimulated by them, Harold Loeb, Felix Frazer, and Walter Rautenstrauch; and closely related to them were such distinguished publicists as Stuart Chase and Jay Franklin (John F. Carter). In one way or another they were all products of Veblen, James, Dewey, Robinson, Thomas, Turner, *et al.* I shall therefore call them The New Sociologists. *They are today the mid-century sponsors of the philosophy of experience in social reconstruction.*

It was at this moment, 1933–1934, that the *Social Frontier* group at Teachers College, Columbia, served as the center around which the sixty Fellows of the John Dewey Society organized and began their

studies of the social and educational system. In the same years the Economic Committee of the Progressive Education Association began its work.¹ Within the liberal church organizations, groups formed and studies and plans began to come from the press in 1931, 1932, and 1933; witness the work of such staff members of the Federal Council of Churches of Christ as F. Ernest Johnson and Benjamin Y. Landis.

The Beginnings of a National Council of Design

It is of historic importance that while many of the students of culture and society continued to work in the universities and research foundations, President Roosevelt brought some of the most distinguished students into the Federal government. I refer to such men as Messrs. Hansen, Ogburn, Eliot, Cooke, Merriam, Person, Goodrich, and Mitchell on the National Resources Planning Board ... Messrs. Lilienthal and Morgan and their TVA social engineers ... Mr. Hugh Bennett and his Soil Conservation Service ... the Federal Arts Projects under Hallie Flanagan and other creative leaders ... Messrs. Fly, Watson, Dodd, and others in the Federal Communications Commission. History will honor President Roosevelt for these first steps in social design. At the very moment when the people needed, above all else, a government motivated by good will and guided by disinterested scholarship and creative imagination, he tried to give it to them. As for the Congress itself, I would catalogue as coördinate in importance with the work of the social engineers in the Executive, the work of Senator Joseph C. O'Mahoney of Wyoming and his Temporary National Economic Committee. Their reports total twenty thousand printed pages and their findings are based on the researches and testimony of several hundred experts over a period of three years. Here in TNEC's library is a stirring message to the American people that they can now have the abundant life and a challenge to take the necessary steps to get it.

These skilled, top-ranking designers and executives actively at work in government in the 1930's constituted *a new and exciting phenomenon*. They came from every phase of the culture: from professional government and government research, from mechanical engineering and business and farm leadership, from social welfare agencies — including public health, diet, and nutrition — from educa-

¹ See Chapter XIX. See the *Social Frontier* (1934-1943), and the seven *Year-books* of the John Dewey Society for the study of Education and Culture. See also my *The Great Technology* (1933) for the record of both these groups.

tion and the creative arts, including writing, painting, sculpture, theater, dance and music, architecture, arts and crafts, industrial design. Here was the thing that so many of us had dreamed about and pleaded for and worked for — science in government, research in government, brains in government, disinterestedness in politics and in government.

Meanwhile, the larger body of students continued their scientific studies of culture and society under private auspices. As a consequence of the vigorous work on all these creative frontiers, *there was available, at the very moment that the social system froze in the early thirties, a voluminous body of objective data dealing with the nature of our times. It was the work of social scientists known and respected around the world. They were neither "wild-idealists" nor crackpots of social theory. There was not one party communist or socialist among them. They constituted an impressive body of scientifically and socially minded students.*

What Did the New Sociologists Believe?

I have already noted the beliefs they held in common with the defenders of things-as-they-had-been: their loyalty to the American concept of the freedom of the Individual, to the implication of the Darwinian concept of control of one's environment, to the use of the scientific method. But aside from these traits and attitudes their outlook on American life in mid-century was entirely different. *First:* these new sociologists held the philosophy of experience. Because they accepted the scientific method, they denied every philosophy a hearing on the grounds of authority alone; every one, *no matter how authoritative or "classical" it was, was treated as a hypothesis to be questioned.* To them there were no irrevocable "laws" in social life; changing events produced changing conditions. *These men were really social engineers,* treating the impasse in the social system in the Great Depression as a social problem to be studied and solved. They believed that every generation should *face its social situation as a novel problem* and think things out for itself.

Second: they were *historians.* They believed that the conditions and problems of today are but the current revelation of the continuing trends of yesterday, leading toward tomorrow. To understand the problems of today, therefore, we must plot out *all the significant* trends of yesterday. We must then project them into all the possible optional pathways toward tomorrow that our imaginations, backed by our knowledge of trends and factors, can envisage.

Third: these new sociologists were humanitarians. They held that *the right to life* — hence the right to work, health, education, personal growth — *is prior to the right to property*. Hence, while they wanted so much freedom in every area of life as could be got in a technically efficient and interdependent society, they were staunch believers in the superiority of “We” over “I” wherever the interests of the Individual and Society clashed.

Premonitions of the New Analysis:
Recent Social Trends: 1933

The nature of the appraisal of the social system that the new sociologists were to make before the outbreak of World War II was forecast by the Report of the Committee on Social Trends. Dr. Mitchell was still chairman, but Messrs. Ogburn, Odum, and Merriam, representing a broader interest in social and political analysis, were the determining members of the committee, and Ogburn and Odum were the directors of research. Hence, although the report appeared only three years after *Recent Economic Changes* (and what a three years!), it made a totally different appraisal. The new sociologists frankly recognized the “epoch-making events” of the first third of the twentieth century: World War I . . . inflation and deflation of economic life . . . enormous increase in productivity “and the tragic spread of unemployment,” prohibition, birth control, race riots, women’s suffrage, the cutting off of immigration, the increase in crime and racketeering, “the sprawl of great cities,” expansion of education, the rise and weakening of organized labor, the growth of fortunes, the advance of medical science, enthusiasm for sports and recreation. The Committee faced boldly a wide range of baffling problems and the sharp contrasts in health, efficiency, and tolerance.

An Industrial Society in Transition:
It Must Learn to Plan

The picture painted throughout the report is that of a *highly complex and rapidly changing society, advancing at uneven rates and causing grave problems of employment and of class and racial conflict*. The major emerging problem is that of “closer coöperation and more effective integration of the swiftly changing elements in American social life.” A platform and a program are presented for “a successful long-time constructive integration of social effort.” *Our people must*

be willing and determined to plan the economic and political re-organization of American life rather than pursue a policy of drift. They must understand and recognize the role of science in this, and they must bring together scientific techniques, modes of social education and action, and broad social purposes. We must make more use of intelligence to offset the obvious role "played by tradition, habit, un-intelligence, inertia, indifference, emotions, or the raw will to power." Gravely and intelligently looking into the future, trying to foresee the steps by which a vast amount of coöperative effort among the students of social problems and leaders in government, in the learned societies, in business, labor, and agriculture, *they propose that the people create a "National Advisory Council, including scientific, educational, governmental, economic (industrial, agricultural, and labor) points of contacts."*¹

Recent Social Trends, made in the first three years of the Great Depression, was a wise and brave study motivated by the vision of a new world.

STUDIES OF THE PRODUCING AND CONSUMING CAPACITY OF AMERICA

The report was barely off the press before President Roosevelt was in the White House and beginning to surround himself with the personnel of a vigorous planning group.

Full Production and Employment: A Problem in Social Engineering

Guided by the democratic philosophy of experience and the scientific outlook, the new sociologists insisted that the operation of the American social system must be treated as an engineering problem. Examining its principal factors, they said:

- 132,000,000 needing the highest level of goods and services that their continent and related parts of the earth can provide them
- The known giant natural and human resources of that continent
- The known giant technology that in 1929 had already been developed upon it; a technology approaching technical efficiency

¹ It was this that President Roosevelt tried to do between 1933 and 1941.

FOUNDATIONS FOR A SCIENCE OF CULTURE

— The world's best trained and experienced technical personnel in design engineers and scientists, in skilled executives, managers and operators

Regard these as the factors of a problem in social science — social psychology as well as economics and government. Let us work at it as a problem, overwhelmingly complex though it may be. The growth of industrial capitalism, the students said, had been so incredibly swift, that *an unexpected coincidence of catapulting factors had brought about a situation that may represent a new social phenomenon, demanding new solutions.*

They asked five questions:

First: Assuming approximately 100 per cent efficiency — no human blockages — in the system, how much can the economic system produce?

Second: How much has actually been getting to the American people?

Third: In what directions are the basic social trends moving and are they keeping pace with one another?

Once we have definite quantitative answers to these questions, the economists and engineers said, we can then ask and try to answer:

Fourth: What are the chief factors in this process that are holding us back?

Fifth: How much shall we depend on private enterprise and how much on government in getting full production and full employment?

I. HOW MUCH CAN THE SYSTEM PRODUCE?

In the period from 1931 to 1936 two groups brought out new answers to the first question. One was composed of industrial engineering leaders — Messrs. Harold Loeb, Walter Polakov, Felix Frazer, and Bassett Jones, working with unemployment engineers under the auspices of the Federal government. The other group was the Brookings' economists, directed by Messrs. Moulton, Nourse, and Levin. Each was independent of the other, and because training and experience were different, their studies were based upon different postulates about modern society and the economic system. Several years were

given to each study and no effort was spared to guarantee their completeness and objectivity.¹

The cautious Economists' Study showed that in 1929 America's resources, machine technology, and personnel were sufficient (assuming the elimination of production bottlenecks) to produce a national annual income of \$96,000,000,000. An equitable distribution, they said, would have given a floor for all families of not less than \$3200 worth of consumer goods and services a year and, for some families, a ceiling much higher.

The Engineers' Study stated that, *if the economic system had been run at its full capacity* by eliminating the real bottlenecks of investment, production, and distribution — and *without any more public ownership* — the efficiency of the system could have been raised by 40 per cent, with a resultant national income of \$135,000,000,000. This would have given *full employment* and each family of four a basic annual income of not less than \$4000 and some families five to ten times as much. Both studies agreed that the natural and human resources and the machine technology were available in 1929 to produce a decent living for all the people — one that would actually exceed the "adequate-diet" standard for non-farm families of \$3000 per year set by the United States Department of Agriculture's Bureau of Home Economics.

These reports were made a decade ago. They were given little attention by most conventional economists and publicists, and were completely ignored by political leaders, newspaper editors, and business leaders generally. Ten years have passed, three of which found our country involved in World War II. In 1944 *under only two years of war the actual annual income of the country was \$150,000,000,000* (1939 dollars). But, as we have already said, even under "Total War" the total resources of the nation were not actually harnessed for the effort — perhaps not more than 70 per cent of the maximum. *Nevertheless, what the Engineers' Study had predicted had been brought about in three years' time.*

¹ *The Engineers' Study* was published in a popular volume; see Harold Loeb *et al.*: *The Chart of Plenty* (Viking Press, 1935), the supporting data in the *Report of the National Survey of Potential Produce Capacity* (The New York City Housing Authority and the Works Division of the Emergency Relief Bureau, City of New York, 1935). *The Economists' Study* was published in four important volumes; see Harold G. Moulton *et al.*: *America's Capacity to Produce; America's Capacity to Consume* (Brookings Institution, Washington, D. C., 1934). No teachers college or school system should be without these.

2. HOW MUCH WERE THE PEOPLE GETTING?

Students had been building up the answer to this question for more than a decade. Until the menace of war compelled us to do what was necessary to run our system at approximately full tilt, *the people were not achieving half of the production that the foregoing studies showed to be possible.* This was the conclusion of many careful studies of the incomes of small groups of families; for example, to name but a few:

- The Lynds' study of "Middletown" midst the "prosperity" of 1924 showed half of the people getting less than \$1500 per year per family.
- The New York Department of Labor study in 1929 gave an average annual family income of \$1470.
- The United States Bureau of Labor Statistics study in Detroit in 1930 gave an average of \$1711.

All of the reliable investigations are in approximate agreement that more than half of our American families, even in the "prosperity" years of the late 1920's, got less than \$1500 a year — that is, less than half of the adequate-diet standard and less than half of the potential capacity of the system.

And, for all non-farm families, The Bureau of Home Economics of the United States Department of Agriculture summed up its study, saying:

"Sixteen million, or 74 per cent, did not have sufficient income in 1929 to provide an adequate diet at moderate cost. Nineteen million, or 90 per cent, were not in a position to enjoy a liberal diet."

According to the Economists' Study, 27,500,000 families in 1929 received \$77,000,000,000. So uneven was the distribution of this income among the people that 16,300,000 families — 60 per cent of all — received less than \$2000. *More than three fourths* of our American families did not get the \$3200 which, according to the Brookings estimate, America's powerful economic system had the capacity to give them! In fact, 11,650,000 families — *42 per cent of all* — *received less than \$1500 per year.* Even more startling was the fact that *one tenth of one per cent* — 36,000 rich families — *received as much as did 42 per cent* — 11,650,000 poor families.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Three years after the publication of the Economists' and Engineers' Studies (1938), a report of the government's National Resources Committee stated:

"In the fiscal year 1935-1936, one third of America's families . . . had less than \$780 income, one half had less than \$1070; two thirds less than \$1459, nine tenths less than \$2500."

Thus, by the middle 1930's the students could tell the American people for the first time in their history how much they could produce and distribute if the hampering factors in the system could be eliminated. And a few *educational* sociologists were telling that to the schools — and sad to say, were not being heeded.

3. WHAT DO THE TRENDS TELL OF THE NATURE OF OUR TIMES?

While some of the students went boldly on to wrestle with the baffling question, *What is holding us back?*¹ a new group of social engineers were assembling a convincing body of proof that ours does constitute a new and critical period in the modern history of industrial capitalism. Looking back on their studies, some of which extend over a full generation, we can see now that they were carrying on a new kind of historical research. *They were subjecting the growth of the chief physical aspects of the social system to quantitative measurement*, and their technique included the fitting of curves to the historical data of the social system. With the coming of the Great Depression Mr. Bassett Jones, an industrial engineer, applied the curve-fitting technique in a memorable metrical-analysis of the time — quantity relations revealed in a hundred years of industrial production. In the first study of its kind curves¹ were fitted to the historical facts of (1) population . . . (2) production . . . (3) man-hours of labor required to produce such standardized commodities as coal, iron, wheat, corn, cotton, wool, and their fabricated products.²

The quarter-century of statistical analysis and curve-fitting that has gone on does establish beyond question that our times, and especially the fifteen years from 1905 to 1920, constitute a critical period on the curve of industrial capitalism. Most of the plotted curves of rate of growth in population, in the production of metals and alloys, fuels, fibers, foods, of basic commodities, in literacy and other social

¹ Population curves had been studied this way previously.

² See his *Debt and Production* (John Day Company, 1933) and his *Horses and Apples* (John Day Company, 1935).

FOUNDATIONS FOR A SCIENCE OF CULTURE

phenomena, *change from positive to negative in our period*. This is clear proof of the *transitional nature* of our times, and it suggests definitely that *our years constitute a point of critical change on each of the basic curves of Western culture*. Such points rivet the attention of any mathematician, but when located on curves of social trend they are clear danger signals to a people. They tell with fidelity when economic-political-psychological theories as well as social practices must be looked into; *when, indeed, we not only can, but must, reconstruct certain parts of our social system*.

These students have studied not only the changing *shape* of the curves of culture-growth. They have begun also to document, and to confirm, Dr. Ogburn's hypothesis that the "adaptive" culture was lagging far behind the "material" culture. In 1933 I summed up the situation¹ by saying that three basic social trends had got out of step with one another: (1) *economic productivity* — that is, the ability of men to produce economic goods and services — had far outstripped (2) *social invention*, especially that ability of society through the cooperation of its leaders of government, business, and agriculture to regulate and control the direction and extent of economic productivity. But (3) *popular consent* — that is, *the ability of our people to carry on government on the principle of intelligent understanding of the governed* — had dropped far behind both the others. Basically the solution of our current social problems hinges upon getting a large intelligent minority of the people to understand the lags between these three trends. We have mass unemployment today primarily because they do not understand. Our inventive brains have been concentrated for decades on improving the production of goods, especially in the heavy industries because there lay the all-powerful incentive of a sensate culture — the making of a fortune. Meanwhile such baffling problems of distribution as the prodding of idle savings and other surplus capital into investment which will give employment were largely ignored.

The equations of Bassett Jones's curves confirm these findings by showing significantly that the rate of population growth lagged behind the rate at which the productivity of a worker in mechanized industry advanced,² and — most significant for the problem of unem-

¹ In *The Great Technology*.

² That is, specifically, while the rate of population growth was advancing as "the square of the time," that of production was growing as "the cube of the time" — of some commodities as the 4th, 5th, 6th power of the time.

ployment in a technically efficient civilization — *the productivity of a worker was multiplying faster than almost any other social phenomenon.*

As I write, government officials and advisers, notably Dr. Floyd W. Reeves, are beginning to report the frightening acceleration in productivity under war conditions. To give a single example:

The annual increase of productivity per worker in heavy industry:

1920–1929 inclusive 2 per cent

1930–1939 inclusive 3 per cent

1940–1944 inclusive 4 per cent

At this rate the productivity of a worker will more than double in less than a generation.

New Concepts for New Social Problems

As such facts were laid bare, alert social scientists steadily recognized that under such changed conditions new concepts must be found to replace the old outmoded ones and new social machinery has to be invented to fit them. Consider, for example, the novel population problems. As the rate of population growth slowed down, the life expectancy of the American people quickly increased to beyond sixty; soon it will be seventy. The advancing requirements of technical skill and energy on the worker dropped the “old age dead line” in industry from sixty-five to forty. But at the same time the proportion of the population to be supported by public taxation increased. It was clear that these two “old” ideas — namely, that the American worker was young and vigorous and that there would always be work for all in American industry — were no longer true.

Similarly, such concepts as: “expanding economy,” . . . “scarcity,” . . . “*laissez faire*” . . . “law of supply and demand” — basic to the nineteenth-century economists — began to take on a new meaning or become outmoded! “*An expanding economy*” came to mean — not of more people, but of more life — a far richer way of living which could be got by running the social system at full employment at abundance-level, and distributing the life obtained to the people. The old idea that physical things were really scarce was outmoded by such findings as those of the Brookings and Loeb studies. Abundance was now possible.

The Jones analysis augmented the questioning of other long-accepted ideas — one of the most important being the concept of *laissez faire* — *every-man-for-himself*. Both the advancing social trends and fifty years of legislation had increased the conviction that *laissez faire* was actually outmoded. Thus “freedom” was being redefined as “control so designed that all have an equal opportunity for freedom,” rather than as “absence of restraint.”¹ Thus the very definition of the central concepts of democracy underwent an increasing amount of criticism and reinterpretation.

As new ideas slowly ousted old ones, the whole problem of “purchasing power,” including the respective share of owners, managers, and workers in the national income, was subjected to critical review. It was formerly assumed that there was a definite discoverable relation — established on a basis of bargaining between owners and workers — between what a worker could produce and what society could pay him for producing it. However, concepts have changed steadily and at the present transitional moment *there seems to be no discernible relation on such a bargaining basis between what a worker in quantity-production industries can produce and what society can pay him for producing it.*

4. WHAT ARE THE CHIEF FACTORS
IN THE PRODUCTION-EMPLOYMENT IMPASSE?

On the fourth question, What are the major factors of the creaking system? there has been no essential disagreement. Both the long-time and the current trends had set them out sharply. They are six in number: Four are Individualistic or “I” factors; two are Social or “We” factors.

A. FOUR INDIVIDUALISTIC “I” FACTORS

First: The banks and other INVESTMENT AND CREDIT AGENCIES

— Here is a great concentration of power and one of the two chief controls over the economic system and over employment.

Second: The Business Structure — manufacturers and merchants, large and small

— 34 billion-dollar corporations, holding virtual monopolies over prices of many basic commodities which are indispensable to the American people.

¹ See James F. Feibleman’s *Positive Democracy*; also my *Now Is the Moment*.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

- Some 300,000 corporations and private businesses organized in two spearhead peak-trade associations: the National Association of Manufacturers and the United States Chamber of Commerce. This is the greatest single source of political power, with vast financial resources for the publicizing of its program of return to private enterprise.
- Hundreds of thousands of little businesses and some 3,000,000 owner-worker shops and stores . . . Unorganized, but reflecting the “business” point of view in hundreds of thousands of neighborhoods, in thousands of communities and their Rotary, Kiwanis, and Lions clubs, in 10,000 Boards of Education, etc., etc.

Third: The Farmers

- Several thousand large farming corporations, led by city financial and business leaders . . . organized in spearhead price, marketing, and political bureaus as the Farm Bureau Association and related regional organizations such as the Associated Farmers of California. In all respects these are business, not farming, enterprises. They constitute a large national center of power, operating legislative lobbies and collaborating closely with banking and manufacturing enterprises.
- 6,000,000 small farmers, scattered over the country, unorganized, resentful, after two generations of struggle, at the disparity between business and farming standards of living . . . bewildered by the conditions of our society . . . not understanding labor, fearing and suspecting it . . . 150,000 of these small farmers are organized in the National Farmers’ Union, in carrying on legislative lobbies like those of business.

Fourth: The Workers: Labor

- Approximately 57,000,000 workers (the 1945 estimate), mostly in towns and cities.
- About 13,000,000 organized . . . fairly equally divided between the conservative AFL which collaborates with business and the progressive CIO which collaborates with National Farmers’ Union and all liberal forces . . . Racketeering still rampant among conservative groups. Under the CIO’s leadership, for the first time in our history, labor is playing a vigorous role in elections and lobbying for legislation . . . No

FOUNDATIONS FOR A SCIENCE OF CULTURE

immediate prospect for real collaboration between the two wings of organized labor.

- 40,000,000 to 45,000,000 unorganized workers in villages, towns, and cities. These constitute half of the adult population, the rank and file believing in "live and let live," wanting to get on in life and let their neighbors get on. Opinions and beliefs are molded by the daily stereotypes of the mass-audience communication system — which is essentially a monopoly, centered in the tabloid press, a few newspaper chains, movie chains, radio networks.

B. TWO SOCIAL — "WE" FACTORS

Fifth: The Coöperatives

- A new and growing movement comprising a few large corporate enterprises and several hundred consumer coöperatives plus a few producer coöperatives — in agriculture and in city neighborhood marketing.
- This movement contains great potential for relocating economic and political power legitimately in the multitude of individuals who constitute the American people. If it could grow to control one tenth of commodity sales, it would serve as a powerful price-yardstick. So far, its total effect in the struggle for power is negligible, except as a minor educational force.

Sixth: The Government

- This factor has undergone such a drastic change in the past seventy-five years that I shall discuss it in some detail under the caption:

5. HOW MUCH GOVERNMENT IN THE SOCIAL SYSTEM?

How Freedom and Control Became a Psychological Problem in Our Times

I have outlined the six factors in the present economic impasse in the framework of the perennial problem of "I" and "We" because today we confront it again — the age-long problem of freedom and control.

It was not a crucial problem on any of the frontiers of American history. To our pioneer fathers the continent was limitless; there was and an elbow room for all. "Keep off each other and keep each

other off" was both an appropriate sanction and an effective slogan to authorize and propel individualism. With one reservation we can say that it worked; the exception was that it produced ruthless exploitation of land and people . . . and tragic waste of both. But it worked badly in the complex industrial communities that mushroomed up behind every frontier — and for perfectly well-known psychological reasons. Three factors, working together in a century of exploitive history, account for it.

First: The psychological drive for a better living. The incentive — a real virgin continent; a fortune for the taking — coal, oil, water power, the unearned increment in urban sites. Law-made wealth — easy money. Generation after generation it lured men, drove them on. The driving motive power behind hard work — "I shall be rich," or "Anyway, I shall have a better living." Psychological factors were tied in inextricably with economic and geographic ones.

Second: The nation-wide belief that every man was free to pre-empt and exploit without let or hindrance. Laissez faire. Every man for himself. First come, first served. It guided and propelled the continents of the world for the next century. By the 1930's it was the talk of even politicians and the general public in America.

Third: The psychological "law" of individual differences. This concept, probably known to every practical philosopher, has been sufficiently documented in the foregoing pages, confirmed by a multitude of studies, from Quételet's *L'Homme Moyen* in the 1840's to Thorndike's three-volume *Educational Psychology* in 1913.

These three factors are the subtle psychological roots of the ancient problem of "I" and "We," reinstated by the conditions of our times. *Given the American Scene of the 1800's: The Lure of Gain, The Public Sanction of Laissez Faire, and Individual Differences — and The Problem of the Power and the Glory Emerged Again.* While the separate facts are probably known to all my readers, I state them here to give them a special turn: *to remind us, first, that they are all basically psychological in nature and, second, that they must be studied together*, as an interrelated unit, if the problem of freedom and control in modern life is to be understood and solved.

The tangle of the six competing factors of the American economic system is, then, the historic conflict: Who rules whom? And — how? It is the problem of all the industrializing peoples of the earth. All of them, reaching toward the democratic way of life while facing the problem of socialization, are locked in a struggle for power. In each

of their societies (except the Russian) — the British, the French, the Scandinavian, the Belgian and Dutch, the Chinese, as well as the American — the millions of individualists are lined up in the same six competing phalanxes — business and financial men, farmers, workers, coöperatives of citizens and Government. In each one the basic question is the same: How much private enterprise? How much coöperatives? How much Government? *Each is a Mixed Economy seeking the balance between I and We.*

The Critical Factor Is Government

But we know now the answer to the fifth question: Which is the critical factor? *The single positive factor in the economy — the factor that can operate freely and effectively when all the others are stalled in conflict — is Government.* In any complicated situation there must be *one factor that can act.* To act it must have sovereignty and motive power and resources. Government fits that bill of particulars. It has sovereignty over all. It has financial power. It can assemble the country's creative brains anywhere, any time. It can be, perhaps is today, the single most disinterested factor.

The unique role of Government becomes clear if we analyze out of the production-employment impasse the factor that holds us back. The sharply contrasted conditions provided by the Great Depression of 1929-1939 and World War II, 1939-1945, have smoked the hidden factor out into the open, where it can be studied. The bottleneck that stymied the industrial producing-distributing system is *the lack of a BUYER — someone to give orders, with payment guaranteed, for goods and services large enough to keep the system running full tilt.*

This is established by the contrast between what happened in Germany and Russia before and after dictatorship, and in Britain and the United States before and after the war began. There was no unemployment in Germany after 1934, in Russia after 1928, or in Britain and America after they went to war. The buyer in the German industrial system under Hitler was the Government. The buyer in the Russian industrial system under Stalin was the Government. The buyer of half the purchases in Britain after 1939 was Government. The buyer of half the purchases in America after 1941 was Government. In these instances the entire machine-enterprise started up and went to work. There was no unemployment.

Have we said thereby, either that we should rely on war to keep us all at work, or that we should resort to dictatorship and plan totally

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

as in Russia, Germany, and Italy? Not at all. *But if we are to have full employment we must always have enough buyers functioning to order goods and services without interruption and with payment guaranteed. That, we now know.*

For a century our national life was hampered by the conviction "the less government the better." Yet, under the impact of national tragedy in 1933 *all parties – businessmen, bankers, farmers, industrial workers – turned to the Federal government.* For a decade and a half, therefore, Government has been in the center of the stage. Led by an astute politician, it broke all the historical precedents of our national economic political life – proclaiming "the more government the better." In spite of the failure to prime the pump of a *self-sustaining* business system, its stimulation was the prod that revived production and profits. And it did keep the people with the President through more than three precedent-breaking terms.

Is Government's role, then, the really *new phenomenon in our situation?* Both sides insist that it is, although for different reasons. The financial men and businessmen insist that it is new – new and alien, an interloper. To employ Government as the Roosevelt Administration did is "foreign to the American way," which is to take the lid off and leave everything to business. The new sociologists, Professor Alvin Hansen in the lead, also say that the advancing role of Government is the new factor; Government is the only factor that can lead out in advance, stimulating and interjecting capital and ideas as well as sufficient regulatory control to maintain a Balanced or Mixed Economy.

EDUCATION MUST TEACH THE HISTORY OF THE INCREASING ROLE OF GOVERNMENT

Although no democratic people has successfully answered the question – "How much government in the social system?" – *this we now know: If the principle of consent is to be implemented, public education must bring up a generation of young Americans who at least understand the problem.* This question must no longer be shunned in the curriculum. While the schools cannot and will not try to give an answer to our fifth question, they will supply all the documented historical data needed to grapple with it; and in addition they will bring to the young people *both* current contending interpretations of the problem and the data – that of the conventional historians and econo-

FOUNDATIONS FOR A SCIENCE OF CULTURE

mists and the philosophy of experience of the new sociologists. We can be even more definitive than that. The historical record that we shall bring into the curriculum will establish beyond doubt that for seventy-five years the actual trend has been steadily toward *more* government in the social system. While this is no place to recite the history itself, I shall at least take the space for a few succinct illustrative captions. The record of the trend would treat such actual changes as these:

- In the 1880's the *laissez-faire* system of individual préemption and exploitation of property was challenged by discussions in labor unions, chambers of commerce, women's clubs, farmers' organizations, caucuses and conventions of the political parties, courtrooms, editorials in the press, and the passage of a multitude of local ordinances, state and Federal laws. *In a thousand separate little conflicts, new trends gathered momentum.*
- Many minor weaknesses in government were corrected and *steps were taken to relocate power in the average citizen.* The secret ballot established, the "direct primary" adopted and four other reforms — the "*initiative,*" the "*referendum,*" the "*recall,*" and the "*direct election of senators*"; the spoils system gradually eliminated.
- The struggle over monopoly control over property led the farmers to join the Patrons of Husbandry and as partners of the Populists to get such laws passed as the Interstate Commerce Act (1887), the Sherman Anti-Trust Act (1890), the Hepburn Act (1906), the Clayton Act (1914), and the Federal Trade Commission (1914). It was all a part of a new social-trend — coöperative "We" advancing upon individualistic "I."
- The Federal government protected the interests of the people in the public domain by a succession of national laws reserving the land to public uses and to private ownership on a widely diversified plan of small allotments; witness the Homestead Act of 1862, the General Revision Act of 1891, the vigorous conservation movement led by Theodore Roosevelt, and the marked extension of the trend in the Wilson Administration and under the socializing influence of the World War years.
- The biggest struggle was over taxation and credit control; witness the final passage of the Income Tax Amendment (1913), the tax on inheritances and upon the excess profits of corporations and partnerships (1917) — the latter establishing the principle of the right of the people to conscript wealth as well as man power in war. A generation of effort to reform banking and credit established the Federal

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Reserve Board (1914), and the abolition of exorbitant rates of interest — 12 to 16 per cent were common — in such laws as the Farm Loan Act (1916) providing for the loan of Federal funds at a rate of 5 per cent.

- Security became more and more a matter of public conscience: *The concept of "freedom of contract" was redefined*, the burden put on the employer to safeguard employees. States *prescribed hours of labor and conditions of work for men in industries*. Congress (1906) made interstate common carriers *responsible* for injuries sustained by employees (1908), limited hours of railway employees (1916) and fixed an eight-hour day for trainmen. In 1935, when twenty-eight states had old age pension laws, Congress passed the Federal Social Security Act, providing nation-wide insurance against industrial unemployment, old age pensions for the needy, a long-term old age insurance plan, health insurance for industrial workers, pensions for the blind and for relatives caring for destitute children.
- Step by step the changing social-economic conditions forced government into the lives of the people; from the creation of the Department of Agriculture in 1862 to those of the second Roosevelt in the 1930's every administration added new social services and controls. Witness the growth of Federal, state, and local taxation: 1913 — \$2,250,000,000 . . . 1930 — \$10,250,000,000. Government expenses: 1915 — \$719,000,000 . . . 1929 — \$2,750,000,000. Then, the Depression, government money poured into relief and huge public works. By April, 1935, Mr. Jesse Jones's RFC owned or controlled three insurance companies, scores of national banks, a railroad, a real estate mortgage loan company, and 4,000,000 bales of cotton. The Federal Land Banks had taken over the ownership of 20,000 farms in 46 states, totaling 23,000,000 acres; in the remainder of that year 3,000,000 farmers signed contracts with the Federal government under the AAA. The Federal government had taken over the problem of unemployment relief. The NAM reported (1935) that 41,000,000 persons, approximately one third of the population, would receive Federal funds if the proposed Social Security Law was passed.
- In October, 1934, the National Industrial Conference Board reported that the Federal government was the largest owner of securities in the world — owning at that time \$12,000,000,000 worth of foreign securities, mostly war debts . . . nearly \$3,000,000,000 worth of RFC stock and notes . . . \$1,207,000,000 worth of securities of other corporations and \$750,000,000 of miscellaneous securities. Here was a total of \$17,000,000,000.

THE ECONOMIC CHARACTERISTICS OF
AMERICAN SOCIETY: A FINAL SUMMING UP

This brief tabulation of a few of the great changes since the 1890's needs perhaps to be succinctly restated so as to project more sharply the characteristics of our society and the problems which confront us. That I shall do now. Note that only the characteristics of the *Society* are given here; those of the *culture* are dealt with in Chapter XI.

THESE, THEN, ARE THE CONCEPTS AROUND WHICH
WE SHALL REBUILD THE DESCRIPTION OF SOCIETY
IN OUR NEW SOCIAL PROGRAM IN THE SCHOOLS

First: It is a large-scale industrial system of limitless power.

- Basic commodities are increasingly produced by corporate-owned power-driven machines of increasing technical efficiency.
- The power until recent date has been molecular, based on natural fuels (coal, oil, moving water), the resources of which are fixed and limited by amount and the supply of which is exhaustible within a short time.
- Atomic fission, now successfully completed, revolutionizes the power phase of the productive system, makes available unlimited resources, requires such vast financial support and carries such dangers of monopoly and destruction as to make it probable that power production must be nationally centralized and controlled — possibly world controlled.
- The trend toward public control of the production of all basic quantity goods and services has been markedly accelerated by these power advances.

Second: It is a technically efficient society which has now precipitated a novel problem of full employment at abundance level.

- The American industrial system is rapidly reaching such high technical producing efficiency that there seems little likelihood that the accelerating technological displacement of workers can be offset by predictable gains in new kinds of employment. This may still further increase the encroachment of government control on private enterprise.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

- The history of the business cycle lends little support to the view that competitive free enterprise alone can provide full employment of American labor on a standard of living commensurate with our natural and human resources.
- The facts of social trend document the conclusion that the American social system is a Mixed Economy — part private, part public, part decentralized, part centralized . . . the trend is in the direction of more rather than less centralization and public control.

Third: It is a competitive private enterprise system living by expansion only.

- In spite of the advance of public control, the system is primarily a privately owned and administered one, which can continue to exist only by continued expansion. In every stage of its development it has prospered only by growing. To continue to live under the private enterprise system, its continuous expansion must be guaranteed. We confront the question: Can private enterprise do this?

Fourth: It is a pecuniary social order, resting on money and price.

- The history of the system has established that everything needed for full and continuous production and therefore of employment is available in the United States except “the money.” The possession of money is crucial to survival in the system and to its expansion, and the stability of the system rests upon the stability of the unit of money, price, and of wages and the interrelationships of these with profits. One nub of the problem is therefore the fitting of prices, wages, and profits into a sound and designed unified plan. Experience has not yet determined the respective roles of private enterprise, government, and coöperatives in this process.

Fifth: Can this private enterprise system, living by uninterrupted expansion, grow at the needed rate when depending on voluntary investment of private savings or private creation of credit (debt)?

- The history of the system has not yet clearly determined whether or not a sufficient and continuous flow of savings

FOUNDATIONS FOR A SCIENCE OF CULTURE

or private creation of credit can be guaranteed by private enterprise.

- Neither do we know surely to what extent government (so-called “deficit”) financing shall be employed. Recent history has suggested that deficit financing must continue to be used.
- Neither has history established the danger level of the public and private debt incurred by the system and their relation to national wealth and annual national income.

Sixth: The crucial role of the Buyer, giving large-scale orders for continuous production.

- During the Great Depression the Federal government was the largest-scale buyer of goods and services. It was the critical Buyer. During World War II it bought approximately half the goods and services produced, and there was continuous and full employment at the highest standard of living in our history. But it was done largely by the creation of large-scale national debt. With reconversion to peacetime conditions government becomes decreasingly the Buyer, production slows down, and unemployment rises. The Buyer is crucial. The problem of maintaining the Buyer must be studied carefully.

✓ ✓ ✓

This is my brief summing up of the economic findings of the students of the social system, a generation after Thorstein Veblen's appraisal. The reader would do well to turn back to Veblen's summary and note the closeness with which history has confirmed his predictions of 1914.

CHAPTER XI

The Patterns of American Culture

TWO SOCIOLOGICAL INSTRUMENTS FOR EDUCATION

1. *The Concept, "The Culture"*

Between the two wars and especially under the menace of Fascism, the American people became conscious of their way of life as never before in their history. Under such slogans as "American Democracy" and "The American Way," the spirit of our people was declaimed over the radio, from the rostrum, in the periodical press, in hundreds of books, giving a powerful impetus to adult education in the understanding of American society and culture. But more than that was accomplished: the focal ideas in the American way of life came to be seen as the nub of a new concept which the anthropologist and sociologist were clarifying. This was the concept "the culture," a most important instrument for the reconstruction of the curriculum.

Under the leadership of Franz Boas, the American school of ethnologists had already advanced from one limited concept to another until by World War I they grasped this all-inclusive one — "the culture." Their predecessors had started with a general idea somewhat like it fifty years before, but the present use of "the culture" is supported by a clear body of documentation. Like the functional psychologists, the anthropologists are now chiefly concerned with behavior: the structure of society interests them less, what the people in the society do, think, feel, believe, fear, and desire concerns them more. As a consequence the concept "the culture" has been greatly clarified — and with it "society" — and a fairly common consensus of meaning is beginning to emerge.¹

¹The student of education will be greatly helped by Linton's symposium, *The Science of Man in the World Crisis*; for a careful explanation of the meaning of "the culture" see the chapter by Kluckhohn and Kelley.

Although weighty academic debates about terminology still hold the floor at anthropological and sociological meetings (as Kluckhohn and Kelley remind us), the two terms can be distinguished very simply. "Society" refers to "a group of people who have learned to live together; a culture refers to the distinctive ways of life of such a group of people."¹ Thus we distinguish the people who constitute the society, from their behavior, the objects they have made, "and all of the alterations which they produced in their natural environment," all of which is "the culture." The culture is the "record of the distinctive ways of behaving . . . and those results of behavior which are also characteristic." In what follows I shall adhere to this distinction between society and the culture.



Bearing in mind the warnings of the students, I suggest that educators use the concept "the culture" to include the total life of a people — what they do, make, contrive; what they think, believe, fear, desire. In using it as a guide to the building of the social curriculum I have found it most useful to distinguish three levels:

First: On the surface, the material culture — the ways and means by which a people produces and distributes its physical goods, buys and sells, communicates, and the like — in general, its total economic system.

Second: The social institutions of the people which form beneath the obvious physical culture. These appear as the family life, government, industry and business, social organizations, the press, radio, and other agencies of communication, the ritual of churches, lodges, schools and colleges, the work of forums and other parliamentary and elective procedures, the ritual of courtesy in social life, codified food habits, ways of dress, speech, recreation, and the like. The social institutions include also the language of the people, their ways of measuring, recording, and expressing facts, their use of science and art — all of these used as instruments of thinking and feeling.

Third: The subtle and hidden "psychology" of the people, even more directing and formulating than the external material culture and the social institutions. Social arrangements are created primarily by drives, attitudes, ideas, feelings, in the background of beliefs and val-

¹ *Ibid.*, page 79.

ues. What the people have in their heads, what they want most and fear most, determine above all else what they do and what they are. Their desires — for personal security, for a better living, for social approval — dominate their social psychology. But the social psychology of a people also includes the all-pervasive “climate of opinion” of the wider community, molded by such directive concepts and attitudes as freedom, equality of opportunity, justice, patriotism, and the like.

There are, perhaps, other factors which play a determining part in molding the cultures of a modern people, but these illustrations of three phases will explain sufficiently the sense in which educators today can wisely use the concept. Summing up, let us distinguish the society as the people in their structured life, from the culture as the way of life that goes on within the society.¹

2. *The Culture-Pattern*

It is within this all-encompassing culture and its social institutions and climate of opinion that men, women, and children live out their daily lives. But if educators are to understand their behavior, interpret it clearly, and pass it on to the younger generation, these broad concepts must be broken down into narrower and more practicable ones. For a generation the social anthropologists have been seeking to do that, but not until they grasped the fact that their material was essentially psychological did they succeed. That happened in the decade immediately following World War I. Then the “social psy-

¹ As for a third all-inclusive and much-used word, “civilization,” I urge that it be used as synonymous with “the culture.” I doubt the wisdom of following such practices as that of MacIver in calling part of the culture “the civilization.”

SELECTED STUDIES OF PRIMITIVE AND ADVANCED CULTURES

- Benedict's *Patterns of Culture* (1934) and *Race, Science, and Politics* (1940)
 Kardiner's *The Individual and His Society* (1939) and his *Psychological Frontiers of Society* (1945)
 Feibleman's *The Theory of Human Culture* (Duell, Sloan & Pearce, 1947)
 Jones's *Life, Liberty, and Property* (1941)
 Whitehead's *Science and the Modern World* (1925)
 Randall's *The Making of the Modern Mind* (1926)
 The Lynds' *Middletown in Transition* (1937) and Robert Lynd's *Knowledge for What?* (1939)
 Linton's *Science of Man in the World Crisis* (1945)

PATTERNS OF AMERICAN CULTURE

chologists" began publishing their library of studies of social attitudes, the stereotype, public opinion, and the psychology of language and of other social institutions. Psychoanalysis and psychiatry were taken up in America as the psychology of personality came to permeate the air breathed by the social scientists. Freud himself tried to apply his psychoanalytic theories of behavior to primitive societies, but his success was limited because of his assumption that the same constellations are found in it as he had postulated for modern behavior. A young generation of social anthropologists carried on new studies of primitive cultures; to name only a few examples — Linton's studies of the Tanala,¹ Du Bois' study of the Alorese, Malinowski's,² Firth's,³ and Fortune's researches,⁴ Margaret Mead's investigations of childhood and youth in New Guinea and Samoa.⁵ Slowly sociology and anthropology were turned into psychological channels. By the middle twenties J. M. Williams, the Lynds, and other students were analyzing the drives, traits, and attitudes underlying social behavior in American community life. A decade later such psychiatrists as Abram Kardiner were collaborating closely with the anthropological group around Ralph Linton.⁶ By the late 1930's, as Milton Herskovits' recent statement shows, all the social sciences, including economics and government, had "gone psychological."

"We know that the ultimate reality of culture is psychological; that only in so far as there are people to carry on the institutions of a culture can that culture exist. In this psychological reality of culture lies the mechanism of cultural stability, the reason why human beings find greatest ease living their lives under a known, a predictable routine. But by the same token, this is also the mechanism of cultural change."⁷

Thus, for many years the students groped for the connection between the behavior and personality of individuals and the "mass be-

¹ Ralph Linton: *The Tanala: A Hill Tribe of Madagascar*. Field Museum of Natural History (1933).

² B. Malinowski: *Coral Gardens and Their Magic* (1935).

³ R. Firth: *We, the Tikopia: A Sociological Study of Kinship in Primitive Polynesia* (1936).

⁴ R. Fortune: *Sorcerers of Dobu* (1932).

⁵ M. Mead: *Growing Up in Samoa*.

⁶ See Kardiner's *The Individual and His Society* and his *Psychological Frontiers of Society*, and Linton's *Science of Man in the World Crisis*.

⁷ In Linton: *Ibid.*, page 163.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

havior" of social institutions.¹ Then, in the 1930's, Dr. Ruth Benedict and other social anthropologists provided the clarifying link — the concept of "the psychological culture-pattern."²

Herskovits, in a recent definitive statement, says that the culture-pattern is

"the most important concept in the objective analysis of cultural change from the institutional point of view . . . (It) is a series of interlocking behavior and thought and value systems, some of wider applicability than others, some even in conflict with others. The patterns of fundamental values in a society, for example, will be effective over the entire group; but there will be subpatterns by which men order their lives differently from women, young and middle-aged folk from their elders, members of lower from those of higher socio-economic status. It is the multiplicity of patterns which together make up the culture as a whole; *it is the particular patterns that impinge on the life of an individual member of society that will shape his behavior.* But all must be taken into account when an understanding of the mutations of culture in change is the end of analysis."³

This is the concept of culture-pattern that the Lynds use so effectively in their second "Middletown." We shall see how indispensable it is to educators for their appraisal of American community life.

THE NUB: THE DOMINANT CONCERNS OF THE PEOPLE

There is one other concept that we must employ in the reconstruction of the content of education. No clear consensus of terminology has yet been achieved, but the concept itself is what I shall call "the dominant concern of the people." While a culture embraces many patterned ways of behaving, feeling, and reacting, they tend to organize themselves around one or a few dominating core ideas that constitute a common view of life pervading the culture. Benedict speaks of it as "the integration of culture."

"A culture, like an individual, is a *more or less consistent pattern of thought and action.* Within each culture there come into

¹ See Judd's *Psychology of Social Institutions*, which is the pioneer American exhibit of the psychological studies of language, number systems, systems of exchange, and the like, launched by Wilhelm Wundt in his classic ten-volume *Volkpsychologie*.

² See her book, *Patterns of Culture* (1934).

³ M. Herskovits, in Linton, *op. cit.*, page 158.

being characteristic purposes not necessarily shared by other types of society."¹ [My italics.]

Pervading the family, neighborhood, community, or other form of group life is a psychological atmosphere which encompasses and subtly affects all. As Herskovits puts it: "All individuals tend to share common interpretations of the external world and man's place in it." There is frequent reference to the *implicit nature* of the influence of the culture, "implicit" suggesting an ever present but hidden system of beliefs and values of the people that have passed below the threshold of awareness but still dominate feeling and thought and behavior.

This central concept has been independently grasped recently by students of philosophy and psychiatry as well as of social psychology and social anthropology. It is stated by Feibleman as the concept of "*implicit, dominant ontology*," by Herskovits as the "*dominant concern of the people*," by Benedict as "*integration of culture*," by myself as the "*determining concepts of the climate of opinion*," by Kardiner as "*basic personality structure*." These all seem to be special verbal ways of expressing the same concept.

/ / /

We can now combine these conceptual tools of the sociologists with the important ones given us by the psychologists. Taken all together they provide an intellectual foundation on which to build the social program of the new school:

- "society"
- "the culture"
- the "psychological culture-pattern"
- the traits, drives, attitudes, beliefs which orient and propel the individual (witness Allport's "Functional Autonomy of Motives")
- the dominant culture-pattern: Feibleman's "dominant implicit ontology" ... Kardiner's "basic personality structure" ... Rugg's "molding concepts of the climate of opinion" ... Herskovits' "dominant concerns of the people" ... Benedict's "integration of culture." In our own national terms, this is "The American Way."
- the concept of class (caste)

¹ *Op. cit.*, Benedict, page 46.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

THE SOCIAL ANTHROPOLOGISTS AND SOCIOLOGISTS MAKE EYEWITNESS STUDIES OF AMERICAN COMMUNITY LIFE

Franz Boas's work bore rich fruit. After 1920 the key to the maturing science of culture and society lay in the studies of the sociologists, the social anthropologists, and the social psychologists. The richest fruit of all was in their face-to-face appraisals of changing American community life. The cue to understanding them was given years ago by Clark Wissler:

"To most people, anthropology is a mass of curious information about savages, and this is so far true, in that most of its observations are on the less civilized. What is not realized is that *anthropology deals with the communities of mankind, takes the community, or tribe, as the biological and social unit*, and in its studies seeks to arrive at a perspective of society by comparing and contrasting these communities; and whatever may be the deficiencies of anthropology, it achieves a large measure of objectivity, because anthropologists are by the nature of the case 'outsiders.'" ¹ [My italics.]

¹ Foreword to the Lynds' *Middletown*, page vi.

SELECTED SOURCES OF THE CONSENSUS

I. Studies of Rural Life:

1. Three pioneer studies, inspired by Professor F. H. Giddings
 - J. M. Williams: *An American Town* (1906)
 - N. L. Sims: *A Hoosier Village* (1912)
 - W. H. Wilson, *Quaker Hill* (1907)
2. Pioneer National Survey of Rural Life:
 - Report of the Theodore Roosevelt Commission on Country Life (Senate Document No. 705, 60th Cong., 2d Sess. 1911)
3. Studies developed under social and religious organizations especially, after 1920, by the Institute for Social and Religious Research; many of these are discussed in later pages.
4. Studies in the Great Depression and Great War, under government and private auspices

II. Studies of City Life:

1. A pioneer study:
 - Paul C. Kellogg and others: *The Pittsburgh Survey, 1914*
2. Many surveys of public schools of communities and states; notable earlier ones: — Baltimore (1911) ... Cleveland (L. P. Ayres and others) ... St. Louis (1916) (C. H. Judd and others) ... New York (1913) ... Gary, Indiana (1914)

PATTERNS OF AMERICAN CULTURE

That is exactly what the young students did, beginning forty years ago. They *studied changing American culture by making direct eyewitness appraisals of rural and urban community life.* The full documentation of their labors is a vast library. The educational worker can get the gist from a representative body of sources such as those given on this and the preceding page.

I. THE STUDY OF CHANGING RURAL LIFE

After 1900 the movement of population from farm and village to town and city accelerated rapidly. Conditions of living in rural areas changed so much that the churches, the social welfare agencies, the colleges — especially the state land-grant colleges — and various departments of the government began to study them. In 1910 the Theodore Roosevelt Commission on Country Life reported,¹ that the equilibrium and stability of farm life had become so disturbed that “The work before us . . . is nothing more or less than the gradual rebuilding of a new agriculture and a new rural life.” Deeply concerned with the changing mood of the people, the President said: “There is too much belief among all our people that the prizes of life lie away from the farm.”

Individuals, as well as organizations, began to make appraisals of rural life. At Columbia, three of Professor Franklin H. Giddings’

¹ United States Document No. 705, N. Y. 1911, pages 18–25.

SELECTED SOURCES — *Continued*

3. The pioneer study of The Institute of Social and Religious Research, contrasting small city life in the 1890’s and the 1920’s
— Robert S. and Helen M. Lynd: *Middletown* (Muncie, Indiana) 1929
4. Face-to-face studies of the depression and war years:
— R. S. and H. M. Lynd: *Middletown in Transition* (1938)
— W. Lloyd Warner: six-volume “Yankee City” (Newburyport, Massachusetts). See especially Volume I: W. Lloyd Warner and Paul S. Lunt: *The Social Life of a Modern Community* (1941). (See the extent to which the “class concept” can grip a student’s mind in Warner, Havighurst and Loeb: *Who Shall Be Educated?* (1945))
— Studies of Negro-White life inspired by Warner’s “class” ideas:
— Allyson Davis, B. B. Gardner and Mary R. Gardner: *Deep South* (1941)
— St. Clair Drake and Horace R. Clayton: *Black Metropolis* (1945)
— Alfred Winslow Jones’s Study of Akron, Ohio: *Life, Liberty, and Property* (1941)

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

graduate students had already contributed studies: J. M. Williams: *An American Town* (1906) . . . N. L. Sims: *A Hoosier Village* (1912) . . . W. H. Wilson: *Quaker Hill* (1907). They were initial, descriptive and statistical studies of the process by which rural areas had first become isolated rural regions, and then, under the impact of the new communication, had slowly come into contact with industrializing communities and regions. The students were trained sociologists using the new quantitative methods and the data of newspapers and other historical records in studying trends. Slowly they too came to emphasize the social psychological features of the culture. By the middle 1920's the work of such men as Williams definitely reflected this interest; witness his *Our Rural Heritage* (1925), in which nearly half the book dealt with the psychology of attitudes.

Departments of sociology¹ in the higher educational institutions, especially in the state land-grant colleges, developed scores of rural social research projects, about a third of which were statistical studies of population, standards of living, schools, churches, hospitals, and the like. A national count of these studies in 1926 showed 104 projects, 80 at land-grant colleges.

By World War I the techniques employed by Williams, Wilson, and Sims had been greatly improved upon; witness Galpin's "social anatomy" method of describing the patterns of association in which the economic-social life of farmers went on. The investigations introduced quantitative methods of treating census records, questionnaire data, the facts of standards of living as related to farm income, the trade relationships with business centers, consumption practices of farmers and their relations with those outside the local trade areas, and the like.

For our knowledge of social change in America we owe much to the intelligent and persistent research of college professors of sociology who conducted recurring surveys of the changing life of the same rural regions and communities. Conspicuous among these is the work of Dr. Edmund de S. Brunner, who, three times in fourteen years, after

¹ Immediately after World War I sociologists and economists carried on a campaign for government support of social research. In 1922 the Parnell Bill was passed, granting \$20,000 a year to each land-grant college for each of three purposes: rural sociological research, rural economic research, home economics research. It is the judgment of such workers as Dr. Edmund de S. Brunner that the leadership of these men and the granting of government funds formed a most important stimulus to the development of the social studies of rural life in America

1923, studied the changing life histories of the same 140 village-centered agricultural communities. The three studies together provide an accumulative and quantitative record of the change in ways of living of a large number of rural village-centered communities, through a period of pseudo-prosperity followed by another of disastrous depression.¹

The churches played a very important part in this work. Between 1910 and 1916 the Board of Home Missions of the Presbyterian Church, under the direction of Dr. W. H. Wilson, made sixteen rural social surveys. Between 1920 and 1924 Gill analyzed the six thousand rural churches of Ohio. The Institute of Social and Religious Research, of which Dr. Brunner was Director of Town and Country Survey for ten years, was another dynamic agency in rural analysis.²

The Role of the Government in Rural Social Analysis

The Federal government made an important contribution to the study of rural life during the depression years.³ Under the auspices of the government's Resettlement Administration, directed by C. P. Loomis, seven new rural communities were studied. One study by Lord and Johnstone, *A Place on Earth*, appraised sixteen of the subsistence homestead projects and another considered ten Farm Security Administration communities. Another traced the changing social structure of a county in Georgia throughout its 150 years of history. In 1942 careful studies were carried on in FSA Districts, Soil Conservation Districts, Local Extension Clubs, AAA Districts, and others. In 1939, under governmental leadership a group of sociologists, anthro-

¹ See his *American Agricultural Villages* (1923) and *Village Communities* (1927); J. H. Kolb and Edmund de S. Brunner: "Rural Life," Chapter X of *Recent Social Trends*, Vol. I; and Brunner and Lorge: *Rural Trends in Depression Years* (1937).

² In 1928 the Institute published his important and much-neglected study, *Immigrant Farmers and Their Children*.

³ Note the work of Carl C. Taylor, head of the Division of Farm Population Rural Welfare, Bureau of Agricultural Economics, U. S. Department of Agriculture. Over a period of a quarter of a century Dr. Taylor has been a leading student of the social survey. See his *The Social Survey* (1919) . . . *Rural Sociology* (1926) . . . *Human Relations* (1927); see his chapter in Linton's *The Science of Man in the World Crisis*, "Techniques of Community Study and Analysis as Applied to Modern Civilized Society," pages 416-441.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

pologists, and psychologists set up a coöperative research project "to investigate the cultural, community, and social psychological factors in rural life." They were especially concerned to discover the basic cultural patterns of land use, attitudes toward work thrift and other virtues, the social economic and political organization of the community, the role of leaders, the effect of machine technology on farmers and farming, the influence of urbanization, and the factors which facilitated or offered resistance to change.¹ Dr. Taylor now reports that, under government auspices, seventy representative counties of the three thousand in America are to be used as research laboratories; a typical community of each county is to be studied with the best known techniques, with eyewitness trend-studies of mechanization of agriculture and of changes in standards of living.

2. STUDIES OF THE CHANGING LIFE OF CITIES

In the past quarter century several institutes of social research, government agencies, university departments, and individuals have made important firsthand studies of social change in our cities. To name the most vigorous ones:

- The Institute in Social and Religious Research
- The Institute for Applied Social Analysis
- Such University Institutes, Schools, and Departments as Yale's Institute of Human Relations and Harvard's School of Business Administration and Department of Industrial Research
- Various Federal WPA projects
- Face-to-face studies of Americans-in-the-Great-Depression by such students as Agar, Anderson, Bingham, Caldwell, Frank, Marlsey, and others already referred to

Taken comprehensively, the students sought to make a systematic evaluation of all the major phases of community life. The Lynds' first study of "Middletown" illustrates it very well; note their "six main-trunk activities" of the community:

Getting a Living	Using Leisure in Play, Art, etc.
Making a Home	Engaging in Religious Practice
Training the Young	Engaging in Community Activities

¹ Six government reports are now available under the general title, *Culture of a Contemporary Rural Community*, Rural Life Studies, Nos. 1-6 (1941-1943).

PATTERNS OF AMERICAN CULTURE

But the studies of economic, technological, and political change were more for the purpose of digging into *the psychology of the changing American mood and mind*. They constantly asked:

- What was social change doing to the attitudes, beliefs, and values of our people? What was on their minds?
- Did they have a sense of security or of insecurity? Was it changing?
- What were their dominant concerns, the “ontology,” of the men-on-the-street?
- What was happening to the “American way”? to the American sense of equality?
- How was the sharp trend toward corporateness in America affecting their attitude toward property rights as contrasted with the attitude toward personal rights?
- Was the American classless concept of “freedom” changing? Was America becoming a “class” (caste) society?
- What, in the large, was the status of the struggle over “I” and “We,” the Individual and the Society?

How Did They Study These Questions?

The Lynds, Warner, Lunt, Jones, Davis, Drake, and Cayton are illustrative of the new profession of social analysts. Their studies can be traced back to Boas and Giddings of Columbia, Thomas and Park of Chicago, Lowie and Mayo of Harvard. These third-generation men are social anthropologists, sociologists, and social psychologists who apply the best known investigational techniques. Most of the studies have been well financed and have extended over a considerable length of time. Note quickly their characteristic methods:

First: Face-to-face studies. The Lynds and their trained staff became residents of Middletown for a year and a half; went to its churches, schools, clubs, union meetings, lectures, card parties; made hundreds of personal friendships; dined with persons in all sections of the population. The Warner group did much the same thing in “Yankee City,” Davis in “Deep South,” Drake and Cayton in “Black Metropolis” (Chicago). Thousands of personal interviews were carefully recorded and reported. Their respective volumes are packed with concrete human interest material, dramatic episodes, conversations reported from interviews, long personally dictated “profiles” and life histories, hundreds of personal commentaries and psychologically revealing episodes of actual life in the community.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Second: Factual analysis of local historical and current social records. Both the Lynd and the Warner groups left few if any records unscrutinized, unsifted, and unappraised. They canvassed and evaluated census data, city and county records, court files, school records, newspaper files, minutes of organizations, old diaries and scrapbooks, letters, local histories, directories, maps, "boom books," "Annuals," and health surveys. The study, as Dr. Wissler said of Middletown, "achieved a large measure of objectivity."

/ / /

Types of Communities Selected: Avoiding the vast overwhelmingly complex metropolis, studies like "Yankee City" concentrated on communities small, compact, and autonomous enough to be subjected to approximately total analysis; in these the sampling technique was unnecessary. In "Middletown" (38,000 people in 1924, in the middle of the country, growing fairly rapidly, partly industrial, with a substantial local artistic life fairly representative of American small cities) was also compact and homogeneous enough to be manageable in such a total-situation study. It was a town without special peculiarities, in general a kind of "common denominator of America, the Middle West."

"Yankee City" was one of the oldest Massachusetts seaport towns, of 17,000 population, "sufficiently autonomous to have a separate life of its own surrounded by a farming area" "populated by a number of ethnic groups" . . . "small enough for data to be obtained for approximately all individuals in the community" . . . "one in which the descendants of earlier settlers were still living and maintaining their positions in the community" . . . "the town had also developed, in the last two generations, a considerable manufacturing center."

WHAT IS THE AMERICAN WAY?

The Need for a New Ontological Synthesis

The time has come when educators can make definite use of these sociological instruments in rebuilding the curriculum of the schools and colleges. What they need above all is a *new ontological synthesis* answering the question: What manner of man is the American? What are his characteristic traits? What does he value most deeply, believe in most vitally? Into what principal patterns does American culture fall? Bearing in mind that ontology, culture-patterns, and traits are inextricably intertwined, and that the culture is

PATTERNS OF AMERICAN CULTURE

the fusion of all, we turn next to the forming of a statement of that synthesis.

First, the basic traits of the American. What manner of man was he in 1890? In what ways has he changed in our time?

THE DOMINANT AMERICAN TRAITS, BELIEFS, AND VALUES

I

Eight generations of living on our land had built out of the mixture of northern Europeans a new man — the American. He was lusty, aggressive, confident, sure of himself in things that had to do with getting a living, building a home and a family, strong and competent in everything that had to do with physical achievement. He naïvely believed in *laissez faire*, although even in 1890 he was unaware of the inroads that were being made in the practice of the idea. Driving and guiding daily behavior was a sturdy individualism . . . leave every man as free as possible to work out his problems. Government, and everybody else, keep hands off. The climate of opinion was pervaded by the spirit of opportunity and absence of restraint. Free!

II

The new Americans, like other men, always knew that they differed widely among themselves. Yet, more than most people prior to the twentieth century, they asserted equality; and even more than other Anglo-Saxons they built *a social order in which, up to recent decades, the people felt less sharply divided into social classes*. Conquering the wilderness tended to bring men near together, to make them feel on the same level; moreover, workers were scarce and the laborer was respected. While the competitive contests of boyhood and youth constantly taught each one his place in the community roster of ability, each one felt and frequently asserted his right to be regarded as equal to all the others. Not equal in physical strength, in energy, in intelligence, in esthetic sensitivity or creativeness; but equal "before the law," *equal as sovereign personalities in the confederation known as American society*. This was of the very essence of the *unique brand of democracy that was emerging in the United States*.

Until the late nineteenth century, and with the exception of a few old Eastern seaboard towns, here were the makings of a markedly classless society. Yet there was always an undercurrent of questioning; on all sides the people voiced it: "Although folk are born different in many ways, they ought to be equal in chances for getting ahead —

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

but somehow, they're not. One man really is as good as another, at least that's what the Constitution says. But somehow things don't work out that way."

III

American society being young, and its social groups ever in flux, the idea of the "ladder of opportunity" was ever present. Any boy, irrespective of birth, could be sheriff or county clerk, mayor, or governor, even President. The route to success was hard work, living up to the rules of the game, creating confidence and respect in one's ability. The school, also arranged in graded rungs, was the chief instrument by which the ladder of opportunity could be climbed. In this respect also America was unique and revealed its tendency toward classlessness.

IV

Fathers had told their sons in each generation, and the Americans of 1890 believed it still: "*Competition is the driving force* that keeps the American way of life alive. As you climb you will find others pitted against you, seeking the jobs you want, the honors you crave, the profits you slave for. You'll have to fight for what you get, and success will come to the strongest. Your life will be marked by struggle and conflict; but this will be essentially good. It will keep you alive and alert, hold you to your job, provide you with the lifting force to climb to success." But — there was always a "but." "*But: Of course, not everybody can be boss, and factories can't give jobs if there aren't jobs to give.*"

V

From the time of the first Puritans who settled our Eastern seaboard lands to our generation the concept of self-discipline was drilled into the children. "School yourself! Get up early, work hard all day, year in, year out, midst the dangers of wilderness, snow blizzards, hailstorms, river floods, burning drought, or the jungle of the machine cities." So the virtue of "stick-to-it-iveness" — the will to see the job through — was built in the people. For three centuries discipline was the watchword. But, the shrewd ones among the people knew that you had to do more than work hard and persist. The Lynds heard the people saying it in Middletown:

"Hard work and thrift are signs of character and the way to get ahead. *But: No shrewd person tries to get ahead nowadays*

PATTERNS OF AMERICAN CULTURE

by just working hard, and nobody gets rich nowadays by pinching nickels. It is important to know the right people. If you want to make money, you have to look and act like money. Anyway, you only live once."

VI

Our Western way of life was *the business way based on the possession of money income*. For hundreds of years, in Europe as well as in the twenty-five new countries, the leadership of the new society had been continuously in the hands of the traders, the manufacturers, and the moneylenders. Eight generations of life in the new continent had continued it uninterrupted. Success was measured by the possession of money. "I'll be rich," Mr. Rockefeller, Sr., had exclaimed, and all the enterprisers of the nineteenth century had echoed it.

Robert Lynd's aphorisms of American culture-patterns, based on his two studies of "Middletown," drive home the traits and the shrewd spirit of "covering your hand" that had come to mark our people by the period 1925 to 1935:

"The family is our basic institution and the sacred core of our national life. *But: Business is our most important institution ... other institutions must conform to its needs.*"

"Life would not be tolerable if we did not believe in progress and know that things are getting better ... *But: The old, tried fundamentals are best; and it is a mistake for busybodies to try to change things too fast or to upset the fundamentals.*"

"Honesty is the best policy. *But: Business is business, and a businessman would be a fool if he didn't cover his hand.*"

"Education is a fine thing. *But: It is the practical men who get things done.*"

"Science is a fine thing in its place and our future depends upon it. *But: Science has no right to interfere with such things as business and our other fundamental institutions.*"

"Patriotism and public service are fine things. *But: Of course, a man has to look out for himself.*"

"The American judicial system insures justice to every man, rich or poor. *But: A man is a fool not to hire the best lawyer he can afford.*"

"Poverty is deplorable and should be abolished. *But: There never has been enough to go around, and the Bible tells us that 'the poor you have always with you.'*"¹

¹ Lynd: *Knowledge for What?* from pages 58 to 101.

VII

Most things in American life, we said, were thought of as private. In no way is this more clearly revealed than in the way our people have interpreted the ownership of property. An American, having stumbled upon a forest of trees, a rich deposit of coal or iron or oil, or having invented an engine or a machine, built a factory or a corporation, marked it as his own and said "That's mine! I made it, I invented it, I developed it, so it's mine. You keep off." So deep did this belief run that to most Americans, as to the people of other countries, *private property meant that the owner could do with it as he would*. He could exploit it without let or hindrance, even if there were other people dependent upon it. He could use it *or withhold it from use*.

VIII

Living with one's fellows was a practical matter, and experience had shown that "good fences make good neighbors." Robert Frost described the mood of individualism in *Build Soil*: "Keep off each other and keep each other off." As my own father used to say of a certain obnoxious neighbor: "I don't like him, but I've got to live with him, probably fifty years." And the other fellow too had to live with my father. "Live and let live." "Work together, enough to keep the community and the country going. And going ahead, progressive, but not too progressive — not 'radical' or anything un-American."

These personal moods were generalized to play an important part in group life. In every generation the old settlers looked askance at the newcomers. The society divided itself into antagonistic "in-groups" and "out-groups." Nordics looked down on Slavs and Italians and Jews . . . Protestants on Catholics . . . businessmen on artisans . . . middlemen on producers. This spirit affected international relations also. For a hundred years since the Founding Fathers, national leaders had warned the people: "Stay out of entangling alliances, especially with Europe." Thus a spirit of isolationism was fostered in the people, especially in those living away from the coasts. The lack of electrical communications and airplane transport throughout the nineteenth century did not make of this a serious danger even in the 1890's. But important if hidden trends of increasing interdependence were even then

in the making, and these shortly would become a disruptive factor working against American security.

/ / /

These are the traits which, in a hundred years, conquered the continent that Mr. Jefferson said could not be cleared in a thousand. In favorable conjunction with isolation from Europe's intrigues and destructive wars, they built the highest standard of living that man had ever envisaged and the most tangled social jungle man ever confronted. Deeply embedded in the American climate of opinion, these traits were passed on from generation to generation down to our own day. Little wonder that they regarded themselves as Men of Destiny.

Manifest Destiny at Work in the 1940's

Even in the 1940's, while the world sneered at America's fat softness, the spirit of Manifest Destiny continued to work its wonders. When our people, committed traditionally to peace and to aloofness from quarreling Europe, were faced by the gigantic tasks of arming half the world and training and equipping youth of hitherto slipshod habits and restless insecurities, they rose to the emergency successfully. Confronted by physical danger, Manifest Destiny still runs true to form.

THE GREAT TEST: CAN THE AMERICANS LEAD THE WORLD?

But, granted that we can lick the world . . . can we lead the world in coöperative design and reconstruction?

When, in our own times, the Americans were faced by *social* danger — for example, by technological unemployment that displaced millions of workers, or by the necessity of collaborating in world diplomacy and mutual understanding with devotees of a completely alien ideology — American political leaders did not present convincing proof that they are strong men of coöperative design and construction. This was natural, for nothing in their environment — except lip service — has ever demanded group thinking and a deep social faith. Neither their informal education, their community way of life, nor their formal schooling had taught them the nature of the world that our fathers built and in which we must live. Hence, when confronted by the intellectual jungle of world-wide industrialism that is now caught in a grim succession of Great Depressions and World Wars, their char-

acteristic response has been baffled, tantrum-like castigations of convenient whipping boys.¹

All the evidence that we can bring to bear from the past generation shows that in these foundational aspects of life, the rank and file of Americans, including most of their business and political leaders, have behaved like unsure adolescents. Our history has made them so. Throughout two centuries and a half, their attitudes were marked by slavish worship of Britain and Europe and the classical past. Their Schoolmen built their curriculum by copying the trivium and quadrivium of academic Europe's seven liberal arts. Their architects debauched the continent by scattering over our land tens of thousands of eclectic Greek-Roman-Gothic-Georgian buildings. Their dance was classic Italian-French-Tsarist ballet. Their theater, their law, their language, and their letters were British.

The reasons lie in our history, and are twofold. First, ours was a new and youthful society, mushrooming up with dizzy speed. Our fathers were really "first builders"; having no antecedents to follow, they had to improvise. In the initial stage of a dynamic era, the order of the day was "Try something, try anything once and see if it works. If it works, it is a success." The sanctions of life, in theories of thought as well as behavior, were pragmatic: "Its truth will be measured by the tests of its consequences." And, of innovators and improvisers, perfection is not demanded. "Get it built and on time" was the slogan. Thus in every walk of life, in every area of the culture, the "slack" provided by Nature's rich surface was so great that the people did not need to sit down and plan together.

In the second place the concepts with which they thought about their problems were appropriate only to an individualistic social order. Take off the lid, and the competition of strong men will produce the maximum possible national wealth and income. "I" was riding "We," and the *laissez-faire* idea worked well enough in an infant pioneer society. As we have shown, all the basic concepts of the democratic idea were interpreted in a similar nominalistic theory of particulars and of action. Hence, when confronted by novel enterprise where swift improvisation, hitting the bell five or six times in ten, would suffice, the frontier strength, efficiency, and initiative of the Americans got by.

But in our time, although most of our people, and most of their political and business leaders, did not know it, *they were leaving be-*

¹ Witness: the Congressional Record on almost any day during the past ten years!

PATTERNS OF AMERICAN CULTURE

hind the jungle world of every man for himself and entering a world in which men would have to plan together every social enterprise of the culture. These lusty Americans, anesthetized by their riches and still muttering "Manifest Destiny," were being whirled into a new day that would demand of them coöperation rather than individual competition, concept as well as percept, thought before action, appraisal and design before building.

✓ ✓ ✓

From this picture of the traits of the American we can begin to appraise the probabilities that our people can take up the gigantic world responsibilities laid upon them today. Certainly the spirit of the frontier is as strong in them today as it ever was. These traits bred on the physical frontier — a Paul Bunyanesque mood of buoyant confidence, a naïve inability to conceive of failure, an ability when beaten down to get up off one's knees at the ninth count — all these are needed as the motivating energy if one is to clear any jungle, whether it be physical or social. Nevertheless, these traits alone will not solve the staggering problems on the present social and psychological frontiers; witness the current failure of most of our leaders to understand the real factors we must face in the domestic and world impasse.

THE CHARACTERISTIC CULTURE-PATTERNS OF AMERICAN LIFE

But when we examine closely into *the dominant culture patterns* of the American today we really question the chances of our success in leading the world out of its present morass. *A people's characteristic manner of response* to the affairs of life is as important as their naïve beliefs and assumptions. The culture of every people tends to fall into recurring patterns. These patterns are complex products, largely unknown to the people who hold them, and are functions of their beliefs and assumptions. It is these basic culture-patterns that at bottom take the measure of the people for the tasks ahead of them.

1. *Leaving Decisions to the Casual Current of Events*

I think the most critical culture-pattern today is the refusal of the American people to take thought about their affairs in advance of crises which compel them, reluctantly, to do so. The Americans are still

"luck-hunters." Their constant rejoinder to pleas for preparedness is: "I'll not be the unlucky one." "It won't happen to me." "It can't happen here." So strong is their resistance to control that they steadfastly put off letting any group or individual design and operate the system for them. They always do this eventually, but only when grave disaster threatens: for example, efficient and pure public water supplies were built in America only after great cities had burned down and thousands had died from epidemics; social security was established by law only after recurring examples of nation-wide insecurity had overwhelmed the people. The national behavior seems to consist of a chronic blind dependence on the casual ongoing interplay of everyday life. Problems, whether momentary or deep-seated, individual or group, are met by impulsive improvisation. Carl Sandburg recorded this national habit of procrastination and makeshift facing of problems:

"That old barn on your place, Charlie, was nearly falling last time I saw it, how is it now?"

"I got some poles to hold it on the east side and the wind holds it on the west."

There are, of course, the rare exceptions; witness the practical farmer who practiced the Sustained-Yield Principle and survived every farm depression. When they asked him how he did it, he said: "Spread the fat year's surplus over the lean year's deficit." But only one in a hundred did it; the ninety and nine were depressed.

I do not think this deep-seated trait is peculiar to our people alone; it seems to be inherent in human beings everywhere. I personally found the same mood wherever I went around the world — in the villages of China, in the barrios of the Philippines, in South Africa, New Zealand, and Australia. Never to be erased from my memory is the picture of those Chinese peasants who, instead of building up the levee, stood anxiously beside the rising river, muttering: "It will not rise higher."

2. *The Belief in Laissez Faire* *the Root of the Culture-Pattern*

Throughout Western society, indeed, it could not have been otherwise; the basic ontology of the people molded this culture-pattern of relying on the accidents of events. For two centuries the dominant conception of behavior control on both sides of the Atlantic was *laissez faire*. The physiocrats' theory of the eighteenth century became the

deeply ingrained way of life of the American in the nineteenth: leave every man free to exert himself to the uttermost of his capacity and the total wealth and income of all the people will be the maximum possible. The social implication was: leave every two struggling rivals free to fight it out, and may the best man win. Our business and political leaders still assume, as did our fathers in the 1890's, that *if you take off the controls the competitive give-and-take will produce the maximum of social welfare as well as national income; that quality will follow automatically upon the achievement of quantity.* Today as yesterday, in every walk of life and on every level of society, behavior is dominated by the attitude of leave-it-to-the-current-of-events. And through it all runs a curious inertia — an aversion to planning one's life, to taking thought for the morrow.

3. *The Confusion about Social Planning*

This personal aversion to planning one's life is reflected in a similar tendency in the larger community and national scene. One of the most curious splits in the American mood is that shown in the confusion about "social planning." The entire business and technological world practices planning on a large and vigorous scale. The efficiency of every private and public corporation of America rests upon it. The uninterrupted operation of public water supplies, and hence of the lives of tens of millions of our people, depends upon it. Vast public works employ it meticulously. No businessman would allow himself to carry on the production of commodities without the shrewdest planning of which he and his organization are capable. Yet the same businessmen, while demanding efficiency of the United States government, refuse to let it plan; as a single instance recall the recent killing, by the Congress, of the National Resources Planning Board and other design agencies.

In the past ten years I have had much experience with this muddled attitude, especially in combating the nation-wide attack on my social science books.¹ I find among my few intelligent opponents (most of them were provincial Legionnaire "Americanization Chiefs" who believed whatever their central officers told them) that the aversion to large-scale national planning is not to the "planning" *but to the "control" that must go with it.* The astute ones have grasped an important generalization — namely, that *one cannot plan, build, and operate any enterprise without strategic control.* The capital exhibit of current

¹ See *That Men May Understand* (1941).

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

planning and construction today is the TVA. Its engineers knew from the beginning that the base of the problem in the Valley was *complete control of the Tennessee River and all its tributaries*; the Valley was a giant watershed stretching across parts of seven states, administered by seven quarreling state governments, which for years had been unable to work together. Here was a clear case where the partial sovereignties of the states had to be given up to the one total sovereignty — that of the Federal government — that could *control the whole watershed*. By Federal law the TVA engineers *were given control over the whole watershed and they completely solved the problem*.

Let us teach our young people two documented facts:

- that to plan and build and operate we must control the entire scope of the thing planned.
- that it is central control that the Americans have resisted throughout their history; this mood has carried over subtly today and creates opposition to government's participation in planning.

4. "Leave It to the People"

This nucleus of implicit beliefs in the total ontology of our people is based upon an honest conviction, and expressed in the casual behavior of the multitudes of individuals, that "you can trust the people." Individual life, the students remind us, is periodic, shifting constantly from balance to imbalance and back to balance. Social life is likewise. But you can trust the people to regulate and redress the imbalance. Enough individuals will always wake up to the dangerous stages of distortion, and will take steps that will "*automatically restore the balance*." In recent years this belief has also been documented by the students who point, with supporting data, to the many examples of social action in which the people did straighten things out. For example, whenever Congress misbehaves, and much of it does much of the time, the people straighten it out. You have to give them time, but eventually they will do it. This is the basic mood of the people.

5. *Examples of Culture-Patterns Planned after the Accidents of Events*

It is this system of beliefs that has dictated the minimum framework of control that government has imposed upon the people. The consequence of leaving the structure of controls to the current of acci-

PATTERNS OF AMERICAN CULTURE

dental events and the chance that the people may wake up is a crazy-quilt patchwork of law and primary state papers:

- a system of national defense on land, sea, and in the air — only brought to a point of efficiency under the menace of war
- the national transport and communication service, largely left to private-ownership controls, now partly structured by law — the process itself not one of systematic over-all design, but of cumulative response to the accident of events
- an utterly inadequate public school system and a vague scheme of regulation of equally inadequate private schools and colleges
- a system of lawmaking, courts, police and fire protection, and insurance governing the protection of life and property, and the owning, preëmption, inheritance, and use or disuse of property
- a partial system of public hospitals and health services; no provision in half the country

But these systems, like Topsy, “just grewed.” Not one was really designed. The political structure of our society is an inefficient chaos of Boards, Departments, Bureaus, Authorities, and Commissions, what-not.¹ Thus even those phases of our culture that have been subjected to some kind of “planning” have been put together piecemeal, bit by bit, *in answer to the competitive coercions of separate sectors of the population*. No basic over-all *design* has been made.

6. *Economic and Social Security Left to the Vagaries of Competition*

But if the foregoing are regarded as “structured” phases of our culture, what are we to think of the total lack of planned provision for those critical ones which lie at the roots of human security? I mean the right to a job, to a place on the land, to credit, to health, to free access to ideas, to education, to rich leisure activity, and the creation of the social machinery by which the people can get them and keep them. A fine example is the content of our national Bill of Rights. Out of the competitive struggle of several centuries the *civil freedoms* and the *political freedoms* were written into our national Constitution — *but no economic or social freedoms were included*.

¹ For a graphic and carefully documented illustration see Charles E. Merriam's *Chicago*.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Both the "freedoms" that were guaranteed and the machinery to implement them were built step by step, piecemeal, by the competition of warring forces. There was never, at one point, an over-all design. A totally new industrialized mass-production society has replaced the handcraft agrarian one of 1787, but no Constitutional Convention has ever been held since that hot summer in Philadelphia to reconsider the total redesign of our society. Moreover, in spite of nation-wide demands for drastic revisions of our Bill of Rights and the Constitution, even the mild efforts of liberal Congressional leaders are defeated. Competition still underpins every culture-pattern of our lives. As I write, the Congress is again refusing to protect the basic economic freedoms of our people.¹

Other Confusions in Beliefs

The shifting facets in the implicit ontology of the Americans have produced other examples of cultural confusion. The population is admittedly growing older, and the problems presented to the people are increasingly baffling and demand erudition and wisdom. Yet our whole tradition thus far tends to value youth above maturity. In our vast industrial enterprise the 1890 old-age deadline of sixty-five has already become the 1940 deadline of forty. Even middle age is suspect, for youth is in the saddle. Provincialism is rampant. The casual sentimental act is valued above the critical solution of problems. The wisdom of maturity is demeaned, and first place is given to im-

¹The National Resources Planning Board, before it was abolished by Congress, had already prepared such an economic-social supplement, known as the Nine Freedoms:

1. The right to work, usefully and creatively, through the productive years
2. The right to fair pay, adequate to command the necessities and amenities of life in exchange for work, ideas, thrift, and other socially valuable service
3. The right to adequate food, clothing, shelter, and medical care
4. The right to security, with freedom from fear of old age, want, dependency, sickness, unemployment, and accident
5. The right to live in a system of free enterprise, free from compulsory labor, irresponsible private power, arbitrary public authority, and unregulated monopolies
6. The right to come and go, to speak or be silent, free from spying of secret political police
7. The right to equality before the law, with equal access to justice in fact
8. The right to education, for work, for citizenship, and for personal growth and happiness
9. The right to rest, recreation, and adventure; the opportunity to enjoy life and take part in an advancing civilization

PATTERNS OF AMERICAN CULTURE

pulsive action and improvisation. The deep-set mood of "Try some thing and see if it will work" is still abroad among us.

In such a climate of opinion, cultural roots are shallow. The feeling of the people is toward tomorrow; the foundations of yesterday are ignored. This shows itself in many ways — in the transitory nature of the job and in the tremendous mobility of the population from house to house, neighborhood to neighborhood, town to town, even region to region. It reveals itself strikingly in our housing: few people build with stone; the homestead idea of permanence and good building on the land is seldom encountered. The concept of "the cultivation of the total scene"¹ just is not within the comprehension of most of the people. Flux, impermanence, instability, are exaggerated rather than brought under control. Yet the very nature of the flux calls out for wisdom and mature guidance and reconstruction. As hours of work decline and the need for rich and wise use of leisure mounts, our people are caught up in a new national mood of anesthesia — a maelstrom of auto riding, jazz bands, bars, movies, and radio.

THE AMERICAN WAY AND THE PROBLEM OF CLASS

But no study of the patterns of American culture is more rewarding than that of the concept of class. History shows that most human societies have revealed a class structure — certainly all ancient and medieval societies, all modern European ones likewise, with the single exception of Russia. But now comes before us the insistent case of the United States of America: is it the single provocative exception among the democracies? Here, then, is a problem which must be studied in every high school and college: Is America a "classless" society, as many students have said throughout two generations? Or are our communities suffused with class consciousness from the Upper-Uppers to the Lower-Lowers, as Lloyd Warner and Paul Lunt and their colleagues insist?²

We need at this moment a definitive study of the American way and the problem of class. Were such a study available, it would be

¹ See Chapter XIV.

² W. L. Warner: "Yankee City" Series; see Vol. I, Warner and Lunt: *The Social Life of a Modern Community*. See also Warner, Havighurst, and Loeb: *Who Shall Be Educated?* The current addresses of Harvard's President Conant show that he too has become absorbed in the class idea.

possible to set down here an authoritative consensus. But no such study is at hand, and so, as we move into the design of the new educational program, we must do what we can with the materials at our command. Many of those materials I have already brought together, and I propose now to add to them the conclusions from recent studies of culture-patterns that bear more directly on the problem of class.

On every moving frontier the classlessness of the Americans was proclaimed. Sixty years ago eminent foreign visitors, such as Lord James Bryce, came to the same conclusion; in 1888 Bryce said: ¹

“In the United States, public opinion is the opinion of the whole nation, with little distinction of social classes.”

But later, he said, our agrarian society was changed by industrialization and the capitalists, especially the financiers, had developed into “more of a class.” In the 1920’s Charles and Mary Beard described our great Middle West – the Valley of Democracy – as “a social order without marked class or caste, a society of people substantially equal in worldly goods.” ² But they disagreed with Bryce’s appraisal that class consciousness was emerging with industrialization. Commenting on the industrial changes that came in the Middle West and in other parts of the country, they said:

“Moreover through investments in odd lots and baby bonds, through stock-owning and profit-sharing schemes, through savings banks and insurance companies, this large middle class had become part owners, usually absentee, of the enterprises managed by captains of finance. By this unforeseen development the

¹ James Bryce: *The American Commonwealth*, Vol. II, pages 272–273.

² *The Rise of American Civilization*, Vol. I, page 534.

SELECTED SOURCES FOR THE STUDY OF THE
AMERICAN WAY AND THE PROBLEM OF CLASS

A. Davis, B. B. Gardner, and M. R. Gardner: *Deep South*

St. Clair Drake and H. R. Cayton: *Black Metropolis*

B. Ginsburg: *Encyclopedia of the Social Sciences*, Vol. XI, page 536

A. W. Jones: *Life, Liberty and Property*

R. S. and H. M. Lynd: *Middletown and Middletown in Transition*

W. L. Warner and P. S. Lunt: *The Social Life of a Modern Community*, Vol. I
of six-volume “Yankee City” Series

W. L. Warner, R. Havighurst, and N. B. Loeb: *Who Shall Be Educated?*

The student should not miss the debate on the problem of class that appeared intermittently in the *Social Frontier*, from December, 1935, through 1936.

PATTERNS OF AMERICAN CULTURE

Marxian prediction that the middle class would be ground to pieces between the plutocracy and the proletariat was so far unrealized in the United States.”¹

Fifteen years later, in the Great Depression, when of all times would be revealed the sharp divisions of class consciousness, many eyewitness recorders concluded that our people still did not reflect a “class psychology.” Certainly the question of “class” is an important one for the American educator who is struggling to organize our youth in the foundational study of our own culture. In a short space I shall try to state the present consensus of thought.

WHAT DOES THE CLASS CONCEPT MEAN?

In everyday language, the term is employed in many senses. People casually use such phrases as the middle class, the upper classes, the lower classes, the educated classes, the well-to-do classes, the business class. But students need a more scientific definition, and on one point the students agree: the class concept deals with social differentiation, and all modern societies, including our own, show an intricate differentiation of groups. Our problem is to explore the factors and the permanence of the differentiation.

The consensus is clear on two points:

- *First*: In all modern societies the nature of the stratification of the groupings has changed markedly;
- *Second*: In most major industrial societies there remain even today some exhibits of the “caste” meaning of class.²

¹ *Ibid.*, Vol. II, page 719.

² See explanation of this concept later in this chapter.

SELECTED EYEWITNESS STUDIES OF THE AMERICAN WAY

1. Herbert Agar: *Land of the Free*
2. Sherwood Anderson: *Puzzled America*
3. Alfred Bingham: *Insurgent America*
4. Erskine Caldwell: *Some American People*
5. Waldo Frank: *The Re-Discovery of America*
6. Morris Markey: *This Country of Yours*
7. Alexander Meiklejohn: *What Does America Mean?*
8. James Rorty: *Where Life Is Better*
9. John Spivak: *America Faces the Barricades*
10. Charles Wilson: *Roots of America.*
11. Edmund Wilson: *The American Jitters*

What are the factors that lie at the roots of class? Are the groupings into which the people put themselves primarily economic? Or are they social? Or psychological?

Economic, Social, and Psychological Factors

A generation of social anthropology has shown how definitely economic factors divide the people. Modern studies of primitive societies which have undergone sharp economic changes, but within the framework of an agrarian social order, have confirmed them. Perhaps the best single example is Ralph Linton's study of the social effects of the introduction of wet-rice production in the dry-rice culture of the Tanala.¹ Linton's report establishes clearly that a fundamental alteration in economic practices changed a relatively classless primitive society into one of marked and self-conscious classes.

Moreover, the distinguished mid-nineteenth-century students of the economic anatomy of the new industrial society made great use of the class concept. To such distinguished students as Karl Marx the ownership and control of productive property was the chief stratifying factor. Other equally distinguished students have stressed the psychological outcomes of economic differentiation. Werner Sombart, author of *Modern Capitalism*, conceived of a class "as a group which by its way of thinking stands for a particular system of economic organization." Such students insist that a body of ideas and interests held in common give the people in a group a feeling of coherent class fellowship. There are still others, such as Spann and Sir Francis Galton, who concluded that intellectual ability was the critical factor in stratifying a society into social classes.

The social-psychological study of the culture has tended to show the equally important role of noneconomic factors, in binding people together into "classes." One historic trend of thought stressed the feeling of "consciousness of kind" in the group. This view insisted that class cohesiveness depends on the nature of the common experiences of the group and the extent to which class consciousness has developed a traditional solidarity of interest. Attitudes of respect and admiration for the achievements of one's class, as well as the necessity for the defense of the group against attack, all contribute to the solidarity.

¹ Ralph Linton: *The Tanala, a Hill Tribe of Madagascar*. Field Museum of Natural History, Chicago (1933). See also his *The Study of Man*, and his chapter in Kardiner's *The Individual and His Society*.

PATTERNS OF AMERICAN CULTURE

What, then, are the marks of a class society? Of the many systematic modern definitions Ginsburg's comes nearest to being an adequate statement. Classes in modern society, he says, are:

"groups of individuals who, through common descent, similarity of occupation, wealth and education, have come to have a similar mode of life, a similar stock of ideas, feelings, attitudes, and forms of behavior, and who, on any or all of these grounds, meet one another on equal terms and regard themselves altogether with varying degrees of explicitness, as belonging to one group."¹

Note the elements in this definition:

- groups of common descent and common experience
- living similar modes of life
- holding relatively same ideas and feelings
- who meet on relatively equal terms
- and feel themselves to belong together

But two very important psychological characteristics are missing or minimized in Ginsburg's list, and I shall want to emphasize them; these are the feeling of superior or inferior status and the feeling of *permanence* in a class. None of Ginsburg's elements conveys the first; his concept of "common descent" suggests the second. I would add these elements, then, to Ginsburg's scale:

- a definite feeling of *status* within one's class and with respect to the hierarchy of the classes within the society, and ...
- the feeling of "being born" into a class and taking on its attributes and passing them on to one's children

This is the "caste" meaning of class — and for a complete view must definitely be included.

/ / /

Equipped with this total yardstick, let us see what the consensus of the students is with respect to the class culture-pattern in the United States.

First, the studies that point toward little if any class stratification:

¹ *Encyclopedia of the Social Sciences*, Vol. XI, page 536.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

I. THE VIEW THAT AMERICA IS A CLASSLESS SOCIETY

Where Do the Americans Place Themselves?

One of the most important measures of class in a society is the extent to which the people themselves *feel* that they are divided into superior and inferior classes. Several polls of public opinion supply clear-cut and convincing evidence. *Fortune* magazine, February, 1940, reported a Roper poll on the question: "What word would you use to name the class you belong to?" The answers, regarded as a good cross section of American opinion, tabulate as follows:

1. Upper Class (best, highest, etc.)	2.9 per cent
2. "Business," "executive," "white collar"	2.0 " "
3. Middle Class (upper, "middle," above average, etc.)	47.0 " "
4. Lower ("poor," "poorest," "working," etc.)	14.9 " "
5. Miscellaneous	5.7 " "
6. "Don't know"	27.5 " "

56.5 per cent of those interviewed did not actually use the word "upper," "middle," or "lower." Roper's agents asked those persons: "If you had to describe the class to which you belong with one of those three words, which would you pick?"

THE EVIDENCE IN THE RECENT STUDIES

We have several recent studies of the class problem in America; the most pertinent are:

- systematic polls by Roper (*Fortune*) and Gallup (Institute of Public Opinion) on what the American people themselves feel about it
- the Lynds' two reports on Middletown
- Jones's attitude study of a cross section of the population of Akron
- Warner and Lunt's study of "Yankee City"
- the Chicago Attitude Study (Kornhauser, 1937)
- the American Marxian analysis of class in America (e.g., Corey)

From these we get two definitely opposite interpretations:

- *First*: The affirmation of the continued blurring of class lines confirmed by the polls and by the Lynds and Jones.
- *Second*: From Warner and Lunt's study of Newburyport, Massachusetts; a picture of a class-ridden community, a view which Warner has tended to generalize for the country and with which his students at the University of Chicago now seem to be inoculated.

PATTERNS OF AMERICAN CULTURE

	PERCENTAGE OF ANSWERS	PERCENTAGE OF POPULATION INCLUDING PREVIOUS ANSWERS
Upper Class	10.6 per cent	7.6 per cent
Middle Class	68.0 " "	79.2 " "
Lower Class	11.9 " "	7.9 " "
Don't know	9.3 " "	5.3 " "

The fact of psychological importance about the American people is that they *regard themselves as belonging to a vast middle class*, which encompasses nearly four out of five of the people. The business executives avoid the word "upper class," as the unskilled laborers avoid "lower class." The Roper-*Fortune* poll was confirmed by the statistical results of a Gallup poll of the Institute of Public Opinion: ¹

Upper Class	6 per cent
Middle Class	88 " "
Lower Class	6 " "

The Lynds' Study Confirmed These Findings

In their second study of "Middletown" (Muncie, Indiana; 1935) the Lynds devoted much time and thought to the class problem. In the first study (1924-1925) they had paid less overt attention to it, contenting themselves with cataloguing the people in two broad occupational groups:

- the business class: 29.4 per cent of the gainfully employed people
- the working class: 70.6 per cent of the gainfully employed people

There was little sign of "upper" or "lower" classes in 1925, little sign of a class cleavage. But by 1935 the situation had changed greatly and they gave much space to the problem.

The Lynds conclude that

"To most of its people, of whatever group, 'class differences' and 'class consciousness' are vague, unfamiliar, and, if recognized, unpleasant and sinister terms . . . any talk about 'class differences,' a 'class struggle,' and similar unpleasant things is attributed to 'reckless outside trouble-makers.' Officially, Middletown scoffs at the 'class struggle.' . . ."²

¹ Gallup and Rae: *The Pulse of Democracy*, page 169.

² *Op. cit.*, *Middletown in Transition*, pages 447, 449, 450.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

But, recurringly throughout the second "Middletown" report, the Lynds add such qualifications as this one:

"And yet — despite the fact that tradition, inertia, and intent combine to blur any potential class differences, indications of a sharpening of awareness of some class lines continually break through tendencies to bury them." . . . "the line between working class and business class, though vague and blurred still, is more apparent than it was ten years before."¹

Searching for the factors that cause the shift, the Lynds remind us that it may in part be the natural consequence of a "big town" growing up into a moderately large city; it is now almost 50,000. One can discern changes in the culture-patterns of the larger community:

- there is less localism, more tendency toward metropolitanism.
- a growing anonymity . . . "the lost individuals" . . . the people losing each other as friends, and acquaintance and association become more selective.
- the informal friendships of earlier days are replaced by participation in formal social organizations.
- the feeling of "belonging" to the community declines.
- control of community life is concentrated in fewer hands.
- residential areas become more sharply segregated and homogeneous.

By 1935 the businessmen themselves began to see that, as one of them said, "Out of the depression there is unquestionably emerging the first faint outlines of local labor solidarity." Episodes increased in frequency that showed that the social distances between the two groups was increasing. But, the problem isn't all either-or. As one went down on the workers' South Side and watched the men and their families, the "feel of the scene was on the easy resilient side; no crew of helots or men cowed into furtiveness." The mood of frontier America — the mood of spontaneous and optimistic independence — seems still to be in these towns.

Nevertheless, in Middletown, economic power still secures all other power. The Lynds opened a chapter entitled "The X Family a Pattern of Business Class Control," with this comment made by a Middletown man, in 1935:

¹ *Ibid.*, pages 450-451.

PATTERNS OF AMERICAN CULTURE

"If I'm out of work I go to the X plant; if I need money I go to the X bank, and if they don't like me I don't get it; my children go to the X college; when I get sick I go to the X hospital; I buy a building lot or house in an X subdivision; my wife goes downtown to buy clothes at the X department store; if my dog stays away he is put in the X pound; I buy X milk; I drink X beer, vote for X political parties, and get help from X charities; my boy goes to the X Y.M.C.A. and my girl to their Y.W.C.A.; I listen to the word of God in X-subsidized churches; if I'm a Mason I go to the X Masonic Temple; I read the news from the X morning newspaper; and, if I am rich enough, I travel via the X airport."¹

The Lynds say that a small self-conscious upper business class is gathering around the X family.

The lower level of this business class appears also to be drawing away from the central nucleus, but it is moving downward, associating itself with others to form a "new middle class." "These are the small white-collar folk — struggling manufacturers with no particular future, the smaller retailers and tradespeople, salesmen, officeholders, school teachers." These seem to recognize that they do not belong with any upper class, they are feeling a new consciousness of kind with "the white-collar small fry." It's not easy to locate this split exactly, but the feel of it builds cumulatively from little incidents in the ongoing life of the community.

The Lynds sum it up by saying that they feel they can see the people of Middletown forming into six new economic-social "groups"; they do not permit themselves to call them "classes." If any twofold division of all can be made, the first three of these groups stand roughly aligned against the second three in economic division.

Jones's Study: Personal Rights vs. Property Rights

Alfred Winslow Jones's study² of attitudes throws clear light on the class problem. It was a study of the *attitudes* of the people of an industrial city — Akron, Ohio — toward the ownership and use of *corporate property*. Out of the study emerges a factual cross section of the attitudes of our people concerning *personal rights* as contrasted with *corporated property rights*.

¹ *Ibid.*, page 74.

² Alfred Winslow Jones: *Life, Liberty, and Property: A Story of Conflict and a Measurement of Conflicting Rights* (1941).

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

The importance of choosing corporate property rights as a subject of psychological study need hardly be argued. Since the publication of Berle and Means's *The Modern Corporation and Private Property* (1933), a host of documented statistical studies has shown that the property, wealth, and income of the United States is under the control of a small sector of the corporate owners of industry.

Jones's study was carried on in Akron, Ohio, in 1938-1939, by a staff of ten trained sociological workers, who personally interviewed 1122 individual citizens and obtained group interviews with 503 more, a total of 1705. It was done under the joint auspices of the University of Akron, the WPA Federal Writers' Project, and the Institute for Applied Social Analysis. Each interview consisted of relating to the subject eight dramatic episodes illustrating the conflict between personal and property (corporate) rights, and getting his answers to definite questions.

A standardized system of marking the answers led to a scale of possible scores from 0 to 32. A score near 32 meant a definite commitment to property rights over personal rights, a score near 0 the opposite. I have gathered the scores from Jones's study and listed them briefly:

	SCORE
— 18 rubber magnates (big owners in real estate, banking, and publicity)	29.0
— 23 farmers	19.5
— A storekeeper	19.0
— 37 "company union" members	17.6
— 24 white-collar technicians	15.5
— 54 women office workers	15.5
— 40 teachers in public schools	15.5
— 11 Protestant ministers	15.2
— 303 citizens' "Control Group"	12.3
— 52 small merchants	12.1
— 4 Greek Catholic priests (17, 12, 10, 6)	11.3
— 8 Catholic priests	11.2
— 72 WPA white-collar workers	11.0
— 110 WPA manual workers	7.8
— 193 CIO skilled rubber workers	6.2
— 3 Jewish rabbis (6, 2, 0)	3.7
— 21 Technocrats	2.9
— 12 Socialists	2.8
— 2 Communists	0.0

One can neither scan the foregoing ranked scores nor read the details of Jones's records without recognizing that the people in this

PATTERNS OF AMERICAN CULTURE

American city scatter widely across the entire scale of attitudes. *There is no sharp cleavage between two great warring blocs.* Jones says:

“Even in Akron, with almost everything in its background making for cleavage, the trend toward conformity with the compromising position seems to be stronger than the trend toward cleavage.”

That America is a Mixed Economy in psychology, as well as in ownership and control, stands out clearly from Jones's records.

“The central morality exerts a powerful pull upon the attitudes of the workers . . . Public opinion, however, would welcome any change in, or even the abolition of, *corporate property rights if it were made obvious that corporate property is a very special form of property in general, and if the changes would make life, liberty, property, and the pursuit of happiness demonstrably more secure.*”¹

II. THE VIEW THAT AMERICA IS CLASS-CONSCIOUS

There is another body of students who are convinced that there is much more class-consciousness in America than studies like the foregoing show, and it is important to appraise their evidence and logic. I shall refer to two studies, one under the leadership of W. Lloyd Warner, the other the Marxian analysis of Lewis Corey.²

Warner and Lunt Found a Class Society in Newburyport

Lloyd Warner and Paul Lunt's study of the small seacoast community of Newburyport, Massachusetts, which they call “Yankee City,” is constructed primarily on the thesis that life in the community revolves around a rigid and widely pervasive consciousness of “class.” In this position they stand alone, for no other investigator has confirmed them.³ Everybody in the town of 17,000 people fits, the authors maintain, into one of six social-economic classes: Upper-upper, lower-upper, upper-middle, lower-middle, upper-lower, lower-lower. The report is organized in terms of the class concept.

¹ *Op. cit.*, A. W. Jones, pages 330-354. [My italics.]

² See his *The Crisis of the Middle Class* (1936).

³ Six volumes under the general title, “Yankee City” Series. See especially Vol. I: *The Social Life of a Modern Community*. W. Lloyd Warner and Paul S. Lunt (1941). First three volumes are the only ones published.

The study of "Yankee City" conveys a feeling of a community organized in a hierarchy of social classes ruled from the top by the old families who have held on for nine generations, even though their money income had declined and many of them were "shabby genteel." The study makes much of the fact that the possession of money is not the chief criterion of upper-class membership. Some money was necessary, but great wealth alone did not determine one's position on the class scale. "The wealthiest man in our town" was not at all regarded as "Upper-Upper." Why? Because "he and his family do not act right." Morally they were all right, but "they did not do the right things" . . . "They did not belong to the right families" . . . "They did not go around with the right kind of people."

Of course, there's a slow shift in the composition of the social classes in Newburyport. One gets the feeling of members of the lower classes very slowly moving up the social scale, as the generations passed, by "bettering their financial position," by "marrying into the good families," by more education, by "playing the game." Correspondingly, some among the later generations of Upper-Uppers were pulled down by marrying out of their class.

The conclusions of the Warner-Lunt study, although it was made by persons trained in sociological or anthropological methods of research, contrasts sharply with those of the Lynds and Jones, with the results of the polls, and with many other judgments, including my own.¹

The American Marxian Analysis of Class

The approach of the Marxian analysis is quite different from that of the face-to-face studies of community life in America. It is to make elaborate statistical and historical analyses of the distribution of "owners" and "workers," as was done by Lewis Corey in his *The Crisis of the Middle Class*. He assumed for America of the 1930's, as Marx

¹ I grew up in a small Massachusetts city (Fitchburg), about the size of Newburyport, and some forty miles inland from it. It is typical of scores of small Eastern inland manufacturing towns. While a few old families preside socially over the town from the heights of lovely Prospect Hill, twenty years' experience of the town gives me the clear feel of another "Middletown" — not a "Yankee City." Warner and Lunt have described, and devastatingly it seems to me, one of the few exceptional "old family" seaport towns of the Eastern United States. Careful search would reveal a few that are still left here and there. But among the nearly twenty thousand incorporated communities of America, they are the rare exception rather than the rule.

had asserted for Europe nearly a century before, three economic measures of class: ¹

First, the economic criterion of class: that the ownership of *productive* property divides any national population into two mutually exclusive economic "classes" — owners and workers — each of which is sufficiently homogeneous, in the interests of its members, to guarantee eventually concerted political action.

Second, the disappearance of the middle class: that the American people, most of whom throughout most of their history were essentially a vast "middle class" of small property owners, have largely lost that ownership and are swiftly disappearing downward into a "proletarian" class of propertyless workers.

Third, the concept of the class struggle: that there is an irreconcilable conflict of interests between these two "classes" and that social change can be brought about in America only by warfare between them.

Are these theses valid when applied to twentieth-century America? *The immediate theoretical question is: On what measures can a mixed national population, like that of the United States today, be divided into mutually exclusive "classes" which are homogeneous and antagonistic enough for concerted social action?* The Marxians' criterion of ownership of productive property seems to me to be utterly inadequate for American conditions. The problem reduces to a question of psychology: When will a group of people really stand and act together?

My answer is: *Only when they want approximately the same thing.* It is their driving desires and their fears, their orienting loyalties and their beliefs, not their abstract membership in a general economic "class," that will march them in solid phalanx to the ballot box to utter a concerted Aye or Nay on social issues. To document this conclusion, consider the composition of American society.

III. THE VIEW THAT AMERICAN SOCIETY IS A WELTER OF INTEREST-GROUPS

A realistic analysis of government in America shows that it is carried on, not through the warfare of two great fighting "classes" but

¹ See my analysis in "The American Mind and the 'Class' Problem," *Social Frontier*, February, 1936, pages 138-142.

rather through the interplay of many small special interest-groups. There are, in every community, political parties and machines which constitute a feudal hierarchy of either self-aggrandizing or social-service groups. There are powerful business and industrial cliques — Chambers of Commerce, Manufacturers' Associations, Department Stores, Real Estate Boards, what-not — which are the dominant political force of the community. There are civic-betterment blocs such as The Municipal Voters League, The League of Women Voters, The Parent-Teacher Association, Civic Federations, and the like. There are chauvinistic-patriotic groups such as The Daughters of the American Revolution, The National Security League, The American Liberty League, and The American Legion. There are religious groups, professional groups, racial groups, and neighborhood groups. This composition of the community into a tangle of intermixed groups was well documented by Professor Merriam in analyzing more than five hundred such interest-groups in his famous study, *Chicago*.

Government in a democratic society, then, is the political interplay, largely invisible to the public, of this myriad of milling interest-groups. The members of each one want something — a franchise or other concession, a new tax or the abolition of an old one, an extension of one's own liberties or a restriction of those of others, the betterment of this or the exploitation of that. Directly or indirectly, through professional or lay lobbies, each one exerts its pressure upon executive, legislature, and judiciary. Their requests, demands, or pleas are granted, rejected, or ignored in proportion to the volume of coercive threat carried by their lobbies. Thus all these groups are "in government," although most of them disclaim it.

While their constituencies are individuals who are bound together by common wants, any one individual is generally a member of many different groups. Since the aim of some of these groups will conflict in policy, program, and strategy with those of others to which any individual belongs, the persons who compose them are frequently torn by confused and conflicting loyalties.

↑ ↑ ↑

*Evidence from the Depression Studies
of the Mood of the People*

I cite one final body of appraisal — namely, the dozen eyewitness reports on the mood of our people in the Great Depression.¹ I refer

¹ See my bibliography on page 349.

to those of Meiklejohn, Markey, Bingham, Rorty, the two Wilsons, and others named earlier. These men, after separately mixing with run-of-the-mine Americans throughout the country during the worst years of the Depression, definitely confirm the conclusion concerning the absence of an "owner *vs.* worker" psychology in the temper of the people. Even then, with 15,000,000 out of work, they saw "no revolution" in the offing . . . the "worker does not want to overthrow the government." They saw America "puzzled," ignorant and bewildered, uncertain of problems, factors, or solutions, and governed by wishful thinking; the people on relief still clung "to their despairing hope that a man sitting in Washington will pull them out."

The migratory worker "knows nothing about Communism." . . . He merely "knows that 'red agitators' organize strikes." The docile white-collar worker "took the brunt of wage cuts and unemployment without even raising a voice in protest." The "white-collar man still clings to his air of aloofness, still considers himself better than the laborer." As for the solidarity of the working class, these reporters found "a realization everywhere among the workers of the rottenness of many of the old unions." Bingham commented on the vested interests and the conservative, even reactionary behavior of the American Federation of Labor.

They found "in the average American a profound humbleness. A hunger to do the thing together in some way is still alive in us." . . . "Work — that's what we Americans want." There was "optimism" that jobs would return. The tone of the workers' comment was "It's my own fault!" — not the owners' fault and folly. The down-and-out American "does not blame his civilization. He feels that in some way he is not a good American because he has not risen above his fellows." "It's no time for bellyachers now."

/ / /

Thus, neither from the study of the process of government, nor the history of the American mind, nor from current eyewitness appraisals, can I find support for the Warner thesis of a class-conscious society or for the Marxian dictum that the American people are divided today into two antagonistic conflict groups in which a class of propertyless workers will shortly fight it out with a small but powerful property class.

/ / /

These, all too briefly canvassed, are the types of data and logic with which the educator can equip himself today to study the culture-pattern of class in the American way of life. I doubt if a truly authoritative statement of consensus can be made at the present moment. We shall need many studies like those of the Lynds and Jones, Warner and Corey, before that can be done. *Yet the educators of America are confronted by a practical problem.* They must lead American youth *now* in the study of what the actual culture-patterns of their people are. They dare not continue to avoid the problem as has been done altogether too much in the past. I cannot leave the problem, therefore, without summing up my own view.

I can find no massive groups in our society which can be characterized as classes on the criteria outlined in this section; namely, persons who are of common descent and experience, who hold the same beliefs and values, who regard themselves as a company of equals, but superior or inferior to another group below or above them, who definitely feel themselves to be a coherent class, teach their children their status, and are prepared to maintain it. On the contrary, I find an all-pervasive social flux, marked by an active and complex interplay of a multitude of changing interest groups. Some of these groups are massive and organized for economic and political action. Obvious examples have been stated in detail in Chapter IX; see especially the outline of the six factors and the review of the structure of American society. The shifting membership of each of these large groups is bound together temporarily by *common interests* for which they are organized and act in concert. But the bonds are tentative and easily broken. Except for tiny islands of class-conscious sects (either F.F.V., "old-family" at the "Upper-Upper" end, or "Communist" die-hard at the "Lower-Lower" end) these are not buttressed by the facts of birth, permanent class membership, or the ritual of class solidarity. Far from teaching their children the "class-struggle," they urge them to participate in the *laissez-faire* race for a better living.

Thus as one looks out over the bewildering flux of the American scene he sees a vast economic differentiation of group life, accompanied by considerable social realignment. Is the traditional American Dream — of every man having a chance to rise to the highest stature of which he is innately capable — fading out? It is too soon to say with finality. Before that can be done we shall need a library of studies like the few reviewed here.

WHAT HAS WORLD WAR II DONE
TO CHANGING CULTURE-PATTERNS?

This is perhaps the leading question we shall have to put to our educators and their students in the higher institutions in the next few years. They will not be able to answer it, indeed they can do little more than deal vigorously with the current of domestic and international events. *But they can come to the problem well-equipped with the concepts and trends that we have perceived in the last four chapters.*

Vistas and Problems re Atomic Energy

Obviously it is too soon, in the midst of the first post-war years, to define any new trends in the culture-patterns that have been brought about by World War II. Among those that have long been under way two have been given a big push by the climactic success of the scientists and the engineers in releasing atomic energy and in harnessing it for destruction by the atomic bomb. *The first is the rate of increase in the economic productivity of the American social system and the problem of its social control. The second is the rate with which the mood of the American is changing re all-out participation in world organization and control and acceptance of vigorous leadership as military and economic nation No. 1.* Both are problems of control and stand first on our educational agenda. Both are basically educational problems because they will be solved eventually only if the people understand.

Most students of the social scene and of education would agree with Stuart Chase's recent suggestion in *The Nation*:

"that another two billion dollars be allocated, this time to the *social* scientists, an equally urgent directive should go along with it. Perhaps after some time in the laboratory and plenty of courage and effort, they can show us how to live with the unbelievable power the physical scientists have loosed upon us."

"Unbelievable power" is the keynote struck by the atomic scientists. They agree that the initial application of atomic energy in productive enterprise will be in "cheap heat and cheap power for the host of synthetics and plastics which are already revolutionizing industry." Our first positive application of atomic energy, say Messrs. Compton,

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Pragel, Oppenheimer, and other distinguished scientists, will be in the realm of large central power plants. Dr. Oppenheimer said recently,

“it is quite feasible that a city the size of Seattle should be completely heated from an atomic-energy source in less than five years.”

Dr. Compton assures us that atomic-energy power stations, efficient and economical, *could* be operating within a year. Here are untold possibilities for the development and distribution of inexpensive power to all the formerly backward regions of the entire earth. Cheap heat as well as cheap power can revolutionize the steel industry, the manufacture of cement, glass, ceramics, bricks. We stand on the verge of a revolution in plastics and of an enormous advance toward economic self-sufficiency. We can now expand in spectacular fashion the gains that science has already made in electronics, electrometallurgy, agriculture, medicine, and biology. This will be followed by an enormous production of artificial radioactive materials, with which “it is possible to investigate the metabolism of men and plants, to recognize and avoid diseases, and to improve the yield of plants.” These radioactive materials also make us “independent of heavy storage batteries, or batteries of great current capacity” . . . “of any electrical installation” . . . “new aspects are open for television: transmission stations without powerful central stations will be possible.”



But, staggering problems of social control are thrown up in the train of these startling scientific successes. The successful social control of atomic energy and such constructive uses as have just been suggested will quite possibly bring about the destruction of the larger units of our present heavy industries. Certainly, the production of steel and all the basic metals will be transformed, as will be the mining of coal and petroleum. As Chase says:

“Railroad and steamship lines may lose up to 40 per cent of their revenue freight. *Technological unemployment could grow to catastrophic proportions*, if everything is left to God and the National Association of Manufacturers, to use Alvin Johnson’s phrase.”

“Energy is a determiner of civilization. Low-energy cultures absorb most of their man-power in getting food. High-energy

PATTERNS OF AMERICAN CULTURE

cultures such as the United States, or Western Europe, in recent years, can release more than half their man-power for the service trades, education, and the arts. The atom may release 90 per cent for higher things – if enough higher things can be found. Not 10 per cent will be needed for farming, mining, and manufacturing. Even before the war, learned committees were worrying about the problem of leisure. Presently they are going to have a superlative opportunity to worry!”

CONCEPTS OF THE CULTURE FOR A NEW EDUCATION

Summing Up

- We distinguish society – the structure of the groupings of the people – from the culture – the way of life of the people.
- The culture is likewise seen in three levels: (a) the material culture ... (b) the social institutions ... (c) the psychology of the people.
- The culture includes both the ontology (the beliefs and values) and the characteristic culture-patterns of the people.
- The ways of living of the people tend to organize themselves around a central concern or dominant set of attitudes and beliefs; in America we now call this “the American way of life.”
- A new ontological synthesis, appropriate to the changing society, is emerging in our times.
- Characteristic culture-patterns have been built in three centuries of American history:
 - The habit of leaving decisions to the casual current of events.
 - The belief in *laissez faire*.
 - An aversion to social planning.
 - Economic and social security is left to the vagaries of competition.
- Recent studies of the class stratification of the American people lead to conflicting conclusions; in current polls the people emphasize the classlessness of American society; this is confirmed by such studies as those of the Lynds but denied by such studies as those of Warner and the Marxians.

CHAPTER XII

The Social Psychology of Consent

THREE PRINCIPLES OF CONSENT

One final problem confronts us on the social frontier. That is the Problem of Consent, and its study brings us again to the philosophy of experience; this time we see it in political action and raising baffling problems of social psychology.

The problem of consent is a problem of the psychological frontier, but I have postponed its analysis to this remote point because it is necessary to employ several important concepts dealing with society and the culture. I am using the concept in the sense given it in the writings of the great psychological students of government from John Locke to the present day. Locke taught us, and the writers of the great state papers since our own Declaration followed him, that *democratic government would endure only if it was based upon the consent of the governed*. The problem is therefore as psychological in nature as it is sociological, hence I call it the social psychology of consent. Three great principles are involved.

1. *The Freedoms in Charters of Liberty*

In several hundred years of civil and political struggle the philosophy of experience ousted the philosophy of authority *in the civil and political fields*. As the spirit of democracy advanced, two of the three great principles of consent were finally established. The first was that the rights of the people shall be guaranteed in written charters of liberty. As a consequence a clear body of civil and political rights are now written into the constitutions of most modern states — the right to move about, to gather freely with one's fellows, to think and to speak one's own thoughts, to take thought together and to publish by word of mouth or in writing the results of that deliberation. Thus,

SOCIAL PSYCHOLOGY OF CONSENT

out of the blood and sweat of seven centuries of struggle, Western men have written *the civil freedoms* — those that deal with individuals as persons — and *the political freedoms* — those that deal with the individual's participation in collective affairs — into the modern charters of liberty.

But, as we have just shown in Chapter XI, there are three other kinds of freedom¹ and one is actually prior in cruciality, for it provides the implementation of the others. I refer to:

- the economic freedoms — the right to work and to own property, the right to a place on the land, and the right to social credit.

As we succeed in our times in establishing these economic freedoms in social practice, we shall also be making it more possible to make actual on our continent two other great freedoms of the charter of liberties:

- the social freedoms — the right to health, social security, education, rest, recreation, and adventure, opportunity to enjoy life and to take part in advancing civilization.
- the intellectual and spiritual freedoms — free access to ideas and the right to live in an environment in which one feels free to make one's own statement.²

But it is a tragic truth that should be grasped by every teacher in America that while *these economic, social, intellectual, and spiritual freedoms* now appear in the new constitutions of the Mexican, Russian, and Chinese peoples, and were included (1919) in the constitution of the short-lived German (Weimar) Republic, they have neither been incorporated in our national Bill of Rights nor established in our social practice. *Only last year the efforts of delegates of other countries at the San Francisco conference to write these economic and social freedoms into the charter of the United Nations Organization were opposed by the American delegation!* This dismaying fact suggests that our mid-century years will test whether a complete Bill of Rights can be made the treasured possession of the American people.

¹ The National Resources Planning Board's New Bill of Rights, or "Nine Freedoms," quoted in Chapter X, states the spirit and content of these.

² The documentation to support this statement is given in Chapters XIII and XIV.

2. *The Machinery of the Suffrage*

The second principle of consent is that adequate machinery of the suffrage shall be created and guaranteed by which the people can register their collective judgments at the polls, by an affirmative Aye or a negative Nay. Today, in America, and increasingly around the world, the machinery of the suffrage has been created. Only a quarter-century ago it became an accomplished fact in the Constitutional Amendment that gave the vote to the half of the population that still lacked it — namely, the women. *But the guarantee that the right to vote will be exercised has not yet been given, because its implementation by economic and social security has not been achieved.* In parts of our country citizens are prevented from voting by the fear of insecurity — that is, by hampering poll taxes, by color lines, by property lines, by party lines; the second criterion of consent has not yet been established in our free America.

3. *The People Must Understand*

But the real nub of consent lies in a third principle. That is that *the people shall understand their problems and conditions* to the end that the votes that they cast shall be intelligent ones. The best political machinery will be of no avail unless the people can use it with wisdom. This is *the social psychological principle of consent*, and this brings us to one of the central educational problems confronting our people today — the problem of nation-wide adult education.¹

THE BATTLE FOR CONSENT

As we move into the post-war world, we find ourselves in the midst of a tense psychological struggle. Since consent is given only when the governed understand, winning the battle for consent is primarily the task of the educational forces of the nation; certainly understanding can be developed in our complicated society only through an education which is conceived in the very broadest and deepest sense. It is wisdom that our people need above all else to lead the modern world. We are strong enough . . . but are we wise enough? That we would win World War II was a foregone conclusion from the

¹ Since this was the central theme in two of my earlier books, (1) *The Great Technology: Social Chaos and the Public Mind* (1933) and (2) *Now Is the Moment* (1943), I shall abbreviate its treatment here.

moment of the harnessing of America for all-out production in 1942. But that we can now make the human and political choices that are now necessary to win the peace presents a terrifying uncertainty. For in our generation the people have suddenly come out onto a new frontier and are compelled to chart a new course. It is *a psychological frontier, an unmarked wilderness of competing desires and possessions, of property ownerships and power-complexes*. On such a frontier wisdom is the supreme need, rather than technological efficiency and physical strength in which our people are so competent.

A generation ago there were many among us who seriously doubted whether there was enough "intelligence" in the American people generally to make the popular decisions that they have to make in a democratic society. But as the people have passed through the crises of the Great Depression and World War II we have seen them daily becoming more informed through their modern means of communication. Through an astounding series of elections we have seen them giving convincing evidence that they have an unusual capacity for popular government. In some regions of our country they have proved that they feel the difference in integrity and wisdom between sharply opposed breeds of men; witness the choice recently of some socially-minded Congressmen who stand for twentieth-century welfare-statesmanship rather than the election of isolationist die-hards and precedent-bound officialdom as has been true in other regions.

And yet only a meager beginning has been made. We cannot doubt that these coming years constitute a great testing moment for our people in the building of popular understanding. The question can be put bluntly: Can they grasp the fact that for more than a century our people have been changing both their social practices and social ideas with such acceleration and crescendo that they are now living in a world-wide social and intellectual revolution? It is this fact of *a revolution in ideas and outlook* as well as in social institutions that sets *the supreme educational task of our times*. That task is to build the conviction in *our people that this is a time of deep social transformation; that our times are different from those of our fathers and we must be willing to think differently and consciously govern differently*, if we are to build a decent world for our children.

The people's acceptance of this point of view will be facilitated by seeing clearly both the giant potentialities in our culture and the dangers that menace them. An advancing body of thinking Americans — many of those formerly regarded as conservative as well as the

long-standing liberals — are convinced that our people have within their grasp all the makings of a civilization of abundance and tolerance and beauty. But we still confront the possibility that not enough of us will become wise enough to bring it into existence in our time. Our treasured American way of life is in grave danger from several sources but *chiefly because the people, who are the only legitimate source of power in democratic America, stand baffled, dumbly wanting to build a decent world and vaguely confident that they can, yet stymied in the doing of it.*

The American climate of opinion today presents a sharp and depressing contrast. On the one hand stand the scattered people — the only legitimate source of democratic power; on the other are organized interest groups. Every one of these power groups knows what it wants. Each has a program. Each has a strategy. Each is organized and acts. But the people, the men-on-the-street, stand bewildered and uncertain because, above all else, they still do not know. They wonder. Standing on the threshold of historic events, they are halted by *a profound dilemma: the promise of abundance conditioned by the risks of adventure versus the guarantee of a low-order security if they play safe. Unlike the power pressure groups — they do not know what they want.* They lack a program. They lack a strategy of action. They lack organization. Tens of millions of them do not act. Yet — they have to make up their minds.

This is the problem of consent.

SELECTED SOURCES FOR THE STUDY OF THE PUBLIC MIND

In the past twenty years an extensive documentary literature of propaganda, censorship, and other problems of the formation and control of the public mind has developed. The documentation of my generalizations can be found in such sources as the following:

- Norman Angell: *The Public Mind: Its Disorders: Its Exploitations* (1936)
- H. Cantril and G. W. Allport: *The Psychology of Radio* (1935)
- W. W. Charters: *Motion Pictures and Youth* (1933)
- H. L. Childs, Editor: *Pressure Groups and Propaganda* (Annals of American Academy of Political and Social Science, May, 1935) . . . *Propaganda and Dictatorship* (1936)
- Edgar Dale: *The Content of Motion Pictures* (1935)
- L. W. Doob: *Propaganda: Its Psychology and Technique* (1935)
- Aurel Kolnai: *The War against the West* (1938)
- H. D. Lasswell: *Democracy through Public Opinion* (1941) . . . *Propaganda Technique in the World War*

PIIFALLS IN THE WAY OF
POPULAR UNDERSTANDING

It is little wonder that the American people are baffled in their attempt to understand the factors involved in the present impasse, for there are imposing obstacles in the way. There are barriers of physical geography; the people are sprawled across a huge continent of two billion acres of land in a dozen separated regions and in twenty thousand communities. There are barriers also in racial and regional diversity of population, for at the very moment that America encountered the changes brought by the second stage of industrialism fifteen million immigrants from southern and eastern Europe created hampering problems of cultural assimilation. Indeed, all the factors in our national life — economic, political, population — changed together.

But linguistically the problem was complicated in even more drastic ways by the domineering part that words have come to play in our industrial society. Within three generations the printed word has tended to usurp the role of oral speech. In frontier societies or even in the little hamlets, villages, and towns of the 1890's, communication was largely direct and personal, by word of mouth; neighbors discussed their collective problems face-to-face, and these were still problems of much direct personal interest about which they had considerable firsthand knowledge. Under such conditions, communication was facilitated by the dramatic gesture of the body. But as the printed word — or the radioed oral word — became the chief vehicle of common understanding, communication lost these dramatic three-dimensional

SELECTED SOURCES — *Continued*

- H. D. Lasswell, R. D. Casey, and B. L. Smith: *Propaganda and Promotional Activities: An Annotated Bibliography* (1935) (Indispensable source list on propaganda down to 1935)
- P. F. Lazarsfeld: *Radio and the Printed Page* (1940)
- Walter Lippmann: *Public Opinion* (1922)
- The Institute for Propaganda Analysis. See especially the ABC's of Propaganda Analysis and the analysis of Father Coughlin's radio speeches.
- G. Murphy and R. Likert: *Public Opinion and the Individual* (1938)
- J. R. Mock and C. Larson: *Words That Won the War: The Story of the Committee on Public Information, 1917-1919* (1939)
- Harold Rugg: *That Men May Understand* (1941). See especially Chapter V, "Merchants of Conflict," and Chapter XI, "Good Concepts and Bad Words."

characteristics. As a result such great national problems as full employment and world coöperation must now be brought to the people through the commentaries of the press or of the equally non-face-to-face radio. So communication has become bafflingly indirect and much more difficult with the rise of a complex, interdependent social life.

CAN THE PEOPLE GET ACCESS
TO THE FACTS?

It is a truism that if the people generally are to understand their problems they must have the necessary facts. This presents a two-fold problem: (1) the physical task of getting the facts to them, for many of the indispensable ones are not within their face-to-face personal experience; (2) *the psychological task of getting the facts to the people organized in meaningful form — so that their significance can be understood.*¹

The Physical Machinery of Communication

There is a compensating gain. The physical task of getting the facts to the people has been well-nigh solved. Modern nations are remarkably equipped with the machinery of the new communication — newspapers, magazines, pamphlets, books, radio, movies, newsreels, and the rostrum. Their leaders can send words or other signs and symbols whispering through the air to the other side of the earth. An American President can now speak to his people over the radio from Teheran, or Cairo, or Yalta; that is, the people can hear his words, the sound of his voice. Certainly the physical problem of communication is approximately solved.

But that is by far the simplest of the problems of getting the facts to the people. Even though they hear the words, *they may not get their leader's meaning. And even if they do, they may not be the meanings the people need in order to understand their problems; through ignorance, inadvertence, or deliberate design someone may*

¹This is the problem Walter Lippmann and the "semanticists" — Ogden, Richards, Korzybski, *et al.* — have been writing about for twenty-five years. See Lippmann's classic *Public Opinion* and his essays *Liberty and the News* and *The Phantom Public* . . . also Ogden and Richards' classic *The Meaning of Meaning* and Korzybski's *Science and Sanity*. Excellent popularizations of their work can be found in Stuart Chase's *Tyranny of Words* and S. I. Hayakana's *Language in Action*.

distort or withhold the facts or warp their significance. Thus, getting access to the facts is a human and psychological as well as a physical problem. We must study it further.

I. PROPERTY BARRIERS BETWEEN THE PEOPLE AND THE EVENT

“Someone may distort or withhold the facts.” Who? Those with an interest to do so — either the owners of the things that the people must have or their political satellites who control government. Anyone who has secured control and is motivated by ulterior personal desires — for example, to protect his own economic interests or the concepts and privileges of his fellow-owners of other enterprises — can, and does in all conscience, distort and withhold the facts. With the swift rise of corporate ownership of the press, radio, and films since 1870, a voluminous body of evidence has been accumulated on this problem; in recent years, as the necessity of government regulation became more apparent, such agencies as the Federal Communications Commission have published authoritative accounts of both the history and present status of this problem.

At the root of the human problem there are two kinds of barriers between the people and their political understanding: economic or property barriers and psychological barriers. A word about each of these.

The Economic Problem of Monopoly of “The Facts”

Imposing economic barriers stand between the people and the facts. The most important is the control exercised by those in charge of the newspapers, radio, movies, and other agencies of communication. It is a truism that they exercise wide control over communication either through ownership or, if they are managers, by the persuasion of the owners to turn control over to them. Thus the ancient problem of monopoly has raised its ugly head in the strategic area of communication. Mr. Bellamy’s generalization, “He that owns the things that men must have, owns the men that must have them,” warns us to be eternally vigilant here; for men in a complex democratic society must not only have the facts; they must be the strategic facts, and they must be organized so as to be meaningful to the people.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

Consider, for example, the baffling problem of full employment, which our people now recognize as the crucial domestic one. If they are to understand it, they must know such strategic facts as the following and see them in close relation to one another:

- that America is a mixed economy — part public, part private.
- that the six factors to the problem are credit and businessmen, farmers and workers, coöperatives and government.
- *that each of these has a certain stake in full employment.*
- *how much power each one has and how it uses that power.*
- what each one does and can do that directly affects uninterrupted full employment.
- the role of ownership and control in the entire process.
- the role of the buyer in ordering goods to keep production going.
- how effectively private enterprise, coöperatives, and government each can function as buyers.
- how far the fear of risk holds back private enterprise from buying.
- how far government can and should serve as a guarantor of security for all.
- such concepts as: “What does a thing cost?” “Can we afford it?”
- the role of deficit-financing of national debt and the relation of these to production and the national income.
- and many other equally strategic facts.

But all these facts must be brought to the people organized together in close interrelationship so that the total problem of full production and full employment can be grasped, its factors understood, and certain practical steps toward a solution can be agreed upon. And it is this that powerful selfish interests which control the agencies of communication, including the schools, mistakenly fear and feel that they cannot permit. This brings us directly to two much studied problems of communication.¹

¹ To the present moment I have never found a single organized account of this problem and these concepts in print. For twenty-five years I have struggled to make such a statement myself and put a great deal of it into the educational materials for the schools, *Man and His Changing Society*. I would now be able to make it available for the senior high schools of America, were it not for the fact that the American Legion officers and others who do not understand the problem

SOCIAL PSYCHOLOGY OF CONSENT

PROPAGANDA AND CENSORSHIP

He that controls the critical agencies of communication controls the public mind. This is becoming more than a hypothesis; it is a principle of public opinion. If single individuals or small groups exercise a far-reaching control over the radio, motion picture, and newspaper,¹ they can, by determining the meanings and concepts that dominate individual minds *go far toward determining what stereotypes² shall grip the public mind.* They can do this, as Lippmann says, by "creating a barrier between the public and the event," in one or both of two ways: *first, negatively, by withholding the facts; social psychologists have now come to call this censorship; second, positively, by distorting the facts. We call this propaganda.*

The students of public opinion have spent much time defining these two concepts. To Young, propaganda

"is the propagation of ideas, opinions and attitudes the real purpose of which is not made clear to the hearer or reader."³

To Doob, who gathered together nearly one hundred definitions of it from various students:

"Propaganda is a systematic attempt by an interested individual (or individuals) to control the attitudes of groups of individuals through the use of suggestion and consequently to control their actions."⁴

The Institute of Propaganda Analysis, through its organizer and spokesman, Dr. Clyde Miller, defined it as

"expression of opinion or action by individuals or groups deliberately designed to influence opinions or actions of other individuals or groups with reference to predetermined ends."

or how the educators are trying to solve it have made it impossible for the books to be used in the schools; see my *That Men May Understand*. I have therefore contented myself by stating it, in outline form, in the various chapters of this present book.

¹ That the control of any one of these is not sufficient is suggested by the results of the national elections of 1936, 1940, and 1944, when President Roosevelt was re-elected over the almost solid opposition of the nation's newspapers.

² The discussion of the stereotype follows at the close of this chapter.

³ Kimball Young: *Social Psychology*, page 504.

⁴ Leonard Doob: *Propaganda* (1935), page 89.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

To Emory Bogardus, "propaganda is a method of misinforming people. Under the pretense of telling the truth, it distorts truth." To Katz and Schanck: "an organized attempt to manipulate masses to concerted action through a medium which is indirect."

Walter Lippmann defines propaganda as the "effort to alter the picture to which men respond, to substitute one social pattern for another," adding

"Without some form of censorship, propaganda in the strict sense of the word is impossible. In order to conduct a propaganda there must be some barrier between the public and the event. Access to the real environment must be limited, before anyone can create a pseudo-environment that he thinks wise or desirable."¹

But Lippmann is convinced that "a group of men, who can prevent independent access to the event, arrange the news of it to suit their purpose." And later he adds,

"Whether the reasons for privacy are good or bad, the barriers exist. Privacy is insisted upon in all kinds of places in the area of what is called public affairs. It is often very illuminating, therefore, to ask yourself how you got the facts on which you base your opinion. Who actually saw, heard, felt, counted, named the thing, about which you have an opinion? Was it the man who told you, or the man who told him, or someone still further removed? And how much was he permitted to see? When he informs you that France thinks this and that, what part of France did he watch?"²

Such a "controlled" environment as is implied in these definitions is not to be confused with the "pseudo-environment" which is the stereotyped world of actual responses which each individual, *even with access to the facts*, erects around himself.² This *constitutes still another barrier to real understanding*. Thus, even if the individual had access to every indispensable fact needed to understand a social problem, there would be such powerful barriers between himself and the event.

¹ Walter Lippmann: *Public Opinion*, pages 43, 45.

² Discussed in later sections of this chapter.

Moreover, there are limits to the radius in which ideas can circulate. Most people live in fairly narrow circles. They tend to get the news from standardized sources — newspapers, radio commentators, and the like — and from sources in which is reflected a point of view akin to their own. The factor of time and attention also restricts the circulation of ideas; witness the small amount of time the average man devotes to keeping in touch with the outside world.¹ But all of this is independent of the problem of the deliberate withholding or distortion of the facts through propaganda and censorship.

Censorship and Social Danger

I link censorship to propaganda, for there is no propaganda without censorship. Whereas to propagandize is positively to *distort* the data that are necessary for group decisions and the enhancement of social welfare, to censor is for one sector of the population, by virtue of its prestige and power and hence its control over the agencies of communication, to withhold data needed for the total group to carry on social life efficiently and coöperatively.

We shall not be unmindful of the fact that most human events are to a certain extent episodes in censorship. As we have already made clear, the culture itself presents to us a definitely censored world. *But this is naïve censorship*, the kind of limitation which is inherent in heterogeneous groups of multitudinous and varied pressures. We do live in a censored world, a pseudo-mental world of ideas and beliefs; all this we assume in the naïve censorship of the culture itself. And there is a kind of conscious, deliberate censorship in times of war and other crises, which can be justified as being "in the public interest." To prevent panic it may be necessary to "prepare the attitudes" of the people; to build consciously a pseudo-environment to which the people can react. This is censorship imposed for the public good by officials elected for the purpose. It is not opposed to democratic government, though its constructive usefulness does depend upon the wisdom, competence, honesty, and personal disinterestedness of the censors. But for minority groups to attempt to censor the citizen's

¹ Studies of the amount of time given to reading the daily newspapers by well-educated people are typified by recent statistical reports. On the average, fifteen minutes a day was devoted to the newspapers; 14 per cent read one paper, 46 per cent read two, 21 per cent three, 10 per cent four, 2 per cent five, 2 per cent six, 3 per cent eight. See Lippmann: *Public Opinion*, page 59.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

world in a democratic society, and particularly in a time of crisis, is a matter fraught with grave danger. It is to destroy the only instrument which can make democracy work.

As our sources show, many facts which should be got to the people are today systematically censored by those who control the radio, the movies, and the press and publication agencies generally. Most newspaper, columnist, and radio commentary is censored in favor of the creed of the owner and his group.¹ Most textbook writing for schools is censored by the conscious or unconscious avoidance, by authors and publishers, of "the bad words."² School histories with "Northern interpretations of the War Between the States" cannot be sold in the Southern states. A straight-out evolutionary account of the universe, the earth, and man cannot be sold to denominational schools. These and many other instances of censorship of the facts needed for understanding are actualities in American communities today.

¹ Witness the widespread use of the "Seven Propaganda Devices" reported by the Institute of Propaganda Analysis in their various publications:

1. **NAME CALLING** — giving an idea a bad label — is used to make us reject and condemn the idea without examining the evidence.
2. **GLITTERING GENERALITY** — associating something with a "virtuous word" — is used to make us accept and approve the thing without examining the evidence.
3. **TRANSFER** carries the authority, sanction, and prestige of something respected and revered over to something else in order to make the latter acceptable; or it carries authority, sanction, and disapproval to cause us to reject and disapprove something that the propagandist would have us reject and disapprove.
4. **TESTIMONIAL** consists in having some respected or hated person say that a given idea or program or product or person is good or bad.
5. **PLAIN FOLKS** is the method by which a speaker attempts to convince his audience that he and his ideas are good because they are "of the people," the "plain folks."
6. **CARD STACKING** involves the selection and use of facts or falsehoods, illustrations or distractions, and logical and illogical statements in order to give the best or the worst possible case for an idea, program, person, or product.
7. **BAND WAGON** has as its theme, "Everybody — at least all of us — is doing it"; the propagandist attempts to convince us that all members of a group to which we belong are accepting his program and that we must therefore follow our crowd and "jump on the band wagon."

² See the documentation in Chapter XIII, "The Good Concepts and the Bad Words," of my *That Men May Understand*.

I. PSYCHOLOGICAL PROBLEMS OF BRINGING THE FACTS TO THE PEOPLE

If the People Are to Understand, the Facts Must Be Organized in Meaningful Form

To this point we have dealt with the physical and property barriers between the people and the event. The psychological barriers are equally difficult ones to hurdle. Even if our society succeeds in evolving soon a technique of social control of the agencies of communication, even if we eliminate much of the current propaganda and censorship and a free flow of facts to the people is established through radio, movies, and press, we shall still confront a difficult *psychological* problem. To guarantee public understanding, we must satisfy still another criterion. *That is, that the facts must come to the people so related and organized that the crucial factors of a given problem can be grasped.* The scope and intricacy of the meanings that confront the person who tries to understand our current culture are so vast and so tangled that they stagger even the well-informed student. The buzzing booming confusion must be simplified and reduced to some degree of meaningful order, if the current conditions and problems are to be grasped even by the intelligent minority of the population.

Mass Communication Agencies Are Beginning to Organize the Facts

A quarter century ago Walter Lippmann published three books dealing with the problem of the formation and control of the public mind.¹ The very point I am making now, namely that the facts must come to the people organized meaningfully, he proposed to have implemented by the creation of special fact-finding and fact-organizing bureaus. There was relatively little discussion of his point or his proposal at the time and not much since, although psychologically it is of enormous importance. But since that time the development of the press, radio, and movies has already produced advances toward bringing the facts to the people in meaningfully organized form. The very nature of the American way itself applied in mass communica-

¹ W. Lippmann: *Public Opinion . . . Liberty and the News . . . The Phantom Public.*

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

tion has encouraged the development of press, radio, and newsreel enterprises. These represent every phase of economic-political-social position, from that of *The Chicago Tribune* and *The New York Daily News* on the die-hard Right, to that of *The Daily Worker* and *The New Masses* on the equally die-hard Communist Left, and a welter of agencies holding every shade of opinion in between these extremes. While it is true that each of these agencies is definitely biased by its ownership, the very presence of alternative ideologies on the air, the screen, and the newsstands serves as a partial check and prod to get the facts before the people. Moreover, some of the agencies — even some of considerable circulation — do, within their own frames of reference, consciously *organize the news to make it meaningful to the public*; this is done with conspicuous success by *The Christian Science Monitor* of Boston, *The Chicago Sun*, and New York's *PM*. The situation is the same on the radio; there are small "leftist" stations to counterbalance the "rightist" national chains, although the little ones reach only a fraction of the listeners who tune in on the big chains. But within these great agencies of communication, *the commentator has become a vitally important instrument of organizing the facts for public consumption*. Each of the chief ones has been employed, of course, because he holds and expounds the bias of the corporate owner. But the public is now given each day of the year *several organized accounts of the world's events and these are set in trends*. Moreover, as with occasional newspapers so with the commentators; some of them consciously *organize* the facts in a trend in practically every column and broadcast — witness Walter Lippmann, Samuel Grafton, Raymond Swing, to name but three. The Book Club magazine habit is growing. Pamphleteering is becoming a skilled art; witness the success of the *Public Affairs Pamphlets* in organizing the facts in their trends around critical problems and issues. And there's an enormous array of printed, multigraphed, mimeographed bulletins, pamphlets, information services, yearbooks, papers, that go to millions of Americans who are waking up to the necessity of understanding our world. So, some steps have already been taken toward getting the facts to the people in such meaningful form that they really can understand them.

HOW THE CULTURE MOLDS OUR YOUNG PEOPLE

That brings us to one of our major problems as educators — namely, the psychological process by which our youth are inducted

into the society and the culture. Moreover, it confronts us again with the psychological problem of I and We, but we return to it this time armed with a considerable knowledge of the society and the culture and the concepts of individual growth which have been documented in the preceding four chapters. There are two phases to the psychological account of the Self and Society and their interaction. There is the phase that deals with the Individual, and there is the total Environment in which he grows. This environment is, of course, the American social world — *the total society and culture into which the child is born*. But to make it clearer we break it down into a manageable series of three levels:

- *First*: A hierarchy of ever widening face-to-face groups — families, neighborhoods, communities, the nation, and the world of modern nations
- *Second*: The sounding boards by which ideas, slogans, pressures are communicated — the press, the radio, the movies, the church, the rostrum, the school and college, and the machinery of publicity
- *Third*: Vigorous self-conscious pressure groups, organized for offense and defense, striving to mold the individual's economic, political, social, and moral beliefs and allegiances — chambers of commerce, labor unions, political parties, "good government leagues," leagues of voters, better citizenship clubs, church groups, health and educational groups, etc.

It is through the constant interaction of the individual with these agencies of the society that the process of being inducted into the culture takes place.



Consider a day in the life of an American. So persistently do people encroach upon one another in our urban world that a day of living amounts to little more than an unbroken kaleidoscope of evanescent groups. There are, first, the early morning family groups of rising and breakfast . . . the shifting travel groups of bus, train, and streetcar to and from work . . . the multitudinous morning and afternoon work groups of factory or mine, store or office, farm or mill, school or college, and of the mothers and their children. There are the varied luncheon supper or dinner groups of family and neighborhood, the late afternoon neighborhood clubs, teas, and cocktail parties

... the street-strolling groups or neighborhood groups of friendly conversation in the evening ... the impersonal mass-attendance at the movies, theater, concerts ... the self-conscious and like-minded political and economic groups — “party” rallies, businessmen’s or labor union meetings, the church meetings, the infinite array of fraternal organizations. And there are the periodic weekly, monthly, or annual meetings of church groups, political groups, labor groups, business groups, educational groups, what-not. Any day, any week or month, in the lives of most of us is lived in a flux of these changing groups.

Furthermore, most of these groups are held together by common interests; witness the obvious role of shared interests in the organized institutions — the family, the church, the occupational groups, and the like. Modern life has forced this organized group life upon industrial populations as the only orderly way in which economic, political, and social affairs can be carried on. Such societies have become so huge in numbers and complex in structure that many individuals can no longer deal with one another face-to-face in producing and distributing goods and services, providing employment, guaranteeing security, governing, what-not. Their only recourse has been to deal with one another by means of organization, representation, and delegation of functions and authority.

Hence every “community” has become a welter of organized interest-groups and every individual has membership in several; some persons join a great many. Production and exchange are carried on through the interplay of credit, manufacturing, farming, marketing, and legal associations. Government goes on through the corresponding push-and-pull and give-and-take of political parties, “good government” or “nonpartisan” leagues, chambers of commerce and other peak-trade associations, Farm Bureau Associations, labor federations. Scientific, medical, religious, and educational affairs are largely directed by the interplay, rivalry, and coöperation of vast and complex organizations. The community has become a welter of interest-groups; most social decisions are made by delegated discussion and representative suffrage.

A welter of interest-groups, I say; the accent is on interests. Each of these groups, whether of local or of national scope, is held together by common interests. All are organized to defend or further an interest — the political party to get and keep office; the trade union to get better wages, hours, and conditions of work and to defend collective bargaining and other rights; the various associations of business

SOCIAL PSYCHOLOGY OF CONSENT

and professional men and farmers to get higher prices, increase sales, keep labor under control, or otherwise protect business; the great church organizations to build up membership and enhance their special religious views. All use the lobby to protect and further their interests; as I write, every one of national scope finances and carries on a vigorous lobby in Washington.

PEOPLE ARE KNOWN BY THE STEREOTYPED LABELS OF THE COMPANY THEY KEEP

So the modern man knows his fellows and he is known to them by the characteristics that are associated in the public mind with the groups with which he works and plays, worships and votes, philosophizes and moralizes. He is a "city feller" to some, a suburbanite or a ruralite to others. To the Protestant he is a Catholic, to the Mason a Knight of Columbus, and each is to some extent suspect to the other. People are thought of similarly for their political affiliations: He's Irish and a Catholic and — a Democrat. He's old-stock Yankee and a Calvinist — yes, and a Republican. He's a Russian or Polish immigrant — and a Socialist, probably a Communist. Special traits and attitudes are assumed to be associated with particular professions. He's a teacher and a theorist and he has never met a pay roll, hence he's not to be trusted with practical matters, and he's probably a Socialist. He's a painter feller, lives in Greenwich Village, hence an idler, probably believes in free love. He's a lawyer and in politics; clever, wins his cases, either side. To the labor leader the banker appears as a behind-the-scenes manipulator of business and credit and government; to the banker the former is an agitator and a racketeer . . . probably a foreigner, hence un-American.

Put in general terms *we are known*, not for the infinitely complex beings that we are, but *by the labels that are popularly put on the company we keep*.

THE STEREOTYPING INFLUENCE OF CLIMATES OF OPINION

In the endeavor to make a psychological description of the social world into which an American child is born we come now to two important social psychological concepts. The first is the climate of opinion. We shall note its powerful role in building our attitudes, forming our concepts, fixing our beliefs, creating our codes of ethics

and norms of behavior. The second is the concept that the social psychologists, led especially by Lippmann, have come to call the "stereotype." To see the problem more clearly, visualize the American population as a hierarchy of groups ranging from the total nation and the national and regional organizations down to the smallest family unit. *Each of these* is pervaded by its characteristic climate of opinion highlighted by dominant concepts or stereotypes. All that has been said in Chapters X and XI about the dominant ontology and patterns of culture of the people should now be assumed in this discussion of the induction of the American child into the culture. On the one hand he is molded daily by the unifying influence of the American way; on the other hand he is assailed by the diverse patterns of culture of the competing groups of the society. This problem merits further exploration.

*1. The Unifying Influence of Characteristically
"American" Traits, Attitudes, and Patterns of Culture*

Most of our people — all but the very latest comers from the immigrant ships — tend to think and feel as "Americans"; a child born into most of our communities tends to grow up with beliefs and codes of behavior like those described in Chapter XI. He would tend to say: "I am an American. I believe that our democratic way of life is our greatest resource and possession. It is man-centered — it respects the dignity and worth of each personality, prizes human life above all things, values integrity, tolerance, and fair play, and it seeks to guarantee equal justice to all men.

"I believe that our country was made great by the resourcefulness of my fathers; by their belief in themselves and in disciplined hard work. As they believed in equality before the law, so I do. I want to see no class lines in America. I want all men to be free, to make of themselves what they can and to be strong and well to climb the ladder of opportunity. I respect most of all those men among my fathers who were producers of things. I do not respect the speculators who try to get something for nothing.

"I believe that every individual should be given an opportunity to rise to the very highest that is in him; that means that I believe in private enterprise so far as we can work it out in America without hurting other people through unemployment and a low standard of living, ill health, and other lack of securities. But I believe in social enterprise too. Each man's freedom stops where his neighbor's be-

gins. As in the past our fathers had to put controls on the freedom of individuals, so we shall have to do it more and more in the future. I know perfectly well that in our kind of world no man can live to himself. In order that everyone should be secure, all must work together."

Irrespective of the social-economic "class" of their families, most children are molded by family and community life to accept and live by these dominant American concepts and beliefs. All three levels of the culture are pervaded by them.

2. *Nevertheless, American Culture Is a House Divided against Itself: Center-to-Right against Center-to-Left*

The growth process would be a much more comfortable affair — though it might be dull — if a child could be born and grow up in a community of like-minded individuals. Even in our swiftly changing society that is still true in certain little communities. There's a fairly uniform Republican-white-Nordic-Christian-Calvinist climate in hundreds of New England communities . . . and in similar Southern ones if we change "Republican" to "Democrat" and "white" to "partly black." There are many well-to-do, upper-middle-class comfortable and conservative suburbs scattered over our land in which a child could not possibly grow up with the ideas we have developed in the preceding chapters. The climate would throttle the first attempts to build up such understandings.

But in the growing industrial towns and cities no such unity of intellectual and emotional atmosphere is to be found. In these the American child is born into a world of cleavage and discord in which a deep struggle for power is raging in every area of social life. The community in which he grows up is itself a deep dichotomy. In every political, economic, social, and moral problem the people scatter themselves over a scale of convictions and loyalties from one extreme to the other. For convenience of thought and discussion we tend to divide them at the middle, posing Center-to-Right against Center-to-Left. In general, the Center-to-Right believes in the Exploitive Tradition. Freedom is interpreted as minimum restraint — every man for himself and every country for itself; in short, the Center-to-Right is, in varying degrees, for the pre-depression, pre-war *status quo*. The Center-to-Left, on the other hand, believes in varying proportions in The Great Tradition; that we must design programs of national and world-wide social reconstruction to fit the historical conclusions drawn

from the moving trends; that we shall never go back to anything pre-depression or pre-war; it concludes that now is the moment to guarantee our children a free world. Within each side there are considerable differences — from a middish-near-the-center to an extremist-right-or-left. As our social history has changed the meaning of the basic ideas of our culture, property and its ownership and control, freedom, equality, expression — the position of most of our people on any issue is neither at one extreme nor the other.

*The Center-to-Right vs. the Center-to-Left
on Four Major Issues*

The children of America, instead of being educated via the philosophy of experience on the problems and issues that divide our people, are now being brought up in two opposed camps. To illustrate, I name four of the dozen dichotomies that actually divide Center-to-Right from Center-to-Left today:

First: Acceptance of social change vs. belief in the status quo:
Shall we change the social system or change the people?
Center-to-Right defends the status quo ... Center-to-Left says, "Change the system to fit the changing experience of the people."

Second: The contemporary vs. the past. The Center-to-Right admires and perpetuates the norms and standards of the past in education, law, government, and social custom long beyond their period of usefulness to man... The Center-to-Left, while respecting the achievements and norms of the past as important milestones of human progress and foundations upon which to build, insists that each generation must think for itself and make its own statement of life.

Third: Freedom vs. discipline. The Center-to-Right, holding an utterly dualistic philosophy of authority — freedom-as-absence-of-restraint — and admiring the outward semblances of order in the norms of the past and the status quo would secure order by requiring acquiescence in imposed discipline. The Center-to-Left, holding the philosophy of experience and admiring above all the order achieved by the creative spirit, would cultivate the art of self-discipline.

Fourth: "I" vs. "We," the individual vs. society. The Center-to-Right, defining freedom as "absence of restraint" — *for those wielding power, but conformity for all others* — defends its

brand of individualism as the true Americanism. The Center-to-Left, defining freedom as self-initiative and self-balance, imposes the fusion of individual expression and the collective good (my freedoms stop where my neighbors' freedoms begin) asserts the common good to be prior to that of any individual; hence theirs is an individualism that *individualizes*, produces individuality that is the diverse base for a solid common good.

These are four great dichotomies on which our people divide today. On each of four scenes of American life these opposed concepts clamor for adherents:

- *On the Economic scene:* The "I" concept of the private, pre-empted, restricted use and control of productive property *vs.* the "We" concept of its public development, the maximum use for all the people.
- *On the Political scene:* How much government in economic life? sets the issue. The less government the better *vs.* enough government to keep the system going at abundance level.
- *On the Esthetic scene:* Expression *vs.* regimentation. Shall I say what I see, my way — assuming competence to meet rigorous criteria of form — or shall I reproduce standard classic styles? Shall I put down my view of the profoundly formative forces of life or merely photograph the superficial contours of the external shape?
- *On the Religious-Philosophical scene:* The conflict centers around the respective roles of authority and self-determination.

It is of the greatest importance that the educator shall see that these are the fundamental concepts and issues on which the community divides.

In general, the Center-to-Right tends to be pro-Self, pro-private, pro-the-past, pro-the-status-quo, pro-discipline, and to deny the reality of the necessity of social change.

In general, the Center-to-Left tends to accept the fact of swift social change and to adjust to it by being pro-We, pro-public, pro-freedom, and pro the study of and mastery of the conditions and problems of contemporary life.

THE SOCIAL FRONTIER: A NEW SOCIOLOGY

But, running through every problem the educator will confront the conflict centers around *the concept of social change, its rate of acceleration in recent decades ... how far it has now advanced ... its current rate and direction.*

✓ ✓ ✓

This, then, is our brief outline of the present consensus concerning the psychology of the "environment" into which the child is born and in which he grows up. This is the best we know today of the social world in which education must go on. One final reminder about it: We shall be more than unwise if we do not carry on our educational work with the conviction that ours is a mixed world of conflict and struggle, interspersed with havens and periods of peace. Educators and the more secure citizens generally tend to flinch from confronting this fact. Yet we must do so if our children's children are to live in a world of greater peace and democratic abundance than ours is today.

HOW THE CULTURE GIVES THE CHILD THE CONCEPTS WITH WHICH HE RESPONDS

We have been forced to digress from the problem of the induction of the growing individual into the culture in order to paint in a fuller picture of the social world in which the child grows up. Now we can return to the growth process and to the problem of I and We. As we do so, recall the role of the Teacher — that generalized concept of Mother, Father, elder brothers, sisters, gang playmates, adult friends, and the school's teachers — who serves as the educational intermediary between the individual and the culture.

Picking up the Analysis from Chapter VI

As the years of childhood advance, growth goes on through a back-and-forth interactive process. The Teacher "suggests," and the child responds, accepting or rejecting, but generally accepting. *The Teacher picks out from his own psychological world the meanings with which he wishes the child to respond.* He labels the objects of the physical world and their effects, he labels the human beings, he conveys the meanings of the concepts, attitudes, and beliefs of his own psychological world.

He says, letting the child experiment a bit: "This is fire. Fire is hot. It will burn you, your clothes, your house. That will be bad. Hence you must not touch fire." Interpreting the moving world around the child, he says: "That horse is running. If he hits you, he will hurt you; you must stay out of his way. That automobile is big and heavy and it moves very fast. If it hits you, it will hurt you; you must stay out of its way. That red light tells you when the automobile must stop; you can then cross the street."

Through millions of infinitesimal episodes of gesture and language the Teacher builds up an understanding of the security of the In-Group of the family and others closely affiliated with it in the community. He not only attaches names and a great variety of meanings to the physical objects around the child; *in giving him words and gestures he picks out the interpretation of people and institutions that his sector of the population accepts.* "This is your father, your mother, your brothers and sisters, other members of your family. They are closest to you of all the people in the world. They are part of you and you are part of them. They love you and will guard you. They are for you." Thus the security of home, the great haven of the In-Group, is built; a feeling of close affiliation with "our people" ... "our side" ... "These will harbor me and never fail me."

As the years pass the Teacher, reflecting the Old Stock American outlook, extends the notion of the In-Group to selected persons in the neighborhood, the community, the country, and the remote world. He also builds up aversions to all Out-Groups. Pointing to the people moving in the streets, he says: "That man is Mr. Pratt. He works in the Nichols' Department Store. He pays his bills. He goes to the Methodist Church every Sunday. He is a Protestant. He belongs to the Masons. He doesn't smoke or drink. He is a good citizen. He is a good man. He is a real American."

Pointing to another: "That's Mr. Walsh. He says he is an American but he was born in Ireland. He goes to the Catholic Church and sends his children to a parochial school. He belongs to the Knights of Columbus. You see him a good deal in that saloon on the corner of Main Street. We don't like the things that such people do. You don't make good Americans out of that."

"That man crossing the street is a young lawyer, Mr. Astragan. He is an Armenian. It used to be a part of Russia. He says he is an American but at the Parent-Teacher meeting he is always making speeches about the government should do this and the government

should do that. He quotes Karl Marx and Norman Thomas and he is against the poll tax and he defends the New Deal. He sounds like a Communist. He is a young lawyer, graduated from Columbia Law School. But he's always in the courts on the side of the people without any money. He doesn't get paid for his lawsuits; we'd like to know who pays for his living. Anyway, you don't make good Americans out of that."

"Speaking of real Americans, take Henry Page there. His grandfather came here ninety years ago and built the Falulah Paper Mills. Henry's father made them bigger. He gave work to the people except whenever hard times came; then he had to shut the mills. He always paid good enough wages. He went to Harvard, and his children too. They all live on Prospect Hill on the big Page estate. Shows what hard work and persistence and steady habits and a good solid way of living will do. We sent him to Congress because he was our real American citizen. You be like him and you'll be something."

Multiply our cases a billion times and you have the endless psychological stream of episodes of daily living. Moment by moment the Teacher "teaches" — suggests, labels, interprets — the world of objects and persons, institutions and problems. The child responds, attaching gestures and words, generally acquiescing, sometimes resisting in a conflict of loyalties. Cumulatively, out of the nebulous sense of the passage of time and the attachment of gestures and words and out of a stream of sensory impulses, kinesthetic senses of posture and movement, experiences of frustration, the "big buzzing, blooming confusion" of the outside world takes on order and meaning, security and understanding.

The Interactive Nature of the Process

The process is twofold, back and forth. The Teacher — the Group — pressing in, the child giving back. Assailed at once by too many things, labels, pressures, he picks out cue meanings and responds with those. The child and the youth does it himself but the Teacher is always whispering in his ear, directing him to conspicuous aspects of character, pointing out prominent features of a situation, striking personalities, or outstanding characteristics of institutions. Thus the Individual learns by a multitude of experiences how he can get along with, even control, his social world. He learns also to defend himself against an egocentric world by becoming himself self-centered and aggressive. The process is twofold: **action and reaction:**

egocentric culture exerting pressures, molding and labeling ... egocentric individual adapting to and defending himself against the culture — and thereby contributing his bit to its remaking. Thus Society is two Selves — or two hundred million — interpenetrating in continuous and cumulative processes of circular response.

HENCE — THE LAW OF THE STEREOTYPE

Psychologists, under Lippmann's stimulus, have come to name the nub of this process by which the Teacher picks out special phases of the culture and gives them to the child — the Stereotype. Lippmann summed up his elaborate documentation: "We pick out what our culture has already defined for us" ... "we tend to perceive that which we have picked out in the form stereotyped for us by the culture." Two decades of research by the social psychologists have buttressed his generalization. One can fairly speak of it as *the Law of the Stereotype*.

So it turns out that when one individual reacts to another, he sees him not as the mysterious and complex personality that he is, but as a composite of traits which he has learned to associate with membership in various groups. He reacts to him as: Employer or Worker ... Owner or Renter ... Capitalist or Union Labor Man ... Republican or Democrat, Communist or Socialist ... Jew or Gentile ... Christian or Moslem ... Catholic or Protestant. Hence the portrait the growing child paints in his own mind of the world of human beings, institutions, problems, and issues is a portrait primarily of stereotyped labels — word names that have been associated with membership in groups. Apparently in this multitudinous psychological world there is no other way by which the human being can respond — only through the concept we call the stereotype. Even in the case of the highly cultivated person one may live his life out in closest contact with his relatives and friends and never have his psychological world really interpenetrate theirs. How pertinent was the remark of William James when, after hours of friendly argument at one of their recurring meetings in middle age with his brother Henry, the novelist, the latter had impatiently sworn at William but, contrite, immediately apologized; William, smiling at the brother whom he loved but could not fathom said, "That's all right Harry, those are the first three words I have understood tonight."

Thus each of us lives in the actual psychological world of his own stereotypes. He creates it by his own responses, which he has

taken from the insistent Teacher at his side. But in reality this is only a pseudo-world, as Lippmann says, a world of fictions. Surrounding that fictional world is another hypothetical one; hypothetical because one never can quite know it, nor actually live in it.

✓ ✓ ✓

So time marches on, records its images, builds its moving pictures in our heads. Pictures of the people in family, neighborhood, and town, in nation and distant world, in millions of little disconnected episodes of living painted in in snatches of conversation overheard, single ejaculations, expletives in praise or denunciation, radio commentary, flashes from the newsreel or newspaper headlines. Almost never does the camera of life stop long enough for a really Wise Teacher to paint in an objective photograph of the men and women who move through the psychological landscape of the growing child.

THE SOCIAL PSYCHOLOGY OF CONSENT CONTRIBUTES
NEW CONCEPTS TO THE NEW EDUCATION

Summing Up

- There are three great principles of consent in a democratic society.
- Two of these have been implemented in several hundred years of social practice:
 - The civil and political freedoms have been established.
 - The machinery of the suffrage has been created.
 - But the economic and social freedoms remain yet to be implemented.
- The third principle of consent — namely, that the people must understand their conditions and problems — is one of the chief educational tasks of our times, requiring a swift nation-wide movement for adult education.
- There are serious pitfalls in the way of popular understanding — barriers of physical geography, of linguistic and racial diversities, and in the dominance of the printed word over communication.
- While the physical machinery of communication has now been made efficient, there still remain serious property barriers between the people and social events, resulting in monopoly

SOCIAL PSYCHOLOGY OF CONSENT

of the facts, propaganda (distortion of the facts), and censorship (withholding of the facts).

- There are psychological barriers; if the people are to understand the facts, the latter must be organized for them in meaningful form.
- The American community is a welter of pressure interest-groups.
- Their pressures mold the people, who become known by the labels of the company they keep.
- The process by which the culture molds the individual is interactive.
- The law of the stereotype: "We tend to perceive that which we have picked out in the form stereotyped for us by the culture."

Part Four

THE ESTHETIC FRONTIER: A NEW ESTHETICS FOR A NEW EDUCATION

In no more powerful way did the philosophy of experience write its modern record than in the esthetic acts of men after 1890. During the very years that workers on the social frontier were building the new Sociology and those on the biopsychological frontier were making a new Psychology, their contemporaries on the frontier of American imagination were creating a new Esthetics. The transformation manifested itself in every medium of expression at the same moment. Louis Sullivan and his young assistant Frank Wright were creating original American buildings and Isadora Duncan her new dances in the years that James, Dewey, and Veblen were formulating the social and action psychology. The world prize-winning photographer Alfred Stieglitz was starting *Camera Notes* and organizing the photo-secession against the commercialists, Stephen Crane was writing *The Red Badge of Courage* and Dreiser *Sister Carrie*, at the moment that Robinson and Turner were launching the New History, Albert Ryder was painting "Death on a White Horse" and "The Toilers of the Sea," the Eight were forming around Arthur B. Davies and Robert Henri and with Stieglitz were preparing the way for the Armory Show that, in 1913, was officially to launch "modern painting" in America. Harriet Monroe's new magazine *Poetry* published — also in 1913 — Vachel Lindsay's "General William Booth Enters into Heaven" the same year that Charles Beard issued his *Economic Interpretation of the United States*

THE ESTHETIC FRONTIER: A NEW ESTHETICS

Constitution. The expressive urge in the American broke through simultaneously in every medium.

We are concerned with the products of this all-inclusive creative revolution because, taken all together, *they are the life and program* of the coming school of the mid-twentieth century. As was true of the school of 1890, so of the school of 1950: if the leaders lack an esthetics, the school will be devoid of the creative and appreciative act.

In Chapter XIII I give a brief account of several typical dramatic discoveries on the American esthetic frontier since 1890. From these, in Chapter XIV, I shall state the principles of the esthetic act. These constitute the solid foundation upon which the creative and appreciative life of the school can be constructed in our time.

CHAPTER XIII

The Creative Revolution Produces the New Esthetics

OUR TIMES, THE SECOND OF THREE STAGES OF CULTURAL DEVELOPMENT

To understand the creative awakening of the past half century we must bear in mind that America is one of the twenty-five new countries thrown off from western Europe after 1500 A.D. Out of a thousand years of growth western Europe stood at modern times essentially a twofold culture:

- Nordic Europe — British, German, Scandinavian
- Latin Europe — Spanish, Italian, French

After 1500 A.D. Nordic Europe built five new countries — the United States of America, Canada, Australia, New Zealand, and the Union of South Africa. Latin Europe — Spain and Italy¹ — built the twenty Latin-American republics. Both transplanted their institutions and their psychological climate to the Americas, to Australasia, and to South Africa, and show today occasional dilutions of it in the islands of the Pacific.

The perspective of our mid-twentieth century has taught us that new modern national cultures are born and develop toward cultural independence through three discernible stages:

First: They are transplanted from the mother culture onto new continents or regions; this is a long, slow process of partial continua-

¹ I omit France because, viewed as a cultural whole, the three Americas reveal today only minor residues of France's attempt to perpetuate herself across the Atlantic — a vigorous assertion in eastern Canada, tiny islands of hyphenate expression in the Mississippi and its Delta country, and in New England, and isolated mixtures of French and Negro in and around the Caribbean.

tion of the social practices and institutions of the parent culture and the almost imperceptible creation of new ones.

Second: As the people improvise new and indigenous forms of living, scattered but creative minds rebel against the prolonged tendency to worship the ancestral customs and institutions, create an original body of criticism, and produce original indigenous statements of their culture. This is a hectic period of transition, a time of chaotic cultural flux, when all institutions change — some being transformed swiftly, others lagging far behind and causing great stresses and strains in the new society.

Third: Slowly in the midst of this transitional stage the barest outlines of a mature and indigenous period are recognizable. Here and there, even in the years of transition, isolated Voices speak clearly the original statement of the new national and regional culture. Gradually a prevision of independent and indigenous institutional life and expression emerges.

Sharply telescoped, this is the shape of cultural development of the new countries that the Mediterranean culture precipitated in the industrializing centuries. It is in this background of cultural transplantation, revolt, and reconstruction that we shall see that the indigenous expression of the United States reflects each of these great stages of growth.

Three Questions to Ask:

As we review them briefly, three questions will guide our appraisal of the creative development of our young and transplanted culture:

First: Are our communities and other forms of social engineering, our architecture, books, music, theater, paintings, and other expressions, statements of what the men and women who have made them have themselves felt and seen of life? Are they "American," made out of our cultural materials? Or are they merely imitations of ancient and foreign modes?

Second: How competently executed are the expressions? Do they show signs of having been tested on the rigorous criteria of organic design? Or are the results merely initial and uncensored improvisations?

Third: How deeply aware are our creative workers? Are their expressions reproductions merely of the surface contours of life clothed in photographic realism? Or do they pry down into the motivating

depths of personal character? Or, still more profoundly, are their interpretations laid in cosmic and universal backgrounds?

These are the foundational measures which must be applied to the esthetic acts of a people. I shall apply them to our American expression.

THE PROFILE OF THE AMERICAN STATEMENT

For economy in appraising the outcomes of a half century of creative expression I shall employ a concept that I call the Profile of the American Statement. I use the term "profile" in the engineer's sense — an imagined side view of a structure, showing its various levels or strata. As the engineer sinks his physical shaft through the layers of the earth, so the psychological and esthetic student sinks his shaft of appraisal into the culture. The samples of expression thus obtained can be plotted so as to show the total profile of indigenous American statement that has been made during the last half century. Such an outline of America's Age of Expression will give us far more than the events of fifty years of epoch-making history. It will provide us with the makings of a new esthetics, and thus supply the data for an understanding of the creative act.

A thousand expressive acts of the Self and the culture these artists have made — and on every level of the profile of the American statement. Some, on the surface of the culture, have seen and felt not much more than the doings of the folk, their superficial social arrangements and rearrangements. A second group have been concerned with the public conscience and have documented the problems of evil and maladjustment and the necessity of social reconstruction. Some, fairly unconcerned with the direct study of society and its problems, have been probing personal lives, uttering hymns of lyric joy or grief, painting portraits of personal character, and laying bare the core of human relations. Still others, critical brains and bodies, have been digging at the forces which have bedeviled our society, analyzing the roots of its problems and building a creative criticism. Finally, a few profound mutants of universal time and place have given us the first scattered makings of the American myth. But all have grown in power to state what they feel — to make their statements of life in their America as they see that life.

Taken all together, our American creatives have drawn in a graphic Profile of the American Statement. On all five levels expressive Americans have been filling it in:

THE ESTHETIC FRONTIER: A NEW ESTHETICS

1. Statements of folkways and folklore
2. Social documentation and problems of reconstruction, advancing sometimes into the universal or the cosmic
3. Portraits of individual character, appraisals of human relationships, and such personal expression as lyrical utterance, love songs, and descriptive idyls, some of which rise into profound "hymns of being"
4. Critical analysis of the culture, of literary portraits of it and of methods of studying it ... broadly conceived as "criticism"
5. The foundation of the profile, consisting of concepts of universal validity ... Man-in-the-Universe-and-History rather than men-in-this-time-and-place ... the Great Tradition of the Person

This Profile will constitute the yardstick against which I shall seek an answer to the third of our three questions:

How deeply aware of themselves as Persons and of their America are our creative workers?

But, first, we must see our creative times as the second of three stages in cultural development.

THE FIRST STAGE: THE PROLONGED THWARTING OF THE GREAT TRADITION

During the first stage, the 250-year-long period following the establishment of the original settlements, our cultural norms were almost entirely imported from Europe and Britain. Even a century ago a few among us saw it. Emerson complained that we got our language, letters, art, and standards of thought from Europe, especially from England; the goal he said, was:

"To be as good a scholar as Englishmen are: to have as much learning as our contemporaries; to have written a book that is read, satisfies us. We assume that all thought is already long ago adequately set down in books, — all imagination in poems; and what we say, we only throw in as confirmatory of this supposed body of literature."

So Emerson criticized, but in the next breath sounded the clarion positive note:

THE CREATIVE REVOLUTION

"This is a very shallow assumption. Say rather all literature is yet to be written. Poetry has scarce chanted its first song. The perpetual admonition of nature to us, is, 'The world is new, untried. Do not believe the past. I give you the universe a virgin today.'"¹

✓ ✓ ✓

Then, on July 4, 1855, another Voice of "The Greatest Poet" was raised in protest. An unknown New Yorker, Walter Whitman, offered for sale — with no buyers — twelve long "poems" under the title *Leaves of Grass*. In its long prose Preface, a statement that will live long,² he continued Emerson's plea to the creative potential of America. He showed what the role of the Greatest Poets will be in a new land like these States:

"Of all nations the United States with veins full of poetical stuff most need poets and will doubtless have the greatest and use them the greatest. Their Presidents shall not be their common referee so much as their poets shall. Of all mankind the great poet is the equable man."³

Fifteen years later, in *Democratic Vistas*, Whitman denounced the absorption of Americans in "intellectual topics, pecuniary dangers, legislative problems, business . . . needs of America," while ignoring what "no eye seems to perceive, no voice to state."

"Our fundamental want today in the United States, with closest, amplest reference to present conditions, and to the future, is of a class, and the clear idea of a class, of native authors, literatures, . . . permeating the whole mass of American mentality, taste, belief, breathing into it a new breath of life, giving it decision,

¹ *The Works of Ralph Waldo Emerson*, Vol. IV, page 115. Bigelow, Brown & Co., Inc., New York.

² The student of the role of Walt Whitman should not miss the Foreword to the first edition of *Leaves of Grass*. This was not in the first printed edition, but appeared in the reprint which was issued a few months later. This can be found, "reproduced from the first edition (1855)," in Publication No. 47 of the Facsimile Text Society. Columbia University Press (1939).

³ *Ibid.*, Foreword, page vii.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

affecting politics far more than the popular superficial suffrage, with results inside and underneath the elections of Presidents or Congresses — radiating, begetting appropriate teachers, schools, manners, and as its grandest result accomplishing . . . a religious and moral character beneath the political and productive and intellectual bases of the States.”

/ / /

That was said in 1870, but to an unheeding America. As Vernon Parrington said,

“It was in the '70's that good taste reached its lowest ebb. . . . A veritable debacle of the arts was in process . . . An expression of profound changes taking place at the bases of society. The dignified culture of the eighteenth century . . . was at last breaking up.”

The new industrialism on both sides of the Atlantic was “destroying that earlier culture and providing no adequate substitute.”¹

In the accelerating industrial expansion that Mark Twain and Charles Dudley Warner taught nearly everybody to call “the Gilded Age,” the mad race for the natural resources of the earth and the swift erection of machine enterprise overwhelmed the land. People of creative talent acquiesced in the conditions, submerged by the lure of the comfort that could be theirs. Only a few of real genius — Lanier in the South and Melville in New York — knew better. Men who had a flair for painting, such as S. F. B. Morse and William James, had gone into technology or science. Potential writers, such as Charles Francis Adams, had become railroad executives. By 1893 our worship of classic Europe was blatantly revealed in Daniel Burnham's World's Fair; only Louis Sullivan,² almost excluded from the architectural company that designed it, denounced its lack of courage and originality.

In every medium of expression the creative process was debased. A climate of imitation of foreign classic styles was spread over the land. In every field, I say — in architecture, letters, painting, sculp-

¹ V. L. Parrington: *The Beginnings of Critical Realism in America*, Vol. III, page 49.

² See Louis Henry Sullivan: *Autobiography of an Idea*, pages 325-326.

ture, music, the dance, the theater, what-not — until our times. George Santayana — part Latin, part Nordic — who grew up in it and lifted himself above it, gave it the name that it may never live down — the “Genteel Tradition.”

/ / /

Throughout most of the great industrial expansion mediocre and imitative “talent” held the creative scene; the “genius” of American expression was submerged. Talent there was, but not much genius. The entire culture was in the grip of oppressive forces that made it almost impossible for the creative mind to assert itself except in technology, business, and the other constructive enterprises of the new expanding industrialism. The absorption in building the structure of the new society lured away from its progressive arts the potential genius of the nation, and those that went into it were squelched by it; they found no audience and lacked the encouragement of an understanding and stimulating public. Henry Adams described¹ the men of talent — I pick Henry H. Richardson, Henry James, Mark Twain, Richard Gilder, William Dean Howells, Edward MacDowell as examples — of the Gilded Age: “You grow six inches tall and then you stop. Why will not somebody grow to be a tree and cast a shadow?”

Quickly Summed Up

Three characteristics marked what expressive movement there was in America in the decades of the great industrial expansion:

First: It was thoroughly unoriginal, smug, and complacently aloof from American life, imitative of standard styles whether in architecture, letters, music, or the theater of Europe and the classic past. It was nostalgic, rhyming the echoes of the pre-war days, struggling to live on the standards of the previous generation which in turn had accepted the norm of Britain, Greece, and Rome.

Second: Its gentility was marked by the fear of the fundamental. It dwelt in a world apart, photographing the graceful contours and superficialities of the civilization. It was a sepia print of the outward shape of things, not a dynamic statement of the forces moving the

¹ In his *Democracy*.

things about. It rarely dug into the vitals of the society; it avoided social analysis, the problems and issues of the times. It valued property more than men, avoided the ugly aspects of society, dealt only with the nice manifestations of what was thought to be the grace and dignity of life.

Third: Brought up in such a climate of opinion, a great class of native artists was not born. In the superficial regime the merchant of art ousted the creative artist. The poet and the playwright, the architect and the painter, conformed to the low esthetic standards of a thoroughly exploitive society. Although in the 1880's and 1890's a few exceptional mutants did succeed in rising above the dead level of sheer exploitation, academic classicism, and imitative eclecticism, most of the men of talent never grasped the primary concept that *the arts of expression must be fashioned out of the culture of the people and that the only person who could possibly create it was one who actually experienced it*. Henry James, looking back at them from England, knew that they lacked "perception at the pitch of passion." By the 1880's few understood that *the House of the American, his literature, his graphic art, his community design — all of his expressive statement — must be appropriate to the life of America*. Apparently it was a simple concept — actually, a subtle one. But to us today surrounded by its practice, it is amazing that all but an infinitesimal minority could have missed it. But the lure of the comfort and the glory was too great. The desire to be accepted and approved was too strong.

/ / /

This, then, was stifled "creative America" at the close of the two-century-long thwarting of the Great Tradition.

THE SECOND STAGE:
REBELLION AND IMPROVISATION

Then the Old Order Passed

One by one, as America turned into her great period of transition, both the elder guardians of Victorian gentility and the first trumpeters of the true American statement passed away. First, in the 1880's, went Emerson, and his never seen correspondent of the Amherst garden, Emily Dickinson. In 1891 George Bancroft, America's first historian, died — and the same year Herman Melville, for-

THE CREATIVE REVOLUTION

gotten government clerk and author of *Moby Dick* and *Typee*. In 1892 both Whitman and Whittier ... in 1893 Francis Parkman ... the following year O. W. Holmes, the "Autocrat," and Wendell and Fanny were free at last. The year the Deweys opened their School, Harriet Beecher Stowe died.



Youth took their places. In 1890 twenty-six-year-old Alfred Stieglitz came back from his photographic triumphs in Europe to launch two decades of implacable warfare against the imitation and commercialism of photography and the graphic and plastic arts. Isadora Duncan, mature in her seventeen years, was dancing barelegged and corsetless across the country, and Louis Sullivan, youthful junior partner of Dankmar Adler, was building his new functional urban structures and arguing with his rebellious young assistant, Frank Wright. Another mere boy in his twenties, Charles Ives, was composing the first American symphony out of the folk strains of American small-town bands, while still another — Stephen Crane — was writing *Maggie, a Girl of the Streets*.

Their European Springboard of Revolt

One of the world's deep but rarely recurring shifts in creative mind and mood was taking hold of Europe, and its reverberations were felt across the Atlantic. It was in the early 1880's that Paul Cézanne, disgusted with the utter inadequacy of the prettinesses of French painting, left Paris, went back to his southern home, and painted the first of those plastic studies that helped to launch sixty years of "Expressionist" or "modern" art. Shortly after Paul Gauguin quit his banking job and deserted his wife and family because he "had to paint," finally achieving his life statement in the Pacific. Henri Rousseau, government clerk who turned himself into self-trained primitive, was beginning to exhibit his exotic jungle and animal paintings. Honoré Daumier was documenting the commercialism and hypocrisy of French political life with his cartoons. Not many years later Matisse and Picasso would join them and the modern revolution in painting and sculpture would get under way in France. In Germany the revolt and original improvisation were duplicated and already the artists were called "Expressionist" and "modern." Three great Russians — Turge-

niev, Dostoevski, and Chekov — had fled from the Frenchified arts of the Tsars to western Europe to write their profound Russian novels and plays. Soon the Moscow Art and Stanislavsky and Meyerbold would lead the world's creative theater.

The notion of a people's art was taking hold of theatrically-minded and experimentally-minded men in Germany, France, and England. Edward Gordon Craig, youthful Shakespearean actor with Sir Henry Irving, brought up in the theater in the '80's by his mother, Ellen Terry, was denouncing the hypocrisies of the theater in vitriolic articles¹ and formulating his constructive design for the true theater. In France the creative revolution in letters and the theater grew around the thrilling nucleus of the *Nouvelle Revue Française* — Paul Claudel, Charles Philippe, and Jacques Copeau and his creative little *Théâtre Rue du Colombier*. In London the study of the new industrialism had brought together earnest and original minds: the Webbs — Sidney and Beatrice — Frank Podmore, George Bernard Shaw, Graham Wallas, John A. Hobson, and H. G. Wells, to name but a few. They founded, first, the Fabian Society and then the London School of Economics and Political Science, whose political-economic papers were pondered on both sides of the Atlantic.

Thus, by the 1890's, it was possible for independent-minded young Americans to become aware of a new creative climate in Europe — a greater tolerance, a spirit of rebellion against the rigidities of nineteenth-century Victorianism. And many did become aware of it and went there to steep themselves in its spirit.

A TIMOROUS FOLK-STATEMENT WAS
BREAKING THROUGH IN AMERICAN LITERATURE

But America was having its creative awakening, too. A new "literature of protest" accompanied the farmer-labor Populism of the West and the Eastern cities. In the 1880's, while Edward Bellamy's *Looking Backward* and Henry George's *Progress and Poverty* were startling the land with their prevision of the coming conquest of the physical earth and their premonitions of emerging social struggle, Hamlin Garland had published *Crumbling Idols*. It was reinforced by his *Main-Traveled Roads*. It was perhaps the first manifesto of the new American group of realist writers. In *Crumbling Idols* America began to speak her social and political militancy.

¹ Brought together in his first book in 1905, *The Art of the Theatre*; see also his *Theatre Advancing*.

THE CREATIVE REVOLUTION

Meanwhile the life in our Middle West was being honestly recorded in other social novels. Joseph Kirkland wrote *Zury: The Meanest Man in Spring County*, and Ed Howe, *The Story of a Country Town*. Harold Frederic, a New York up-state boy who worked as a foreign correspondent in Europe, published *Seth's Brother's Wife* and *The Damnation of Theron Ware*. And there were others — Henry Blake Fuller, and Rebecca Harding Davis, and the Columbia Professor H. H. Boyesen, who did three novels — *The Golden Calf*, *The Social Strugglers*, and *The Mammon of Unrighteousness*. These men spoke the mood of the Populism of the small farmers of the Middle West or of the changing cities. They testified from their own life on these Middle West farms, rebelling against the urban control, exactly as Thorstein Veblen was soon to write his protest into profound economic and social monographs.

A mild criticism of American life was beginning to appear even in the pages of New York's magazines of quality — *The Century*, *Harper's*, *Scribner's*. Frank Munsey was making the first of his "forty millions in forty years," buying, killing, and merging newspapers and pre-tabloid sheets, and purveying the sensational in *Munsey's*. S. S. McClure rivaled him with such best sellers as Jack London's hack novels (the erstwhile Socialist had built up an appetite for \$40,000 a year). Slowly Gilder lined up with the reform movement; *Century* and *Scribner's* gave way a little, taking on the popular artists — Joseph Pennell, Howard Pyle, Howard Chandler Christy, and Maxfield Parrish, permitting a mild appraisal of the American scene.

Here was a pale folk literature — the forerunner of the vigorous folk literature of Edgar Lee Masters, Carl Sandburg, Vachel Lindsay, and Robert Frost of the 1910's and of the homiletic novels of Upton Sinclair during the next forty years. Henry Adams felt it and said it in a letter when he came back from Europe in 1900:

"I find America so cheerful, and so full of swagger and self satisfaction, that I hardly know it. The change since 1893 is startling . . . a war or two seems a matter of entire indifference."

✓ ✓ ✓

BUT — IN THE TWO PRIMARY ARTS OF MAN —
MORE THAN REBELLION AND IMPROVISATION

But some of the protest was more than mild folk-statement. Historians will record that in the two primary arts of man — the organic

design of the House and the designed movement of the Dance — the Americans of the Great Transition were powerful originators. *In these two basic expressional instruments — the House and the Body* — I can find no immediate antecedents in Europe, certainly not for Louis Sullivan and Frank Lloyd Wright, first American architects, except their study of how Europe's ancient classic artists made *their* own statements; or for Isadora Duncan, first freed American dancer. Their roots are native; they stemmed above all else from Whitman, uttering the affirming "Aye" of the master craftsman. Both *knew* intuitively from the years of youth that the American statement was to be made from American life. Whether or not any influence of the thin naturalism that was beginning to be sounded on the Atlantic plain may have reached the ears of the adolescent child Isadora, I cannot say. But Louis Sullivan began his work in Chicago as the young junior partner of Dankmar Adler in 1880, a full decade before its restrained criticism could be heard. And certainly his two years of regimented copying and memorizing at the Beaux Arts in Paris did not give him the function concept in architecture. No, America *rediscovered* the powerful concepts of expression in modern architecture and dance.

I. THE AMERICAN BUILDS HIS HOUSE AND CULTIVATES HIS SCENE

The process in architecture was more than putting up a house on a piece of land; more even than transforming that house from mere shelter or comfortable habitation into *designed architecture*, appropriate to the land and the life to be lived in it. *The land itself is primary architecture*, and the designer of the Valley and the House takes his cue from that. The House, as Wright said so acutely, is "growth becoming the law of the land." It is families living on the land, communities living on the land, nations living on the land. It is to the everlasting credit of the creative cultivators of the total American scene since 1880 that they grasped the cue of *the land as primary architecture to be designed as the very foundation for the Good Life*.

1. LOUIS SULLIVAN AND THE ORDEAL OF THE FUNCTION CONCEPT

Louis Henry Sullivan, a creative mutant, true member of the company of Peirce, James, Dewey, and Veblen, rediscovered the function concept — the prior concept of all human design and building. His life was indeed what he titled the book that recorded it — the

Autobiography of an Idea. From the moment when the quest for the great principle started in the library of the Parisian teacher who was tutoring him in descriptive geometry for the Beaux Arts, his life search was for a principle in architecture that "would have no exceptions."

Fifty years before Sullivan, Horatio Greenough, a mediocre sculptor and friend of Emerson, had foreseen the function idea. Talented in public address, Greenough had given widespread circulation to the notion that all structures should be designed in terms of the function they were to serve. With concrete examples he illustrated his thesis: note the practical success of the master craftsmen of shipbuilding in the streamlined Clipper Ship of 1840. "Ninety days from Shanghai to London!" Maximum of sail power accompanying beautifully shaped hull, designed to reduce water resistance to a minimum. Here was the perfect example of *functional* building, and Greenough even had the word "function" to convey the concept. But although the talkative Horatio overlapped Henry Richardson, the latter — most popular builder of 1850 to 1890 — could not put the idea into practice; witness the incredible stone mosaic of turrets and towers which is Trinity Church, Boston!

So the years passed and the American house waited for the master craftsman. Then, in 1880, he came in Louis Sullivan. Sullivan came back from his two years of resisting the conventional stereotypes of the Beaux Arts and the occasional flashes of brilliant insight gleaned from his months with the ancient works of true master craftsmen. Came back to "bigness and be-damnedness" Chicago to build urban buildings more appropriate to the land than buildings had been built since the indigenous design of colonial American small towns around their Common Land. Steadily he learned to ask the central "function" question of every building, every room, every member: What is this for? What is this thing to do? In specific engineering terms: What is this beam, column, or floor to hold up, this roof or these walls to shelter? In broad esthetic design: *What kind of life is to be lived in this house?* The answer, "Goods are to be displayed for sale in this store window," brought into being the broad open horizontal spaces of the Carson Pirie Scott store. "People are to assemble here for theater pieces and lectures" produced the Auditorium Theater. "This is a small-town bank, a countinghouse of credit," built the little functional structures at Hammond, Indiana, and Owatonna, Minnesota. "The bodies of deceased friends are to be placed here" brought forth two beautiful tombs, fitting respectively to the life that had been

lived by a man and a woman. Forty years of building America's indigenous urban house, her original house appropriate to the flat land of the prairie . . . fitting the *new conditions* of great concentration of population in crowded cities . . . building upward ten stories and more with *the new materials* — steel and concrete — putting to work the new contraption of urban industrial civilization — the elevator. Sullivan's freed imagination *saw* the problem of housing urban business and industrial America. His "kindergarten chats" surreptitiously passed on the new concepts to the regimented young draftsmen of 1900 in the offices of the Merchants of Architecture who called him "mere decorator" . . . "dreamer" . . . "visionary."

The Autobiography of an Idea shows that Sullivan knew he was leading the architectural battle of the creative armies of America in the war between the Exploitive Tradition and the Great Tradition . . . between Democratic Power and Feudal Power, which Veblen, Turner, and Robinson were leading on the battlefields of social analysis. He said of the heroic contest:

"Thus, there came into prominence in the architectural world of Chicago two firms, Burnham & Root and Adler & Sullivan. In each firm was a man with a fixed irrevocable purpose in life, for the sake of which he would bend or sacrifice all else. Daniel Burnham was obsessed by the feudal idea of power. Louis Sullivan was equally obsessed by the beneficent idea of Democratic power. Daniel chose the easier way, Louis the harder."¹

Burnham, the Merchant of Housing, won the immediate battle of the '90's — witness his classic eclectic Europeanized World's Fair — but Sullivan, the Artist of Architecture, won the long-time war over the House of the American. He died, alone and neglected and poverty-stricken, before its new structure appropriate to the new industrial culture was achieved; but his young first assistant, Frank Lloyd Wright, has lived to see the many examples of it built by the creative revolution.

2. FRANK LLOYD WRIGHT — BUILDER AND PHILOSOPHER OF THE CULTIVATION OF THE TOTAL SCENE

Wright carried on the function idea, and built on it more than two hundred indigenous and original buildings.² He lent himself also

¹ Louis Sullivan: *Autobiography of an Idea*, page 288.

² For example, Taliesin, his own homestead, workshop, and school . . . "Teikoko," the Imperial Hotel — of all the public buildings it alone was left standing when

to continue Sullivan's war on the "borrowed finery [of the] plan factories [of the] sartorial artists" who gave America's "vulgar rich" the "culture" they wanted. But he did far more than that. He made himself the continuator of the Great Tradition in its revelation in the twentieth-century house. He did this by becoming a student of the new industrial culture, and an articulate analyst of it. A body of new concepts was achieved and incorporated with those of the pioneers of the social frontiers.¹

To Wright the land *is* primary architecture, and the house is the revealing expression of the total culture. In his house — city residence, country residence, factory, business and apartment building, hotel, theater, museum, bank, school, what-not — the American states himself. Ideally, only he — the owner-designer — would know what kind of life is to be lived there; only he from the slow accretion of years of working and absorbing on the land could feel organically the house to be built there. Only he could know the necessity of fitting structure to the terrain and landscape of broad plain or forested valley.

But, since most owners cannot achieve the necessary professional technical knowledge (and may not have at hand a native builder who has it) they call in an architect. This man becomes the *regisseur* (Gordon Craig's artist-director) of the design and building of the house; through him the concepts and feelings of the engineer, interior designer, landscaper, psychologist, sociologist, philosopher are integrated in one organic design. So Wright sees design as all the expressional artists of our time see it — as form imagined, appropriate to the life to be lived in the total House, the life to be lived with the Community and the Valley.

Thus the House of the American is not a mere aggregation of sticks and stones thrown up against the wind and the weather. It is a deep fusion of the land, its relation to the geography of valley and plain, its relation to the local Community and to the larger encompassing Valley and its mechanisms of transport and communication;

the 1923 earthquake razed Tokyo . . . the Johnson Building, Racine, Wisconsin, exciting experiment in the design of a house of business . . . and the Kaufman "Falling Water" in Pennsylvania, an equally thrilling success in the building of a country house.

¹ See especially his *Autobiography* . . . *Materials of Architecture* . . . Gutheim's *Frank Lloyd Wright on Architecture*, and various pamphlets from Wright's Taliesin Workshop.

the relation of all to the changing composition of the population, the nature of man's work and play in the neighborhood and the sensitivity of the culture. In brief, *the House of the American is his total cultivated scene.*

Total Design Based on a Philosophy and Sociology

But to achieve this all-encompassing concept requires deep philosophic roots and a broadly based sociology. In this respect Wright went far beyond his mentor Sullivan and all other designers of the house in our day. He holds an upstanding social-economic theory of "just rights of man," of "a new freedom for living in America" . . . "freedom to decentralize, redistribute, and correlate the properties of the work of man on earth to his birthright, which is the ground itself." The "just rights" of man are *social* rights guaranteed by acts of popular government:

"(1) His social right to a simple direct medium of exchange in place of gold as commodity: some form of universal social credit. (2) His social right to his place on the ground as he has had his right to the sun and air: land to be held only by use and improvements. (3) His social right to the ideas by which and for which he lives: that is to say public ownership of invention and scientific discoveries that concern the life of the people."

"Freedom to decentralize!" With unerring insight Wright goes to the crux of cultural reconstruction — bigness and centralization hamstringing every personal phase of life in America. Bigness . . . Power . . . is good — in the quantity production and distribution of physical goods and services. But in every other respect it is to be broken down. Hence the critical concept — decentralization: little towns, little homes, little factories, little businesses, little schools. Much of Wright's creative life has gone into the design of a model "little" community which he calls Broadacre City and which has been a traveling exhibit going from city to city. This is a "county seat" town of fourteen hundred families . . . four square miles of typical countryside in the temperate zone . . . five acres per family. Here is a community design of diversified houses, as diverse as the owners and their incomes, their personalities and their varied lives, all harmoniously integrated into one fabric.

Sullivan's great principle matures in Wright's Broadacre design

and building. "Form and function are one. The emphasis has been placed upon diversity and unity." In the houses there is no distinction in quality. "Quality is in all, for all, alike. . . . The difference is only in individuality and extent. There is nothing poor or mean anywhere in Broadacres."

Thus a country of farms and "small towns" is visualized, tied together by an efficient, safe, and beautiful architecture of transport and communication — monorail railways, twelve-lane arterial highways (for every Broadacre citizen has one or more motorcars), no grade crossings, no left turns, no visible signals, lampposts, ditches, curbs. . . . 200-mile-an-hour family Aerotors replace the airplane. Three inventions are already building Broadacres: the motorcar, electrical intercommunication, standardized machine-shop production.

Government must be in the "Little" also — decentralized, legitimate power relocated in the individual men and women of America. But a measure of "socialization" would be necessary, to leave all the creative aspects of life individualized . . . "private."

"All public utilities are concentrated in the hands of the state and the various county governments, as are also matters of administration, patrol, fire, post, banking, license, and record, thus making politics a vital matter to everyone in the new city instead of the present hopeless indifference that makes 'politics' a grafter's profession."

This is *not* "Socialism," says Wright; it is "*organic capitalism*" . . . "broadly and firmly based upon the ground . . . Individuality established" in private ownership of productive and residence land and the buildings upon it. Moreover, the forms of genuine democratic life, personally designed, flexible and shifting are free plastic forms and freedom is "about the last thing a socialized state would care to encounter or try to conquer. The very solidarity of a true democratic success would terrorize them more than their planes and guns would terrorize us." In such a social order there would never be unemployment. Indeed

"There would never be labor enough, nor could there be under-consumption. Whatever a man did would be well done . . . because done mostly by himself in his own interest, under the most valuable inspiration and direction. . . . Economic independence would be near every man who worked; a subsistence certain, a life

varied and interesting is the inevitable consequence. Nothing too good for anybody – and no substitute sought for quality.”¹



This must conclude my bare outline of the leadership of the building of the new House of the American since 1880. Two creative minds achieved most of it, against Toryism in its most retarding forms. Little wonder that we are beginning to rank Louis Henry Sullivan and Frank Lloyd Wright with Charles Peirce, William James, John Dewey, and Thorstein Veblen. Our stellar four has grown to six. What a body of concepts the latest two brought forth! Brought together compactly they are:

- The owner-designer builds his House, exercising his social right to a place on the land and his corresponding social duty of developing it and sustaining it to the maximum, his social right to ideas and materials, his social right to credit and purchasing.
- The House designed as the total cultivated scene . . . designed as “necessity, not tradition, demanded.”
- The House conceived as organic architecture – designed by a “*registreur*,” an artist-engineer.
- Design conceived as form-imagined, appropriate to the life to be lived in the house, appropriate to the land, to the community, the region . . . the Land, seen as primary architecture.
- Design based on the “function” concept: The House and every member of it designed on the criterion: “What function does it serve?”
- The necessity of decentralization, of designing and building in the Little if life is to be lived organically and with legitimate power of decision residing in the person.
- Ringing out through it all is *the principle of the Sustained-Yield* – all living things must be nourished fully and continuously. . . . Put back into the land and into the people whatever is taken out in the growing. *This is the law of the total cultivated scene.*

II. THE AMERICANS CULTIVATING THEIR GREAT VALLEYS

The House is the nucleus of the scene. The Valley is the scene itself. As I write in mid-century, the Americans are already sensing

¹Forty years after Sullivan began his work and twenty-five years after Wright’s first houses, their preachments and examples, together with the advancing social-economic trends, brought into being a considerable group of workers known as “Industrial Designers,” meaning the entire profession of men and women who *design for the new industrial civilization*. The necessity of conserving space in my historical sketch prevents a full account of their work. In my forthcoming *Creative America* I shall present them in full perspective.

their valleys. Eleven of them — or is it seventeen, or seventy? — constitute their continent. After three centuries on their land they have at last recovered the simple but profound concept of the Sustained-Yield. Before 1890 they had lived on the land to the east of the Appalachians for only eight generations; to the west they had exploited their rich river valleys for only four. Distrusting the deferred security of tomorrow, without let or hindrance they had taken immediate profits. In a dozen great Valleys, and a score of lesser ones, from the Connecticut to the Columbia and Colorado, they overplanted the soil, they overcut the trees, overmined the fuels, metals, and fertilizers — and they underestimated the water that could nourish or destroy their wonderful watersheds. Surrounded by virginal natural riches, they forgot the great principle of permanent civilization building — what their ancestors had known. That great concept of man's history was that for anything organic to live — land, plants, animals, man himself — it must be fully nourished. Put back into the land, and so into the people, as much as you take out, this is the *Principle of the Sustained-Yield* — the only concept by which a people can cultivate its scene.

All the makings for an admirable cultivated scene had lain before the Americans on their Westward trek. But it was not until the great transition after 1890 that our people rediscovered the two great cues: *first*, that the land was primary architecture; *second*, the Principle of the Sustained-Yield. And it was then that they began the total cultivation of their scene. Teachers must study the story carefully, for they are of the company of cultivators of the total scene of America. Many pioneers of the scientific imagination contributed to it, from the unheralded achievements of the government's Department of Agriculture, its Bureau of Forestry, the dams of its Reclamation Service, to the conquest of the Dust Bowl by Hugh Bennett's Soil Conservation Service.

But the full light of understanding began to gleam with the great example of the upbuilding of the Tennessee Valley. It was at a favored moment — the coincidence of the great depression and the great drought of the early 1930's; the Exploitive Tradition had run its course and life in the Tennessee as in the other great valleys was at its lowest ebb. For generations fifty inches of rain had fallen each year on the overcut and overplanted hillsides; six thousand tons of water on every acre of that Valley. And man's profit taking now paid its toll in the erosion of the farms and cities and in the erosion of the

THE ESTHETIC FRONTIER: A NEW ESTHETICS

people. The invisible floods under the surface . . . the visible torrents in full sight . . . washed the topsoil of that Valley into the great river and was carried down the Ohio and the Mississippi two thousand miles to the Gulf of Mexico. More than the vegetation and the topsoil of the farms was gnawed away; more than the business of the towns. The nourishment of the people was gnawed away, too. For in the cities, not only of the Tennessee but of all the other American valleys, the economic system equipped for abundance stood stalled. Fifteen million skilled workers stood beside their silent machines and their inert farms, helpless, without orders, without work, without purchasing power. After a century and a half of trial, *laissez faire* — freedom to preempt and exploit and withhold from use — was failing. Owners (capital plant) took too much . . . workers got too little. Mass purchasing power did not flow regularly from production system through distribution system to the people.

And then the great experiment of the TVA, setting the thrilling model for a dozen future MVA's, CVA's, OVA's. In ten years the principle of the Sustained-Yield — and the Function concept too — social use, make good for all the people — applied to a great river valley, were rediscovered and put to work. It seems incredible that it should have happened, so great was the inertia of the people and so powerful the selfish opposition of the men who owned the people because they owned the things (dams, machines, power lines, transport and communication systems — but above all *credit*) that the people must have. And it could not have happened but for the dedication of legislators like George Norris, statesmen in government like Franklin Roosevelt, and designers and executives like David Lilienthal.¹

/ / /

New concepts were hewed out of those ten heroic years — concepts of the economic system, concepts of design and construction, concepts of government and of social reconstruction. For here in the TVA we witness the processes of design and the cooperation of The Public and The Private in large-scale, efficient action. Here we see a Mixed Economy — part centralized, part decentralized — working democratically. Here is the object lesson for a century to come.

¹ See the latter's remarkable report: *The TVA: Democracy on the March*.

Total Design and Sovereignty

First and foremost Lilienthal, Morgan and Company learned to discriminate clearly between three great functions:

- policy-making
- operation
- design

Out of the century and a half of national American experience they generalized two great concepts —

- Competence
- Sovereignty

Two crucial prior questions must be answered as a people confront the upbuilding of their society: Who is competent? Where must control be placed?

First, with respect to policy-making. In a democracy, who is competent to make the policies? Only the people themselves. The way must be blazed to relocate the source of legitimate power in the rank and file of the people themselves. Where does sovereignty — control — lie? Only in the people themselves. Thus both the competence and sovereignty reside only in the people.

Second, with respect to design. Lilienthal and his associates knew, as all true technologists and artists know, that before one can build he must design, and in order to design he must control. Popular vocabulary calls it “planning” — but the technically better term is design.¹ *Design is building in imagination, gathering and utilizing all the significant known data.* This is true of the engineer’s design of a dam, a power station, a distributing system, an architect’s design of a house and its appurtenances, a community designer’s design of the community, an artist’s design of a symphony or a poem, a mural or a portrait, a dance or a theater piece. Before any of these can be built it must be *designed*.

Who, then, is competent to design? *Only the master craftsmen who feel all the constituents of the total cultivated scene and who know their significant relations can make the total over-all design;* the people generally, competent in policy-making, are not competent in design. That is a professional and technical task; only the trained

¹ See Chapter XIX for a fuller discussion of this problem.

and the experienced, the informed and the sensitive, can consummate it. And we reiterate design must carry control.

Third, with respect to building and operation: Who is competent? Who controls? In varying degrees, all of us. That is what the men of the TVA found out. Parts of the building and operation are technical tasks to be turned over only to competent engineers, bosses, and skilled technicians. But the upbuilding of the farms is the work of the farmers; the development of the little shops in the towns, of the owner-workers of the shops. So in the TVA our people relearned the principle of the Mixed Economy: centralize control and administration where competence and efficiency demand it; decentralize them in the grass-roots where morale and efficiency call for it.

And that takes us to the basic relation between sovereignty — that is, control — and design. In order to design and to build and to operate, one must have control. The Tennessee gave men a clear lesson in this. Every Valley is a single geographic unit; inside its rim it is an organic watershed. Whatever goes on in that watershed affects other parts; the contours and the river they form see to that. Now the artist-engineers of the TVA knew that; knew that to redesign and rebuild the Valley they must *control it all*. For six generations control had been split among seven jealous warring states who never had worked together. It was like Gordon Craig's description of the theater of the 1890's — nine interests and nine opinions — unified design was impossible. The solution was clear. There was one political unit with sovereignty over all the six — the Federal government. So the thing happened. Federal sovereignty created a single national "Authority," a "government yardstick corporation," — the TVA. With Valley-wide control the nation's brilliant engineers and designers were brought there and told: *Now design and build the good life for this Valley*. And they did, paralleling the social enterprise of the government yardstick corporation with the private initiative of farmers, city manufacturers, and businessmen and the initiative of local and state government. Those who denounced, warning against Federal control, were proved to be wrong. With great wisdom and restraint the Federal engineers evolved a fine integration of centralized sovereignty of design and financing and fused it with a decentralized grass-roots operation. Each agency — Federal, state, county, and local government — did what it was best equipped to do; each private group likewise — private power companies (who made more money than they had ever made before, even though the Authority as a "yardstick

THE CREATIVE REVOLUTION

corporation" cut the price of electricity from 4 cents to 2 cents!) — individual manufacturers, demonstration farmers, crossroads coöperatives, county agents, college and university stations, what-not. Here was The American Way in action — "You do this and I'll do that" ... "I" and "We" doing it together.

So a new life came to the Valley as the River came under control and the soil was nourished and protected. A new life! A new order! Hence a new beauty. From being man the flood-maker, the Exploiter, the American in the Valley learned to sustain the yield in the land and in the people.



Each of these episodes of the creative revolution taught the educators of the future Americans more concepts. The reconstruction in the Tennessee Valley was no exception. We can now add these to our list:

- America as a Mixed Economy — part public, part private, part centralized, part decentralized ... I and We doing it together.
- The ever present role of the principle of the sustained-yield; renourish as you sow and harvest, deny the exploitive idea of taking immediate profits.
- Before we can build we must design, to design is to see the built thing in imagination — a great creative effortful human action.
- *The principle of sovereignty.* In order to design and operate, one must have control. Allocate control to whatever agency is competent to design or to operate.
- *The principle of competence.* Ask and answer for each of the three great functions of social administration: (1) policy-making ... (2) design ... (3) operation: Who is competent to do each?

III. THE MODERN DANCE: THE AMERICAN STATEMENT THROUGH DESIGNED MOVEMENT

The body is the primary expressional instrument. No other tool or appliance intervenes between it and the Self. It is the direct agent of the feelings. Its kinesthesia is the most inclusive and perceptive of all the senses. All primitive peoples know these things naïvely and use the body for communication as well as expression. It is only the literate, sophisticated, modern peoples who, through taboo and disuse, have cut themselves off from their primary expressional instrument. Our sedentary industrializing Western society, with its vast emphasis on the verbal and the disciplinary, denied the free use of

THE ESTHETIC FRONTIER: A NEW ESTHETICS

the body for hundreds of years. Puritan society turned the cortex over to educators to be tutored but said thumbs down on the rest of the body. We need merely remind ourselves of the way in which our Europeanized linguistic education regarded children as disembodied intellects; while the facts were being poured in, most of the organism was ignored and the body was strapped into an intellectual strait jacket. Isadora Duncan, first modern dancer to understand these things, saw this clearly. In 1906 she was writing:

“Very little is known in our day of *the magic which resides in movement, and the potency of certain gestures. The number of physical movements that most people make through life is extremely limited.* Having stifled and disciplined their movements in the first states of childhood, they resort to a set of habits seldom varied. With this repetition of physical and mental movements, *they limit their expression until they become like actors who each might play the same role. With those few stereotyped gestures, their whole lives are passed without once suspecting ‘the world of the dance’ which they are missing.*”¹

1 1 1

Then — in our fifty years — “the world of the dance” was rediscovered, thanks to two generations of heroic trail blazers. Creative teachers will find no more profound revelation of the concepts that will rebuild their schools than those of the “modern dance.” Already we have documented the role of body tensions in every act. Now we shall see their special function in the creative act — in poetry and novel, in painting and sculpture, in music, in the theater arts, as well as in the dance. The obvious medium of training for these forms of creative act is the dance. Two generations of heroic American artists, the second now in the prime maturity of middle age, have laid bare the concepts of designed movement and are teaching teachers how to use the body as an expressional instrument.

THE FIRST GENERATION: FROM ISADORA DUNCAN TO MARTHA GRAHAM

The first great rebel against the Puritan taboos, the first to undergo the ordeal of creating true expressional movement with the body, was Isadora Duncan. The contemporary measure of the

¹ *The Art of the Dance.*

fifty stormy years of mid-passage is Martha Graham — the “dance poet,” exemplifying her credal message that the dancer “synthesizes himself to his country,” . . . “to bring forth an art as powerful as this country” . . . imparting “the sensation of living in an affirmation of life,” . . . energizing “the spectator into keener awareness of the vigor, the mystery, the humor, the variety, and the wonder of life.”¹ Between these two are Ruth St. Denis and Ted Shawn, younger contemporaries of Isadora in the first generation of American dance. These were the first to attempt to create an “American Ballet,” and were the teachers of the fine second generation of dancers of today — Martha Graham, Doris Humphrey, and Charles Weidman. As a result of the stubborn persistence of these first two generations we see faint signs already that a third will rise to give us mature dance artists of the theater.

These dance artists are masters of the *expressional* act, and to understand them we must pause to note its characteristics.

ISADORA DUNCAN (1878–1927):
 FIRST MODERN TO ESSAY THE ORDEAL
 OF EXPRESSIONAL MOVEMENT

It is just fifty years since Isadora, a girl of seventeen, danced her way across America without shoes and stockings and stays, and was rejected by her people. Five years later she was the rage of theatrical Europe. For a decade she lived a hectic life of personal vicissitudes² — wealth and creative achievement alternating with extravagant wastage of talent, foolish dispersal of earnings, and poverty, a constant succession of love affairs, veering violently from the heights of creative passion to the depths of tragedy and destruction. In fifteen years she was through — exhausted at forty. At forty-nine she was dead in an incredible motor accident.

But she and her body — a wonderful instrument of feeling and creativeness, had served their function and served it well. Isadora was a shackle breaker and a pioneer of creative improvisation. John Martin, who knew her, says of her role:

“With the emergence of *Isadora Duncan* there came into being an entirely American dance, indeed, the *first dance art of any consequence*, irrespective of origin, *in our history*. In the

¹ From Martha Graham’s own “Affirmations” in Merle Armitage’s *Martha Graham*.

² See her brave story, *My Life* (1927).

THE ESTHETIC FRONTIER: A NEW ESTHETICS

work of its first great prophet it *revealed itself as anti-authoritarian* in that it *rejected all set formulations of movement codes*, functional in that it dealt with problems of human emotion instead of with the plight of distraught butterflies, democratic in that it took the dance away from the little cult of initiates and urged everybody to practice it.”¹

All the deforming standardization of the classic ballet — its restricting costume, shoes, and formal steps — Isadora threw off and started scratch with the freed body. That she was one of the world's truly great *naturals of body-response of feeling* cannot now be questioned. But she was more than the leader of protest against the hampering taboos of Puritanism. She was the first modern to attempt to create *expressional movement*. Frequently there burst from her measures of her ordeal: “All my life I have been trying to make one authentic gesture.” She was the first to seek “true movements,” “primary movements.” She was a genius not only in the natural use of her own beautiful body in expressional movement, in addition she drove herself to the ordeal of creating true designed movements. She taught us to see one of our great psychological problems: to educate *this greatest of all expressional instruments — the body — to move consciously as well as naïvely*.

How well Isadora succeeded it is perhaps too soon to appraise. Certainly she did not neglect the achievements of earlier historic masters of the dance; witness her protracted studies of the dance products of Greek genius in their architecture, sculpture, and pottery. Clearly she tried to turn herself into a *student* of concept in the dance. Considering the state of the creative mood both in Europe and America in 1900, she should be honored for her tentative beginnings in the world of concept.

A third contribution Isadora made. She saw that the multitudes of America must be awakened to speak through the body. She not only clothed her vision in her own original dances; in addition she employed the limited medium of words: she heard the mighty song that Walt heard, vast choral of children, youths, men, and women singing Democracy:

a “Vision of America dancing . . . a rhythm as great as the undulation of the Rocky Mountains . . . beautiful, strong, with one foot poised on the highest point of the Rockies, her two hands stretched

¹ John Martin: *America Dancing*, page 41.

THE CREATIVE REVOLUTION

out from the Atlantic to the Pacific, her fine head tossed to the sky, her forehead shining with a crown of a million stars.”¹

✓ ✓ ✓

Here, then, were the beginnings of the expressional era in the dance — Isadora’s rejection of the pretty sentimentalities, the mushy romantic storytelling and the rigid standardization of the classic ballet ... her lifelong struggle to make one authentic movement ... her vision and example of America dancing.

RUTH ST. DENIS AND TED SHAWN — THE FIRST AMERICAN BALLET AND SCHOOL OF THE DANCE

At the moment that Isadora was becoming the rage of Europe’s concert stage, a young Irish-American girl, Ruth Dennis (named “St. Denis” by the theatrical producer, David Belasco) was doing a toe dance in a New York musical comedy — to her “eternal shame,” she says in her autobiography.¹ That she was talented is certain, for she danced the “White Ballet Girl” in Belasco’s London performance of *Zaza*. Miss Ruth was an intensely religious person, saw the dance as an instrument of the “temple,” not the box-office stage; for years she read Mrs. Eddy’s *Science and Health*, the Bible, and studied Oriental religions. Acting on one of her sudden impulses, at the sight of an advertising sign — “Egyptian Cigarette Girl” — she created a series of Oriental dances — “Egypta” ... “Cobra” ... “Nautch”; finally “Radha,” which she danced, it is said, fifteen hundred times — before the rulers of Europe and Asia and in the cities of the earth. In 1907 it was received very coldly in the United States — a “mixture of hootchy-kootchy and cakewalk,” American journalists described it — but enthusiastically in European capitals. Two decades later she gave her dances in Japan, China, and India and there too was well received; “her rendering of the Indian dance is of a very high order,” it was said in India.

Refusing European offers in 1908 and 1909 to build theaters in her honor, she returned to her own country. American audiences were beginning to accept the dance as an art, and Miss Ruth toured the United States successfully for two years. In 1911 she met Ted Shawn, a newspaper writer and divinity student, twelve years her

¹ *Op. cit.*, *The Art of the Dance* (1906), pages 47–48.

² *An Unfinished Life* (1939).

junior, an enthusiastic admirer with similar interests in religion and the dance. Seeing her in "Incense," it "suddenly focused his vague feelings on the possible relation of art and religion." Shawn joined her company, danced with her on various tours, and married her in August, 1914, much to the distress of her family. A school of the dance in California — Denishawn — organized previously by Shawn, followed. It was conducted out of doors, to foster "natural free expression," with "the Greek, the Oriental, and the Hebraic . . . the underlying spiritual guide." To Denishawn came several talented young persons — Martha Graham, Doris Humphrey, and Charles Weidman — and Denishawn turned them into skilled romantic performers, potential creative dancers. Fifteen years later they had transformed the potential into the second generation of American modern dancers. Many tours were taken under the auspices of the School, and the leader among them was Martha Graham. St. Denis describes her: "shy and quiet . . . her fascinating, homely face" . . . "tremendous bursts of vitality" . . . combined "extreme temperament with a scholarly and painstaking technique." Graham "owes her professional development to the deep concern and affection that Ted had for her during those early years." Miss Ruth said she was "deeply proud of [Martha's] spirit of loyalty to her own ideas."

More world tours followed, ranging from London and Paris to Japan, China, the Malay States, Burma, and India. During these years of the 1920's, especially under Shawn's design, they created the first beginnings of American Ballet: Shawn and Ara Martin designed a dance under that title. To the School came talented young men, and it is to Shawn's credit that he made the dance a respectable medium of expression for men. For two decades the metropolitan stage saw performances of Denishawn dancers, featuring athletic young men and, after St. Denis and Shawn had separated, his own male company.

Returning to New York from the Orient in 1925, they planned a great "Denishawn House," but a widening rift between them developed and eventually they separated. Soon after, her talented dancers left her — first Martha, and then Doris and Charles; with their going she says: "the last pillar fell" — soon Denishawn was a thing of the past. Each of the two went on alone, however. There were many performances in the early 1930's — St. Denis' own in the Lewisohn Stadium and those of Shawn's male American Ballet and his later School and festival center at Jacob's Pillow in Massachusetts.

/ / /

THE CREATIVE REVOLUTION

Denishawn was important to the creative life of America in three ways:

- it kept the designed dance of the theater constantly before the American public during the critical decade of 1915 to 1925.
- it provided the school in which Martha, Doris, Charles, and others of the second generation learned to stand alone, although its unclear mixture of sweet sentimentality, exotic Orientalism, and American acrobatics confused them and held them back for years from achieving their true expressional dance.
- it gave the young people of latent talent a glimpse of a designed "American ballet."

THE SECOND GENERATION:

MARTHA GRAHAM, DORIS HUMPHREY,
CHARLES WEIDMAN, AND HANYA HOLM

The line of succession through the first two generations of the American dance theater is clear: first: Isadora, who broke the grip of the formal European ballet . . . second: Denishawn, the parents of the latent power that produced . . . third: the mature modern dance of today in Martha, Doris, and Charles. Thus in a sense Isadora, Ruth, and Ted are the dance grandparents of the promising third generation of dancers and designers emerging in the post-war years — Jane Dudley, William Bales, Eric Hawkins, Merce Cunningham, José Limon, Jerome Robbins, Valerie Bettis, Pearl Primus. Who can predict what positively creative talent is to burst forth from the youngsters in the several dance companies today? There is not space, in these few pages of this book that can be devoted to the dance, to speak at length of more than one of the second generation.

MARTHA GRAHAM — MATURE EXPRESSIONAL ARTIST OF THE THEATER DANCE

In Martha Graham we have the mature end product of fifty years of heroic determination to create original and indigenous expressional movement. I see revealed in her today (I have watched her grow for nineteen years) the great aims of the creative artist: *"To say . . . what I see . . . my way . . . yes, my people's way . . . and to say it with form."* Expressional movement. Primary movement. Authentic gesture. My way, and my people's way. Original . . . and indigenous. Here rolled into one human being is both designer and

performer. To me she is the best single exhibit of America's great need — a creative Voice, who not only makes her *own* statement, but endures the ordeal of sounding the statement of her people. The tenth-generation American, descended directly from Miles Standish on her mother's side, speaks:

"To the American dancer I say know our country . . . its vitality . . . its freshness, its exuberance, its overabundant youth and vigor . . . the psyche of the land is to be found in its movement . . . we move; we do not stand still, . . . as we begin to take more honor in the interpretation of the American scene, our dance takes deeper and deeper root."¹

From 1916 to 1923 she studied and danced with Denishawn, and on many tours, including one in England in 1922. In 1923–1924 she was solo dancer in the "Greenwich Village Follies." Then she turned her back on "show business," with the exception of a few performances such as in Blanche Yurka's "Electra," in a group of medieval miracle plays, and in staging the dances for Cornell's "Romeo and Juliet" and MacLeish's "Panic."

In 1926, while a teacher at the Eastman School of Music in Rochester, she made her New York debut as independent concert dancer. She was received well, but not enthusiastically; as Martin records, she was still labeled by the newspaper men the "maiden after Rossetti" — a label she had to work years to live down. During the next few years, still under the influence of the exotic Denishawn tendencies, she danced frequently to classic music from Brahms, Schumann, Schubert. Then slowly she turned to the modernists in music. In 1927 her "Revolt" was danced to music by Honniger, in 1928 her "Immigrant," "Steerage," "Strike," to music by Slavenski. But with her "Fragments: Tragedy, Comedy" to music by Louis Horst came choreographic independence; the dance composed first, the music written to collaborate with it. In the two decades following, Graham and Horst were to build together a new integration of modern dance and modern music.

Of her days with Denishawn, Martha says, in her "Affirmations," that she was struggling to be born, "a bundle of needs and drives" . . . "To me what I am doing is natural, it fits me as my skin fits me." George Beiswanger says the early years (1926–1929) were of "agonized search within; and without — a sturdy and defiant declaration

¹ From her own "Affirmations" in Merle Armitage's *Martha Graham*.

of the right to search." The artist had "to rid herself of what she did not need and could not use"; as Martha put it, "to destroy herself" in order to create. She had to discover and recognize the "impulse from which the affirmative stuff of art springs." "Desire" (1926) came out of this, "Adolescent" (1929) also, breaking down the wall "between passion and expression." Furthermore, she had to build a competent body and teach herself the language and the structure of the dance. As she said herself: "It takes ten years to make a dancer." She read widely among modern painters for cues — from Cézanne, Van Gogh, Picasso, and Matisse.

Through 1929, using percussive music and movement, based upon the initial beat, each movement sharply accented, she weaned herself still more from "the Rossetti Maiden." Steadily she revealed the marks of a true artist, saying what she saw in her own way and with *increasing mastery over concept as well as over movement*. No more temporizing with sweetness and quaintness. Constantly came the confident note of the American dancer creating, as she affirmed in one of her essays, "a characteristic time beat, a different speed and accent, sharp, clear, staccato." As the years passed, she took on the greatest ordeal of the dancer — to become the creative designer. The choreographer who "has a great deed to perform . . . to create a dance form in manner and style typically American . . . requires that he synthesize himself to his country."

Training herself in more of the American gesture, she went to New Mexico in 1930–1931. The Indian period and her steeping of herself in Bach "brought forth" "Primitive Mysteries": "a profoundly moving translation of ritual into the forms of art," said Martin. "At the conclusion of its first presentation the entire audience burst into shouting . . . as of involuntary release of pent-up emotion." Stark Young said of it:

"It is one of the few things I have ever seen in dancing where the idea, its origin, the source from which it grew, the development of its excitement and sanctity give me a sense of baffled awe and surprise, the sense of wonder and defeat in its beautiful presence."

In the '30's came longer solo dances to music by Wallingford Riegger, Aaron Copland, Louis Horst, Henry Cowell, Paul Nordoff, Edgar Varese, and others. Here was one of the great contributions of the second generation of modern dancers — Martha and Doris especially — the stimulation given by their sensitive design to the creation

THE ESTHETIC FRONTIER: A NEW ESTHETICS

of modern music appropriate both to the American dance and to the native scene and times.

Much of her time, after 1929, was spent in developing her group, "an ensemble, that danced as one body and one will"; transposing each member of it into an integrated dance person. Out of it all emerged Jane Dudley, Eric Hawkins, Merce Cunningham, Sophie Maslow, Jean Erdman, Valerie Bettis, to name a few of the best. In 1930 she had joined with Humphrey, Weidman, and Tamiris in the coöperative Dance Repertory Theater. In 1935 she, Humphrey, Tamiris, Holm, collaborating with Mary Jo Shelly and Martha Hill, and with the ever continuing help of John Martin, created a great national Summer School of the Dance at Bennington College. There, through the depression years, dancers and students came from all over the country. There Graham, Humphrey, Weidman, and Holm created the new dances which were performed in New York and other cities in the succeeding winters. There emerged new modern music and the creative stage productions of Arch Lauterer.



The contemporary end point, in the 1930's is The Theater of Martha Graham: "Letter to the World," "Deaths and Entrances," "Salem Shore," "Appalachian Spring," "Herodhiade," "Cave of the Heart," "Errand into the Maze."

THE INFLUENCE OF DESIGNED EXPRESSIONAL MOVEMENT UPON THE THEATER

The half century of modern dance since Isadora began has also worked its effects in two other ways: first, in changing the traditional dance of the theater — the classic ballet; second, in interjecting a revolutionary but profound concept into the theater itself — namely, that *the movement of any theater piece shall be designed as a unitary whole*. As for the classic ballet, it still persists in unchanged styles. The Ballet Russe de Monte Carlo and Hurok's commercial companies of the world's best classic performers are, each of them, good for several weeks in New York each winter, and there are a hundred city audiences for it across the continent. Nevertheless, an increasingly "modern" version, definitely reflective of Wigman, Graham, Humphrey, *et al.*, has crept into the ballet programs of such new companies as Joost and Ballet Theater. I need only cite such pieces as Antony Tudor's "Pillars of Fire" and "Undertow"; Agnes de Mille's "Tallyho";

Jerome Robbins's "Fancy Free"; Michael Kidd's "On Stage." While in most instances of "ballet," even modernized, the choreographer still employs the standard steps and accouterments — the production as a whole is moving toward expressional dance. The sentimental prettiness and amiable classic storytelling are slowly going by the way. The designers are using expressional movement creatively to speak human life in our times and our culture and are freeing themselves from even the regimented costumes and steps.

In return the "modern dancers" are learning from ballet a respect for technical mastery which was too long lacking within their designs and their performances. Thus the two dance strains have steadily affected each other during the past fifteen years. Out of their convergence there appears over the creative horizon the advancing promise of an indigenous, mature, expressive dance theater.

Not the least encouraging sign is the fact that the businessmen of the theater are beginning to use the dance designer to create the movement of whole musical comedies. Who could have predicted a decade ago that the dance choreographer would have acquired enough prestige by the middle 1940's among theatrical promoters, whose criterion is solely the box office, to be commissioned to design the movement of musical comedies on the New York stage? The most successful ones are those in which the "movement" of the theater piece has been designed by a distinguished choreographer of the dance. The Theatre Guild got the idea in 1943. When making "Oklahoma," they turned over to Agnes de Mille, not only the design of the dances, but some advisory direction of the *movement of the actors* throughout the show. Result? A spectacular and box-office success and a piece of marked creative quality. Witness also the success of "On the Town." And as I write, other experiments — hardfisted Michael Todd's "Up in Central Park" with dancer Helen Tamiris designing the dances, and "The Bloomer Girl," choreographed by Doris Humphrey and Charles Weidman, "Carousel" by Agnes de Mille, "Street Scene" by Anna Sokalov, "Finian's Rainbow" by Michael Kidd.¹

¹ A more complete story of the revolution in the use of designed movement would study many other developments; for example, the contribution of the dance-mimes, especially of Angna Enters . . . of the current creative development of tap by such dance "naturals" as Paul Draper . . . of the contemporary vogue of West Indian and African dances by the Negroes — Katherine Dunham, Adata Dafora, and Pearl Primus . . . of the influence upon our theater of such Oriental masters as the Chinese Mei Lan Fang and the East Indian Shan Kar.

ALFRED STIEGLITZ, CREATIVE PHOTOGRAPHER,
VOICE OF THE PLASTIC ARTS

To illustrate basic concepts of the creative act I have dealt with considerable fulness with man's two primary instruments of expression — the House and the Land and the Dance of the Body. In the limited space of this book it will not be possible to study the emergence of America's creative age in the other media of expression. I can now merely point to illustrative artists and summarize additional concepts that are defined by their works. First the graphic and plastic arts and the one man who was their great Voice for fifty years.

The teachers of America have much to learn about the creative artist and his mood and ways of working from the graphic and plastic artists of our time. But most of all from one among them — Alfred Stieglitz, world-famed photographer at twenty-six — for he gave an example of creative production in his own work, and he taught the role of The Place, The Organ, and The Voice in the creative revolution of our times. He taught this by his own life, for he practiced the concepts that he has preached. First and foremost, for sixty years he lived a life of integrity — an adamant refusal to commercialize art or to run with those who do. Second, he taught that America will speak if she has American Places in which to speak and Organs through which to speak — and if there are true American Voices speaking in these American Places.

He himself has been all three — a Place, an Organ, and a Voice, and he has done it from a beginning as a photographer, using what is perhaps the most difficult expressional instrument of all the arts — the camera. The camera is a machine — sheer mechanism. The camera is a thing, equipped to reproduce the shape of things. It *re-presents* profiles, contours, surfaces. The camera, in itself, has no power to go below the surfaces, profiles, contours, shapes. *Only organisms can respond to the sub-surface relations between things, to the forces that motivate things.* Hence only human beings, and of those, only the ones *whose feelings are sensitive to forces* — not to things — can use the camera as an instrument of art.

That was the first great achievement of Stieglitz. He showed men how, working as artists, to use mechanism to produce organism. Man can create from the still and moving scene a world of truly photographic materials. He can create his own esthetic scene. He can organize people and things and photograph them; this is the great

THE CREATIVE REVOLUTION

achievement of motion-picture photography since the 1890's. Or he can search for the esthetic scene in the multitudinous forms of the natural and man-made world. If he is sensitive and alert and patient, he can put himself into such strategic positions that the scene will evoke in him a deep sense of organization and the photographic record will be an organization and hence a work of art. To do so requires great skill in "seeing" in an organizational way. Anybody can aim a camera at a scene, hold it still, and snap its shutter, thereby "taking a picture." But only an artist can "see organizationally," discover and select the strategic place for seeing, and wait for the optimum moment and capture the esthetic organization. This requires that the camera be technically acute and efficient and that the photographer have technical control of the camera and skilled coördination in its manipulation. But if the man is an artist, his photographic record will be an organization, an evocation of the forces in the scene, of the relations between the things. It will be a work of art.

This was the achievement of Alfred Stieglitz — at the absurd age of twenty-five.



Before Stieglitz had come back from Europe as the famous boy-prodigy of photography, three great transition men stood out in painting — Alfred Ryder, Thomas Eakins, Winslow Homer. Then at the turn of the century a true transition group developed around Robert Henri, and The Eight — Arthur Davies, Bellows, Sloan, Glackens, Luks, Lawson, Shinn, and Prendergast. It was they more than any others who, with Stieglitz, formed the bridge between America and the modern French movement in painting. It was they who arranged the Armory Show in 1913. Some among them were commercial illustrators, but all succeeded in various degrees in producing original expression of life in America — the crowded slums of the great city, the Bowery and its bars and night life, scenes on the streets and in the fields, the life of sporting events.

On all the major levels of the expressive profile the graphic artists that followed these folk painters made their way. Many competent painters made themselves sincere recorders of the culture — the "Mid-West Trinity," Thomas Benton, John Curry, and Grant Wood — to name the most conspicuous three. A score of able painters of social protest emerged; typical of the best were Henry Billings,

THE ESTHETIC FRONTIER: A NEW ESTHETICS

Raphael Soyer, William Gropper, Arnold Blanch, George Biddle, Henry Poor. A dozen centers of original painting and sculpture developed — the largest, perhaps, was Woodstock, New York, where such conspicuous painters emerged as Henry McFee, Henry Mattson, Eugene Speicher, John Carroll, Charles Rosen, Georgina Klitgaard; and in sculpture such artists as Alfeo Faggi. Other centers produced their roster of original artists who were trying to make their own creative statements and also those of American life — in Carmel, California, in eastern Pennsylvania, in southwestern Connecticut, at Provincetown, Massachusetts, and of course in the various “Villages” of New York and other cities. But this dramatic development is another story, to be told in another book.

IN ALL THE ARTS OF EXPRESSION THE AMERICAN IMPROVISED HIS CREATIVE STATEMENT

Postponed also must be the story of the emergence of creative American theater, new American poetry, novel, and music, a library of criticism that sounds the fine true beat and rhythm of our own culture. For these strands of the creative awakening I cannot even name names and point to achievements. Enough has been given in the way of illustration, especially from the two great primary arts of man, to present the critical challenge to the teachers of America.

WHAT WILL OUR GRANDCHILDREN SAY OF US?

I think there is a fair chance that, by the year 2000 A.D., our grandchildren may say of us:

“Isn’t it strange that our grandfathers of the 1940’s, while defending their American Democratic Way with their very lives and perceiving clearly its economic and political roots, seemed quite unaware of the expressive power that their sensitive creatives had already generated? Consider their leaders in Education, for example: If we judge them by what they did at the height of the social revolution in the mid-century, many of them failed to see the artist’s unique and indispensable role in social design and reconstruction. After the World War they built up a thrilling social program in their schools: witness their use of world geographic and historical materials. But they had a strange myopia about the arts . . . expression . . . the American statement — which they regarded as something esoteric, hyper-individualistic, asocial . . . something aloof from the main line and of not much concern with the American social scene. “Sociology” was in the saddle, a meager halfway thing — mostly politics and economics — which rarely reached the conceptual roots of

THE CREATIVE REVOLUTION

their transitional problems. The best of their liberal historians, documenting "the American idea" of civilization, were insensitive to the profound thing that had happened in that half of their civilization that lay outside of the physical, natural, and social sciences."

"And yet!" I can hear our grandchildren exclaim about us:

In that tragic moment in world history,
In the midst of dire national danger . . . of bewil-
derment . . . of defeatism,
Creative Americans were drawing the curtain aside
On a vista of a new life . . .
of a civilization just over the horizon
whose wealth, beauty, and spirit
Would stagger the imagination and dwarf anything
that had gone before.

NEW ESTHETIC CONCEPTS FOR A NEW EDUCATION

The systematic body of concepts of the new esthetics which we can employ in the building of the new school program will be gathered at the end of Chapter XIV. Here I shall content myself with the statement of a few that have been illustrated in the foregoing pages:

From the Study of the American Building His House and Cultivating His Scene

- The owner-designer builds his House, exercising three social rights: (1) to a place on the land and his corresponding social duty of developing it and sustaining it to the maximum . . . (2) his social right to ideas and materials . . . (3) his social right to credit and purchasing power.
- The House conceived as the total cultivated scene . . . designed as "necessity, not tradition, demanded."
- The House conceived as organic architecture — designed by a "regisseur," an artist-engineer.
- Design conceived as form-imagined, appropriate to the life to be lived in the house, appropriate to the land, to the community, the region. The Land, seen as primary architecture.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

- Design based on the “function” concept: The House and every member of it designed on the criterion: “What function does it serve?”
- The necessity of decentralization, of designing and building in the Little if life is to be lived organically and with legitimate power of decision residing in the person.
- Ringing out through it all is *the Principle of the Sustained-Yield* – renourish as you sow and harvest, deny the exploitive idea of taking immediate profits. Put back into the land and into the people whatever is taken out in the growing. *This is the law of the total cultivated scene.*
- Before one can build he must design; to design is to see the built thing in imagination – a creative effortful act.
- *The principle of sovereignty:* In order to design and to operate one must have control of the entire operation.
- *The principle of competence:* Ask and answer for each of the three great functions of social administration: (1) policy-making . . . (2) design . . . (3) operation: Who is competent to do each? Control must be allocated to whatever agency is competent.

From the Primary Art of the Dance

- The expressional artist is master of concept as well as of feeling.
- The role of the *designed movement* of the body as the primary expressional instrument of feeling; recognition that it is perhaps the most important *educational* instrument.
- A *designed, graduated program of movement* in the school from the earliest years of childhood to years of maturity.
- Insistence that concept as well as feeling is an indispensable root of designed movement.
- Expressional movement as the conscious effort of the dancer to “say” what he “sees,” “feels,” of life – *his* unique way, and to say what his people feel, *their* way, and thereby to evoke, not to represent a feeling for life.
- The necessity of achieving “true” or “primary movements,” “authentic gestures,” as the method of evocation.
- The role of designed movement of all the personalities in every theater piece.

How Man-as-Artist Works

- Starting with his own imagined conception – a concept, a felt-attitude, perhaps an urge to get something down in objective form . . . the artist selects his material and molds it into an organization. He produces order out of miscellany.

*The First Characteristic of the
American Age of Expression*

- American artists making their original statements (in any medium of expression) of their view of life.

CHAPTER XIV

The New Esthetics: Expression and the Creative Act

THE GREAT CONCEPT OF EXPRESSION

It should be clear from the documentation of the preceding chapter that our times are not only a transitional period between two stages of industrialism; in addition to being that, the last half century has opened what promises to be one of the great expressional ages of modern history. It is clear that the American is learning to make his own indigenous statement with all the materials of expression. The term *expressional*, therefore, becomes an indispensable key to understanding the esthetic act and building a fine program of expression in education. Martha Graham is an *expressional* dancer, John Marin and others are *expressional* painters, Charles Ives and company are *expressional* composers; similarly in other media — Sullivan and Wright in architecture, Stieglitz in photography, O'Neill in the theater, Whitman in letters — all are *expressional* artists.

It is in the new materials that have been precipitated from count-

SELECTED SOURCES ON THE ESTHETIC ACT

Out of the epochal shift magnificent materials have been piled up from which to mold a new esthetics — a psychology of the creative act. Of a hundred books on "esthetics" written in our times, I recommend especially — some for the statement of the whole book, some for selected chapters — the following:

Cheney's *Expressionism in Art*
Leo Stein's *A-B-C of Aesthetics*
Louis Danz's *The Psychologist Looks at Art*
Herbert Read's *Art Now*
Wilenski's *Modern Movement in Art*
Dewey's *Art as Experience*
Santayana's *Sense of Beauty*
Gutheim's *Frank Lloyd Wright on Architecture*

less creative acts of these expressional artists that we find the makings of the new esthetics. Not from the academic philosophers who write books on "esthetics," and most of whom apparently have not actually *experienced* the act itself, but from creative artists whose lives and works practice the philosophy of experience. We have consciously chosen the philosophy of experience as the basis of our consensus of educational foundations and we shall put it to work in making our statement of the new esthetics.

Some Accepted Generalizations

In studying the esthetic act, and its two components — the creative act and the appreciational moods which envelop it — I shall assume the psychological conclusions we have already drawn about the act of human response:

- it is socially constituted
- it is an act of the motivated Self
- meanings are operational
- knowing is generalizing
- attitudes frame and carry the meaning
- concepts touch off the meaning
- knowing is first an intuitive primal awareness of the organism-responding-as-a-whole; second — a defining and confirming or rejecting via the reports of the separate senses

In addition there are three other generalizations which constitute firm ground to support our analysis and which, I think, will be accepted without argument:

SELECTED SOURCES — *Continued*

Invaluable light can be found on the Esthetic Act in the autobiographies, biographies, journals, letters, and notes of creative artists, irrespective of their chosen medium. I give here only a few of the outstanding ones of our contemporary creatives:

Duncan: *My Life . . . The Art of the Dance*

Sullivan: *Autobiography of an Idea*

Frank Lloyd Wright: *Autobiography*

Gauguin's *Intimate Journal*

Collected Papers of Charles Peirce (many excerpts scattered through the six volumes)

Alfred Stieglitz: Selected issues of *Camera Work* (1902–1917) . . . similarly with *Twice a Year* (see *Conversations with Alfred Stieglitz*)

Graham: "Affirmations" in Merle Armitage's *Martha Graham*

THE ESTHETIC FRONTIER: A NEW ESTHETICS

First: Expressive and appreciative acts take place through any medium within the experience of the human being — the materials of the house, painting, sculpture, and the graphic and plastic arts, the school or any other social institution, sounds and tone, the organization of people and social activities, words in poetry, novel, and essay, the movement of the body in the dance and the theater, the design and utilization of tools, implements, and other physical paraphernalia of industrial society. Emphatically the esthetic act is not to be regarded as the exclusive stock in trade of the professional artist — painter, poet, musician, novelist, dancer, actor, dramatist, and the like.

Second: Every human being has within himself some potential capacity to express himself in one or another medium and to respond appreciatively. Hence the goal of esthetic education is Every-Man-Behaving-as-Artist, or in shortened concept, Man-as-Artist. The education of all the children of all the people assumes that everyone, under effective educational conditions, should grow to the maximum of his capacity, both to express himself and to appreciate esthetically.

Third: But there are vast differences among the people in sensitivity and in potential creative capacity. Any population will reveal a few persons of genius, a large number of considerable talent, a great mass of mediocre capacity, and a few persons of very little — “almost no” sensitivity for esthetic experience. Thus the creative and appreciative capacities follow the law of distribution that has been well established for the anthropometrical and mental traits, intelligence, temperament, and emotionalized abilities.

AGAIN THE GREAT DICHOTOMY: THINGS AND FORCES

To make the concept of expression clearer I recur to the deep cleavage between the Thing People and the Force People and their orientation toward life; at this point, therefore, I suggest that the reader recall the distinction that I made between things and forces by turning back to the closing pages of Chapter II. In addition to that summary consider with Louis Danz¹ some further differences between things and forces in the world about us: earth and moon and the *attraction* between them ... gas and its *volume* ... a suspended steel hammer and its *weight* ... a line and its *direction* ... a moving rocket and its *momentum* ... a magnet and its *attraction*

¹ See his *The Psychologist Looks at Art*.

EXPRESSION AND THE CREATIVE ACT

... a tuning fork and its *rhythm* ... air and its *pressure*. In each of these pairs of terms, the former — the thing — is distinguished from the latter — the force.

TWO ATTITUDES TOWARD LIFE AND EXPRESSION

Corresponding to the dichotomy in people is the parallel distinction in their attitudes toward life. The characteristic attitude taken by the thing people is superficial, centered on the things themselves; the other is profound, centered on forces, or relationships. The former can see only the shapes of the surface contours of life; the latter feel the depths. The measure of the former is LIKENESS, conformity to pattern; that of the latter is FORM — which is the integrity of utterance of the self.

There are accordingly two kinds of art and expression, and these we must distinguish if we are to understand the esthetic act and its use in education. There is the art of Things. This is the popular folk art — the folk song, folk poetry, — “*The People — Yes*” of Carl Sandburg ... that Tree of Brooklyn ... the peep show of *Life with Father* ... the acrobatics of the vaudeville dance. This folk expression is the naïve art of the people. I shall call it “representative” art. The technique is close to copying, imitating the surface contours; it is essentially reproduction of *likeness*. Most students call it “realistic,”¹ meaning photographic reproduction of the surface appearances.

The Thing artists describe the *shapes* of the Things — earth, moon, gas, hammer, line, rocket, magnet, tuning fork, air. Most of the so-called “art” of the world is of this type. Many synonyms are at hand for it: we speak of photographic reproduction — re-presentation.² It is useful as a technique of communication which is at its maximum in engineering drawing. If it can be considered to be “art” at all, it is the art of mechanism. In all the technological situations of life in which the principles of mechanism apply representation is needed. The most obvious example is the working drawing of the engineer, in which *the shape is exactly reproduced*, every dimension

¹ I shall use the term only sparingly, if at all, because of its confusion with the philosophic term “realism.” A few of our more profound artists use it in the latter sense, however, to mean with Peirce that “the general” is “the real.” See John Marin’s “your real artist is your *Realist*,” in E. M. Benson: *John Marin, The Man and His Work*. The American Federation of Arts, Washington, page 109 (1935).

² It is the “art” of emotion — in the sense of sentimentality, not of true esthetic feeling; I shall make the difference clear a few pages later.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

so accurately drawn that the builder can build the object from the measured dimensions. This is communication at its meticulous best, for all the psychological criteria are satisfied. All indispensable meanings — “scale,” “unit,” etc. — are standardized and clearly known to all concerned.

But expression, in sharp contradistinction with representation or communication, is the art of organism.

The Expressive artists state the *forces* or *relations between things*. In the forestated pairs of terms they are concerned with forces — attraction, volume, weight, direction, momentum, rhythm, pressure. Witness John Marin, one of the great “force” painters of the world:¹

“Too, it comes to me a something in which I am curiously interested. I refer to Weight Balances. As my body exerts a downward pressure down to the floor, the floor in turn exerts an upward pressure on my body.

“Too, the pressure of the air against my body, my body against the air, all this I have to recognize when building the picture.”

Recall his description of *what* he paints of New York: “great forces at work. . . . Feelings are aroused which give me the desire *to express the reaction of these pull forces . . . great masses pulling smaller masses.*”

Moreover, in every true expression *the operational meaning* is the right one. Note, these forces *do* something: weight *falls* . . . volume *expands*, a ceiling *presses down*, a floor *up*, a line has *direction*, attraction *pulls*, repulsion *pushes*, rhythm *recurs*, antipathy *recoils*, love *goes out to*, hate *turns away from*. Each of these meanings is expressed in action terms . . . as *verbs*, not as nouns. These are all concepts of prepotencies . . . tendencies . . . tensions . . . periodic interactions.

SOME INDISPENSABLE CONCEPTS: FORCES . . .
FELT-MOVEMENTS — HENCE “FEELINGS”

Again We Recur to the Role of Feeling

I said Expressive art was the art of forces playing beneath the surface of life. It is clear from my Chapters III and VII that I regard FEELING as the best single term for all these *forces*. In esthetic expression as well as in other types James and other body-response psychologists are confirmed. Now we can employ the important con-

¹ *Op. cit.*, Benson, page 107.

cepts we have built up, for they are the very concepts to which expressive men resort in telling what it is they are trying to express. These are "felt-relations" or "felt-movements," which are the body equivalent for "forces." Both are stated in terms of "feeling." Practically every artist struggling to articulate what it is he is doing in the creative act uses the word "feeling." Discussing what the artist expresses, Cheney says: "He expresses primarily his feelings for life and order." German artists gave the name Expressionism to that modern movement in art "that put more stress on the expression of the artist's own feelings than on the objective materials of Realist art." William Morris, looking out of his windows at poverty-stricken revolting English workers, said: "I know by my feelings what these men want." William James in his *Principles of Psychology* spoke of a feeling of *and*, a feeling of *if*, a feeling of *but*, and a feeling of *by*. These are feelings of relationship, each expressed by a conjunction, which, to quote Oxford, is: "an indeclinable word . . . serving to mark *the relation between* two notional words."

Expressive art being the expression of forces, forces are themselves best expressed as relations, therefore "felt." A. S. Eddington, the mathematical physicist, says: "Force, as known to us observationally, is like the other quantities of physics, a relation." He cites a confirming quotation from W. K. Clifford, using the data of modern science: "The reality corresponding to our perception of the motion of matter is an element of the complex thing *we call feeling*."

Hence creative or expressional artists do not portray, describe, represent, photograph the surface contours of things; *they evoke the inner forces organizing, motivating, propelling life*. As Robert Edmund Jones says:¹

"all art in the theatre should be, not descriptive, but evocative . . . A bad actor describes a character; he explains it. He expounds it. A good actor evokes a character. He summons it up. He reveals it to us" . . .

Speaking of creative drawings:

"This drawing is evocative. . . . [In it there is] a quality which will attract [people] and disturb them and haunt them and make them dream. Your feeling is in it. Your interest is in it. You have triumphed over the mechanics of the theatre and for the time being you have become a poet."

¹ In his *The Dramatic Imagination*, pages 81-82.

To sum up: Expressive art is the art of forces . . . Forces are felt-relations . . . Feeling is central to the esthetic act. We should say to a painter as Louis Danz does: "Paint me a solid, a volume, a weight, a direction, a tempo, a cohesion, an attraction, a repulsion, a propulsion, an aversion, antipathy, hate, love, design, rhythm, impulse."

Distinguishing Feeling from Emotion

By feeling we do *not* mean emotion. Neither appreciating nor creating an esthetic object is a function of *emotional* excitement, although either the creative artist producing it and sensitive observers seeing it may be emotionally stirred. As Stein says: a "person with a strongly felt emotion may write a poem or heave a brick . . . Neither the heaving of bricks nor the writing of poems is an essentially emotional act." A loud explosion, falling suddenly from a height, the recall of a tragic personal experience, an unexpected scent of special kinds, what-not, may, probably always will, produce emotional excitement. Emotion, then, is a name given to body excitement, and, while it is an accompaniment, is *not a determining factor in the esthetic act*. Feeling, on the contrary, is indispensable to the esthetic act — either appreciation or creation. This requires more explanation to make it clear.¹ One of the clearest distinctions I have ever encountered is Leo Stein's and I quote it somewhat at length.²

"I have found in studying conflicts, repressions and so on, that it is quite possible to have an intense emotional disturbance which has *no definable character other than that of being emotion, on condition that the skeletal muscles remained at rest*, or continued undisturbed their indifferent movements, such as walking."

"It was invariably the case that this emotion had no particular character. Whether the theme was definitely erotic, whether it had to do with fear or anger, made no difference to the quality of the emotion. On the other hand, *an adjustment of the skeletal muscles*, even those of the larynx and throat, in the appropriate attitudes, *would at once give to the emotion a similar colouring*. It is obvious enough why it should be generally thought that the emotions have in their essence this diversity. Usually a situation

¹ MacDougall and Claperede illustrate the utter confusion and uncertainty of meaning among psychologists concerning emotions and feelings. At Wittenberg College recently a symposium was held on that theme; the report, under the title *Feelings and Emotions*, made the confusion of the day clear enough.

² Leo Stein: *A-B-C of Aesthetics*, pages 37, 38, 39. [Italics mine throughout.]

EXPRESSION AND THE CREATIVE ACT

leads to a responsive attitude in which the emotion arises. When I first began to do this sort of thing, my emotions were of different kinds, because I responded to the thought with more definite muscular reactions. *It was only when I maintained the bodily poise practically unaltered, that I began to obtain these indeterminate emotions.*"

"Facts like these reinforced the personal experiences described in the preceding paragraphs, and the two things together led me to discriminate between feelings and emotions. Emotion is just emotion, while feelings are as numerous as appropriate adjustments. They can be grouped, but the groups have no hard and fast limits. They are merely convenient."

Summing up Stein's analysis:

"The Self is the mass of feelings which takes the form of a mass because the individual feelings are vague, and do not point to their real objects, in fact, do not make objects in the sense in which I try, more or less consistently, to use the word. Because the Self is indefinite, it easily assumes various forms, each of which seems for the moment, complete. When it is brought into relation with other things, the characteristic consequences follow from the Self's indeterminateness."

We get confirmation from Cheney's fuller statement of what the artist expresses:

"He expresses primarily his feeling for life and order, growing out of his own experience of universal abstract values, perhaps as apprehended from a sense experience of an object or subject in outward nature; his expression being intensified also by a special mastery of the materials and methods of his art."¹

/ / /

Now we can use the term built up in the earlier discussion of knowing; knowing is primal awareness and the feelings are the chief personal instruments. In the esthetic act there are two coördinate factors — the Knower and the esthetic object. The primal awareness — intuition — is of the gathered-together Self. As Lipps said, we "feel ourselves into the object." The observer of the esthetic object (building, idea, poem, symphony, what-not) strikes body poises and

¹ Sheldon Cheney: *Expressionism in Art*, page 64.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

tendencies, stresses and strains in the physical frame, muscular responses appropriate to his response to the object. That is his way of "understanding" it or "enjoying" or "appreciating" it. We feel the object through our body *tendencies* and stresses. It is "felt-movements," not emotions, that are transferred to the object.

THE PROFOUND CONCEPT OF MOVEMENT

To understand the expressive process we must gather up what we have already documented from many fields about the primary role of body-movement.¹ We recognized it as central in the development of verbal language, in "thinking with the body" . . . in responding to the structure of buildings, in appreciation in the theater and movement arts, in expressive painting, in responding to a vast range of qualities in the outside world. To clinch these and make use of them in this study of the expressive act let us add a bit more of testimony from artists.

Marin in the quotation given earlier, speaking of his paintings of New York's buildings, "if these buildings *move me*, they too must have life. . . . It is this '*moving*' of me that I try to express . . . what a great city is doing." And again: "I see great forces at work; great *movements*." So Marin tries to put down "within the frames . . . a balance, a controlling of these warring, pushing, pulling forces. This is what I am trying to realize." And the staggering difficulty of the task is indicated by his final addendum: "But we are all human."

As Isadora Duncan put it:

"Study the movement of the earth, the movement of plants and trees, of animals, the movement of winds and waves — and then study the movements of a child. You will find that the movement of all natural things works within harmonious expression. And this is true in the first years of a child's life; but very soon *the movement is imposed* from without by wrong theories of education, and the child soon loses its natural spontaneous life, and its power of expressing that in movement. . . .
"all energy expresses itself through this wave movement. For does not *sound* travel in *waves*, and *light* also? And when we come to the *movements of organic nature*, it would seem that *all free natural movements conform to the law of wave movement: the flight of birds*, for instance, or the *bounding of animals*. It

¹ The purpose of this part of my book will be served best if the reader will recall quickly the essence of the material in Chapter VII.

EXPRESSION AND THE CREATIVE ACT

is the alternate attraction and resistance to the law of gravity that causes this wave movement."

Note, again, the contrast between the nature man and the civilized man in this respect. Isadora said:

"The *movements of the savage*, who lived in freedom in constant touch *with Nature*, were *unrestricted, natural and beautiful*. Only the movements of the naked body can be perfectly natural. *Man, arrived at the end of civilization, will have to return to nakedness*, not to the unconscious nakedness of the savage, but *to the conscious and acknowledged nakedness of the mature Man, whose body will be the harmonious expression of his spiritual being*.

"And the movements of this Man will be natural and beautiful like those of the free animals."¹

John Martin, who has made himself one of our best students of the concept of movement, says: "We are made *aware of any object only in terms of the appropriate movement we are prepared to make with relation to it*." [My italics.] We are equipped with kinesthetic and articular senses; "movement-sense receptors," which are in constant motion. They function as a fused "movement sense" which serves us in reacting to all problems or activities of the external moving world as the visual and auditory senses enable us to respond to light and sound waves.

This is what Danz calls "movement inside one's skin," and he gives examples from hearing tones and seeing colors:

"Now if I hear 'C' and immediately after I hear another tone, say 'F,' a very interesting thing happens to me. I *move inwardly* from one tone to the other, that is, the configuration which was established by 'C' is stretched out so as to reach and include 'F' and at the same time 'C' is fading so that when I finally hear 'F' in all its fullness I have almost, *almost* but not quite, forgotten 'C.' And I have *experienced every possible variation of pitch which exists between the 'C' and the 'F.'* Pitch has become *one with time* and the change, *the gradual variation of pitch in time is movement*. Let the reader try this experiment upon himself; sing or hum any note, say 'C,' and then very, very slowly slide down, still singing, to the 7th below which will be 'D.' Do not sing the regular intervals but merely *slide*. Doing this you will find that

¹ Isadora Duncan: *The Art of the Dance*, pages 55, 69, 77. [My italics.]

you experience every possible variation between these two tones. This is movement. You establish a neural configuration, 'C,' and slowly stretch it to lower 'D' just as you might stretch a rubber band. You create a tension in this configuration. When you reach 'D,' you finally let go of 'C' and *you know, you feel, you experience, movement inside your skin. . .*"¹



Twenty years ago, I myself, impressed that the basis of all active living lay in rhythmic body movement, brought together such evidences as I could find.² The examples that were gathered illustrated the rhythmic action of several hundred organs of the body and their integration as the determining basis of personality; witness — the pulsating heartbeat, the synchronized periodicity of breathing, the characteristic timebeat and rhythm of movement in walking, the unique personal accent and rhythm in oral speech, in the responses of the singer, the orator, the actor, the musician, or the manual worker in any occupation. I found that fifty years of laboratory-research psychologists had documented the periodic nature of mental activity. Attention ebbs and flows. Performance is rhythmic: tapping, estimating numbers, discriminating pitch, intensity, and quality of sounds, rowing a boat, running a typewriter or other machine, using tools. Laboratory investigations of reading and writing proved that the eye movements of the best readers and the finger-hand-wrist-arm movements of the best writers are rhythmic. The written as well as the spoken sentence exhibits the same rhythmic peculiarities of the individual. The artist in the studio confirmed the role of rhythm: it is an obvious foundation of personal expression in music, in poetry, and in the creative dance; painters and sculptors bring about subtle rhythmic qualities in their products.

We need not multiply examples. *To be alive is to be in move-*

¹ Louis Danz: *The Psychologist Looks at Art*, pages 112-113. [My italics.] Danz adds: "If you doubt the truth of this, I have proof to offer. Sound is vibration. Tone is periodic vibration. Every tone has a certain rate of vibration. Middle 'C' on the piano vibrates 517 times a second, international pitch. The 'D' below this 'C' vibrates 291. When you hear 'C,' you establish a neural configuration at the sympathetic vibratory point 517. As you descend, this configuration slides through 516, 515, 514, etc., until you reach the sympathetic vibratory point 291. You still keep within the configuration the memory of the starting point, 517. This point continues as a part of the configuration until it fades out."

² In Rugg and Shumaker: *The Child-Centered School*, Chapter XI.

EXPRESSION AND THE CREATIVE ACT

ment, and each organ in constant tension has its own characteristic intermittence. Life itself is perpetuated because of this fundamental quality — the regular recurrence of pauses between stresses. The rhythmic basis of life, then, must find recognition in the new education, for it is a fundamental characteristic of all human activity.

THE CHIEF CHARACTERISTICS OF THE EXPRESSIVE OR CREATIVE ACT

We are in a position now to examine the creative act, describe its nature, and ask what it is that the expressive artist expresses. The expressive act has three outstanding characteristics:

- The Self's Expression
- The Self's Imagination
- Designed Form

Put in homelier words:

- I say
- What I feel (“see,” “think,” “intend”)
- with form

Sheldon Cheney summed it up in six words: “the formal expression of imagined conceptions.” Albert Einstein, world-renowned mathematical physicist, illustrated two of the three elements — To say or express, his way . . . what he sees in the world: “Man tries . . . to make for himself . . . in the fashion that suits him best . . . a simplified and intelligible picture of the world.” Allan Abbott, student of literature: “The creative artist . . . creates a world that in actuality is his view.”

The Expressional Artist — Master of Concept as Well as of Feeling

The expressional act is designed. It is an act of conscious effort. Its psychological constituents are twofold — (1) feeling . . . (2) concept. The presence of one alone will not guarantee the true expressional act. Hence, the act of designed movement is mature, far removed from spontaneous improvisation. All human beings have some capacity for improvisation and with a vast range of media. But only those rare ones who fuse together in their single organisms kinesthetic sensitivity, conceptual intelligence, motor coördination, and the ca-

THE ESTHETIC FRONTIER: A NEW ESTHETICS

capacity for dogged persistence achieve *designed expression*. This is a mark of creative maturity.

Some among us, a few, are naïve "naturals" of one of these constituents—the body-response of feeling. They move well, speak fluently, use gesture dramatically, manipulate tools and materials skillfully. We applaud their spontaneous acts of technical control, even support them well. *They are natural masters of the body-response of feeling*. But most of them are not true expressional artists, for they are not also masters of concept. It is important to recognize early in our study that there are two measures of creative maturity, for we shall see them discriminated clearly in the two generations of modern dancers that have come on the stage of the American theater. Bear in mind, then, that the goal of fifty years of heroic struggle, since Whitman, Isadora Duncan, Sullivan, and Ives first startled the Victorian world, is *designed expression*.

Let us examine each of the three elements of the creative act; first the profound concept of Expression.

I. EXPRESSION . . . I SAY . . . THE SELF MAKES ITS PERSONAL STATEMENT

Every Human Being Wants to Make His Personal Statement

Every phase of our changing culture shows Our Times to be primarily an age of expression. Most men feel the urge to get themselves "stated," to put into some objective form what they feel and think at a given moment. The more articulate ones—the architect of a house, the composer of music, the writer of words, the carver in stone, the statesman of a nation, the creator of a great business, the godly judge of a court, the philosopher of a society—strive to objectify what they feel and are. But the desire to present his Self's view of life finds its expression in the practical doings of the less sophisticated man; my neighbor, the craftsman in stone and iron and wood in his own little shop, the quiet librarian in his own bookshop . . . the teacher in the design of his own class activities. Each strives to make his utterance a replica of himself. *"Each singing what belongs to him or to her and to none else."*

Thus, whether naïvely or in a consciously sophisticated way, most men have the drive to express themselves in some form. Throughout recorded history some have felt the urge so strongly that they have

chosen a definite field of expression as the center of their lifework; they have made it indeed their vocation. The pageant of history is a glorious panorama because of men's portraits of themselves — in community design and organization, in government, in architecture, literature, drama, music, graphic and plastic arts, what-not. In every possible medium of expression man has found a way to record himself.

Expression and the Bill-of-Rights-and-of-Duties

But the dynamic focus of the creative act is the expression of the Self. I say . . . what *I* see and feel . . . *my* way. It is my statement I must make, says Man-as-Artist, not yours, not the community's sloganized will. The most important question the Teacher can ask of one less mature than himself is: "What do *you* think?" The most important attitude he can build in his students is: "I am *expected* to say what *I* think . . . not to give back what the Community, through its Book, said."

Nevertheless, the Teacher's task is to build two great attitudes — not merely one — the attitudes that govern Expression in the twofold Bill-of-Rights-and-of-Duties. With the Attitude of the Bill of Rights the student says: "I am really *free* to think my own thoughts, to feel *my* own feelings." With the attitude of the Bill of Duties: "I am *obligated* to think my own thoughts and feel my own feelings — *my* way." Thus the two together say: "I am not only *free* to express my thoughts and feelings, but I am *obligated* to my fellows to express them, to put them into some objective form. I have capacity for original thinking and feeling. In one medium or another — in the building of my house, in the choice and design of my clothes, in the cultivation of my personal scene, in my conversation, my contribution to my work, through words or ideas or through physical materials, I *must* endure the ordeal of *saying* in some objective form what I think and feel." This is the twofold expressive Bill-of-Rights-and-of-Duties. This is Freedom of Expression.

The corresponding social aspiration of our times is so to arrange the social scene that both of these requirements can be satisfied. It will be, in James T. Adams's words: "that social order in which each man can rise to the highest stature of which he is innately capable." Society is conceived as a multitude of individuals; the social scene is a stage so set that each man is able to advance steadily toward the great goal of the Person that he is potentially. But these goals cannot be reached except through the reconciliation and collaboration of "I"

and "We." The individual must take on a *Bill of Duties that requires designed expression of what he thinks and feels as well as enjoy his Bill of Rights*; he must make himself a cooperative person of responsibility and competence. Society in its turn must collaborate in helping to guarantee the individual economic security and maintain a climate of opinion marked by spiritual freedom.

Although this principle is easy to state, it was characteristic of our people that until our own times few among them really accepted either the Bill of Rights or the Bill of Duties. In the light of the psychological history we have traced we can understand why that was true up to our own times, and be charitable in appraising the failure of our fathers. Had they been a naively self-confident people *in all respects*, the true expression of what they saw and felt would have been natural. But they were profoundly an *inferior* people — except in the preëmption and exploitation of land and government. An inferior people belittle their own expression and our fathers did just that. The physical signs and symbols of their institutional life were copied from older cultures, which they had been brought up to admire and respect. It is perhaps the most difficult of psychological tasks for such a people, building a new culture in the aura of a parent one, to understand that they should say what they see their own way. To make the American Statement was the problem a century ago, but only Emerson, Whitman, Thoreau, Melville, and a few others knew that. We can see now what a tremendous achievement it was for Ed Howe, Harold Frederic, Hamlin Garland, *et al.* to write their first novels out of the lives of the farming people of the American Midwest. What an ordeal it was for Howells to leave Boston in 1881 and move to New York, to study Marx, to make himself a part of the social changes, to speak out in defense of the Haymarket strikers. Even though these were pale measures of our civilization, they were *ours*; they were the American Statement, not copies of classic Europe.

In the Esthetic Act the Self Is Focal

This brings us back inescapably to the Self. Irrespective of which type of human act we study — habit, problem solving, the esthetic act — the controlling agent is the Self. From James and Dewey, Baldwin and Cooley, of the 1890's to Allport and Cheney, Stein and Wilenski, Hofman and Gleizes, of today, whether the process is one of observing or creating, the Knower, the Self, is focal. We start there. And the student of education will be well advised

EXPRESSION AND THE CREATIVE ACT

to ponder every human act in terms of the role of the Self, and to steep himself in the studies of the Self that have been made by the psychologists, the philosophers, and the estheticians.

Recall our consensus on the nature of the Self. *First*, it is the central motivating and directing agent that propels our behavior. *Second*, it is *socially* constituted. All the more profound students of the esthetic act agree with the psychologists' consensus; witness *Stein*:¹

"We see ourselves only because others see us . . . because we are members of society and share in the knowledge that its members in common possess. Each one arranged this knowledge as far as possible to suit himself and so it happens that no one sees himself exactly as any-one else sees him."

The Self can become known only through other knowers; as Stein says:

"it has existence only as a social product. One's self is what one-self would be known-as if one knew oneself. [My italics.] It is the whole of one's personal means as these have been forged upon the anvil of the world."²

We have made the mistake in psychology of studying knowing without paying attention to the equally important process of being known.

"If people really stood outside each other and could not know themselves as others know them they would not be able to understand themselves or each other, except insofar as they dealt with things existing in the world of atomic objects. The world would be a common world only in so far as two and two make four."³

But people are actually parts of a social world. They do see themselves as others see them.

In the third place, the Self is the individual's gathering together of "feelings." Time after time Stein confirms James; for example:

"the self is the grouping of the feelings into more or less stable wholes . . . Feelings of position and poise, feelings about one's desires and their consummation, feelings about one's loves and fears, all this kind of thing enters into the constitution of one's self."⁴

¹ *Op. cit.*, Stein, page 101.

² *Ibid.*, pages 99-100.

³ *Ibid.*, page 101.

⁴ *Ibid.*, page 100.

So much for the first element in our full definition of the expressive or creative act — “I say, what I see, my unique way, with form.”

2. I SEE, MY UNIQUE WAY

We turn to its second element: What is it the artist expresses? He expresses what he sees — thinks, feels, intends. As the instrument of “seeing” I mean, of course, all that complex mass of body stresses, tensions, understandings of forces that were described in the foregoing pages.

The Role of Our Concepts in Seeing

The problem of seeing involves both the *how* and the *what*. “How” I see is primarily a matter of using the Self as instrument; *what* I see is primarily a matter of using Concepts as the focus of experience. The Self as instrument sees with its organic feelings *what* the individual has mastered through his experience. As we have seen in Chapters VII–X, these are focused for use in a body of concept. We look at any work of art *with* the organism; the organic feelings are the instrument. But *what* we see, hear, feel, will be partly, perhaps largely, determined by the concepts with which we react to it. We respond to every situation *with* concepts, *with* focalized meanings. This applies to esthetic as well as to problem-solving or habit situations. Hence we must not forget that we “see” every situation esthetically *with* our chronic organic attitudes toward life and these are focused for meaning by our Concepts.

Hence the profundity of the artist’s expression will be determined by the profundity of his thought and feeling about life, about society and its great forces. If his interests are with the surface arrangements of the people, with their folklore and folk statement, that is what he will express. If he is interested in the more fundamental cosmic forces which move mankind, he will paint, write, dance, build on that level. And every act of “seeing” will be felt in a background of his personally constructed concept. Hence the great measure of what the artist expresses is: Is he master of concept as well as of technique? The appraisal of current painting, poetry, theater, what-not, will be enlightened by it. Such a yardstick will separate the folk-artists and the propagandists of mere documentary realism from the cosmic artists of man-in-the-universe-and-in-history.

/ / /

We need a clearer definition of what it means to see. The statement perhaps should read, not What I see, but What I feel, think, intend; all the tendencies of my organism are involved in what we call, following Cheney, "the imagined conception." What the man-as-artist sees, and feels, will be determined by his sensitivity to the forces that act through his subject: human being, landscape, reconstructed valley, what-not. Certainly the shape of the surface contours will not be his focus. He will not aim at likeness. Still-life will not be his goal; that will be found only among representative, photographic statements. The picture, poem, sculpture, what-not, will *move* the observer if, first, the artist has been moved and, second, if he has succeeded in expressing the moving effect in him.

All great artists and artist-teachers have emphasized what William Blake called "seeing through the eye." Rosabell Macdonald — great artist-teacher of the graphic arts caught in the horrid jungle of the hugest pupil factory in the world, New York City — talks constantly about "seeing through the eye." By this she means requiring

"the kind of separateness of feeling — detachment — that can give one's undivided attention to the thing observed for complete perception of what it is, separated from what every other thing is. This is what is meant by innocent sensing. It takes this kind of seeing to result in an original true esthetic concept. It keeps one's state receptive and one's feeling free and keen. This purity of vision brings about a stimulation of imagination. As soon as the visual experience passes through the artist's life it moves him in such a way that if it eventuates in expression it must be his own child, unlike anything that could be born of another mind, of another man."¹

The students in school, she says "must at first be freed from concern over a 'good likeness,' and also from desire to make a pretty or pleasing result, 'like someone else has done or can do.' They must be urged to aim at honestly saying with a pencil 'what I myself see.' It must be explained that first drawings do not count. 'If we all saw the thing correctly or "right," there would be no point in our drawing at all.' . . . They must be told about the correctness of the camera and how it does not choose, but how they do choose, and that it is this individual choice or way of seeing that can make a drawing a work of art."

¹ Rosabell Macdonald: *Art as Education*, page 43.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

Herbert Read¹ says that vision "is primarily integral," in the sense that Matisse's aim was "to restore integral vision." And Stein speaks of the "chromo advertisement" as a description of measurable and definable objects which is bad art *because the items of its realistic details are separately seen*. He says: "The competent work of art is a result of seeing all the things that enter into it, *in a comprehensively centralized relation to the seer*." Most realistic paintings, and stage sets, are really groups of arranged objects. Above all we need to practice children, youth, and adults in seeing the world as unified esthetic objects. As an illustration, while the obvious way of looking at a candlestick is "to look it up and down," what we should do is to focus on a spot and see *the whole in relation*. The goal is an effective unity of impression. An esthetic object is not the sum of its elements, it is "the result of the influence that they mutually exert on each other." Hence "every esthetic object is unique" and cannot be analyzed. Hence "esthetic experience means discovery or rediscovery"; it is "the endless creation of novelties."

The second major phase of the creative process, therefore, is a determined effort to perceive clearly. "Seeing" means a grasp of *significant* relationships, not docile adoption of insistent familiar ones. It means getting hold of subtle meanings hidden from casual, superficial observation. To achieve it, however, Man-as-Artist must give himself to the task of prolonged concentration, of observing, scrutinizing, weighing — waiting until the surface characteristics give way to inner relationships. The thinker describes the ordeal as one of "thinking it through," seeing all the possible permutations of ideas. The painter puts it, "Looking until it burns into my head." To educate people to be *clear, rather than to be "right," should be our ruling objective*.

Each to see his own unique way! Each to sing what belongs to him and to none else. All the great stagers of man-as-artist's goal agree. To Mr. Einstein it is the person's "own simplified and intelligible picture of the world" . . . To Sheldon Cheney, "the production of the imagination given form" . . . To Allan Abbott, man-as-artist "creates a world which is his view." To Waldo Frank, the artist molds a miscellany of material into ordered form to state his measure of life.

¹ Herbert Read: *Art Now*, pages 78-79. Harcourt, Brace & Co., New York; 1933.

3. FORM: THE THIRD MEASURE OF THE CREATIVE ACT

Our age of expression has produced a definite consensus on the third and last of our profound measures of the creative act. This is "Form." First, to make clear what we do *not* mean, distinguish form from shape. Physical objects, things, have shape. Thing painters, poets, what-not — to use Danz's word — make shapes; they transcribe surface contours. But creative artists — force artists — produce form.

Philosophers agree on form as a basic concept of art; witness Edman:¹ "to the extent life has form it is an art." . . . "Experience, apart from art and intelligence, is capricious and confused. It is matter without form, movement without direction." And Dewey recognizes the profound nature of form as organizing forces, not things: "the operation of forces that carry experience of an event, object, seeing, and situation to its integral fulfillment." Both artists and students of the esthetic act use the term; Louis Sullivan spoke repeatedly of "organic form." Frank Lloyd Wright produces "organic architecture." Sheldon Cheney prefers the term Expressive Form, although he likes Albert Barnes's "Plastic Form" better than Clive Bell's "Significant Form." Isadora Duncan used the phrase "organic form" for her measure of the true gesture. Louis Danz says form is "an expressive organic whole." The new psychologists agree, emphasizing the organic outlook, the organismic view. The poets likewise; witness Robert Frost's:

"Let chaos storm
Let cloud shapes swarm
I wait for form."

We see dramatic illustrations of perfection of form in the skilled performer — the acrobat, the Olympic swimmer, the champion athlete in any medium, the great violinist or pianist, the distinguished lecturer or public speaker. And all about us emerge today examples of anonymous art in vast social reconstructions; witness the utterance of form in the total enterprise known as the TVA. There the engineers worked from the unitary concept of the watershed of the Valley exactly as Edward Gordon Craig organized expressive form in the theater. Old cultures, such as that of China, hold up Perfection of Form as a profound criterion of human behavior; to the cultivated old Chinese, Manner — not Manners — is the norm.

¹ Irwin Edman: *The World, the Arts, and the Artist*, page 14.

What Is Form?

Thus the very essence of an expressive work of art is that it shall have form. As Cheney put it:

“The Expressionist advance has been made largely by schools that might reasonably be called ‘form-seeking,’ . . . The quality was — as near as I could understand it — the sum of the unidentifiable formal and mystically expressive values in the picture, scene, play, dance! I studied on for years, going back again and again to the canvases, (theatre-stage, etc.), to see if the thing that had become more memorable, more essential, than any other element, was still there. Finding it, now a living thing, with vitality increasing as my sensitivity grows, and that it outlasts and outweighs all else, I judge that a label for it will be useful. I accept the least vague offered name, ‘form.’”

He illustrates it:

“The attribute form in art is like the unidentifiable quality the lover sees in his beloved . . . a distinguishing individual loveliness in the beloved — understandable to all other men who have experienced the quality, who have experienced reasonless love.”

Matisse, one of the greatest masters of rhythmic and plastic form in modern times, has described his actual process of painting in the following way:

“If, on a clean canvas, I put ‘*at intervals*’ patches of blue, green, and red, with every touch that I put on, each of those previously laid on loses in importance. Say I have to paint an interior; I see before me a wardrobe. It gives me a vivid sensation of red; I put on the canvas the particular red that satisfies me. A *relation* is now established between this red and the paleness of the canvas. When I put on besides a green, and also a yellow to represent the floor, between this green and the yellow and the color of the canvas there will be *still further relations*. But these different tones diminish one another. It is necessary that the different tones I use *be balanced* in such a way that they do not destroy one another. To secure that, *I have to put my ideas in order; the relationships* between tones must be instituted in such a way that they are built up instead of being knocked down. A new *combination* of colors will succeed to the first one and will give the wholeness of my conception.”¹

¹ John Dewey: *Art as Experience*, page 136. From *Notes d'un Peintre* (1908). [My italics.]

EXPRESSION AND THE CREATIVE ACT

I quote Matisse because only those who use actual material to produce form know what it is. This is our operational concept in action; as Dewey, reading the artists' own interpretations, phrases his ever present concept of the unity of means and ends:

"The problem of discovering the nature of form is thus identical with that of discovering the means by which are effected the carrying forward of an experience to fulfillment. When we know these means, we know what form is. While it is true that every matter has its own form, or is intimately individual, yet there are general conditions involved in the orderly development of any subject-matter to its completion, since only when these conditions are met does a unified perception take place."¹

Thus from fifty years of living in a *functional* climate of opinion, profound expressive artists — whether labeled painters, poets, mathematicians, what-not — agree with the psychologists of human response: *Form is the most appropriate organization of the forces, of the relationships felt by the artist, that he can put down with some objective material.*

We must have achieved a real consensus, for this is precisely what Marin, Cézanne, Matisse, Kandinsky — the expressional artists in general — chorus: the creative or expressional product is one that has Form ... the creative act is one that achieves form.

THREE MEASURES OF FORM

How then can we tell form when it is before us? How can we tell whether this is a truly expressional, a truly creative act? There are three measures.

I. THE PRINCIPLE OF ORGANIZATION

The most generalized criterion, the most all-embracing one, is "organization." Here the consensus is clear:

To Danz: "Form denotes organization." ... "By form I mean an expressive organic whole."

Allan Abbott,² discussing "A New Integration for Literature," indicates the role of organization: "It is this new creation, this large or small *universe self-centered in its own integrity*, and *taking form appropriate to express its inner life* that constitutes art, that makes

¹ John Dewey: *Art as Experience*, pages 136-137.

² In the *Teachers College Record*, Volume XXXVII, December, 1935.

literature." Insisting that the artist creates his own view of the world whether it be Emily Dickinson's tiny universe of "one bee and reverie" or the vast one of Dante, he says, "but the essential thing is that it shall be a *universe* moving about a single center, and that center the poet's creative spirit." [My italics.]

The mathematician agrees; witness Eddington again:

"We often think that when we have completed our study of one we know all about two, because two is 'one and one.' We forget that we have still to make a study of '*and*,' that is to say of *organization*." [My italics.]

Remember James's feeling of "and."

But to organize, we express our "feelings" for the relations between forces, and this carries us back to our distinction between things and forces, to thing-artists and force-artists. Now we can see another; namely, thing-artists *do not organize, they arrange*. Arrangement is the placing of things. As Danz says: "Shapes can be merely arranged — or disarranged" (as per the Super-Realists) . . . "Everything has a shape, but not Form because Form is a quality in the behavioral world, the world of forces. Shape belongs to the geographical world of things . . . "forces cannot be arranged and things cannot be organized."

Put in modern psychological language, we have the contrast between mechanisms and organisms. Mechanisms (things) cannot be organized; they can only be arranged. Witness, an engine or a machine, or a dead mechanical curriculum of parts. One part can be inert, even die, without affecting the other parts. These are mechanisms, assembled from standardized parts; they cannot be organized. They can only be arranged. If one part breaks, the machine, the thing, stops, becomes dead. But an organism, by virtue of being a whole, is organized, integrated; each functioning aspect *interacts* with many others. If any one breaks, dies, others, interfused with it, take up its functions. The burden of modern research in brain physiology and psychology¹ confirms this conclusion. So, also in the functioning of any human, social organization; the central concept is interdependence, sharing of both power and responsibility for continuous functioning. *Thus a living organization can be destroyed only by the destruc-*

¹ Recall Coghill and Lashley's experiments with rats running the maze with increasingly extirpated cortexes. See Franz, Lashley, Coghill, *et al.*, referred to in Chapter VII.

tion of all its vital organs. A perfect negative illustration in the realm of expression is the self-styled "Sur-Realism." I shall come back to it after I have brought into proper relationship the other two criteria of form.

2. THE PRINCIPLE OF ECONOMY, OR SIMPLICITY

Conceived in its broadest sense, the principle of organization may be thought of as embodying our other two measures, but for clarity and emphasis I discuss them briefly. The second rigorous measure of Form is *Economy*. Whitman, in the prose preface to the first edition of *Leaves of Grass*, calls it Simplicity.

By definition organization guarantees a degree of economy; perfect organization, if we could achieve it, would guarantee maximum economy. Organization implies unity; all phases are brought into the one necessary relationship. But hypothetically there is always one potentially best organization of the phases of an organism, one true integration or unity. This it is that the artist tries to achieve in his expression. Its most rigorous principle is economy. Constantly the poet asks: Have I found the one best word, the most direct phrase or organization of words and phrases, to express what I feel? Is there a shorter, more compact, whole way? The architect asks: Is there a single strut, column, beam, or bit of material in my organized House that can be eliminated? The dancer — Martha Graham — tells of the torture of the search for the "one true movement." Her photographer — Barbara Morgan — living with the dance group describes the ordeal of stripping down the movements of the dance to its barest essentials. To find the irreducible minimum — that is the ordeal of the artist.

No medium of expression illustrates the principle of economy more purely than that historic art of organization — mathematics. Note the perfection of form in its definitions:

A circle is . . . the locus . . . of all points . . . in a plane . . . equidistant . . . from a point . . . called the center.

Take away a single word or phrase from that definition and you destroy it; each one is indispensable to the whole. Add a word or phrase at any point at your peril; to do so is to impede the organized meaning of the whole. Thus we see — Economy is more than a useful principle of form; it is indispensable.

To me Louis Danz's simple definition of Form satisfies my criterion of economy better than any other I have found: "*Form is that kind of organization to which nothing can be added and from which*

nothing can be taken." Let every aspiring artist burn that sentence into the vital organ of his expressive feelings. If our writers, including educationists, would make this their governing principle of expression, there would be smaller and better books. If our homemakers would practice it, our houses would be rid of the bric-a-brac of dead days.

In the world of human technique we encounter manifold examples of the dependence of efficiency on economy; note the perfection of form in the skilled performer — athlete, acrobat, magician, craftsman — in any medium. "What a 'beautiful' stroke," we exclaim as the tennis champion of today returns an incredibly difficult shot across the net. "What perfection of form" we see in the pole vaulter, calling every muscle, every phase of his body, mind, and will, every needed coördination, to lift, push, wriggle, glide, his torso across the bar 14 feet up in the air. Witness the utter immaculateness of coördination of fingers, hands, wrists, arms, body, eyes, nerves — the whole organism in the perfect touch and control of the pianist, the conductor, the magician, the skilled worker in iron, wood, stone, plaster, what-not.

The practical analogue of the principle is revealed in contemporary technology; witness the relation between the economy of our engines, machines, airplanes, boats, automobiles, and the efficiency of the product. Recall the weird-looking contraptions of 1890, valves and gadgets stuck on in all positions. The engine of 1890 was not only an atrociously inefficient wasteful thing; it failed utterly to satisfy the principle of economy and hence of form. Today, following Norman Bel Geddes's word, we say it has been "streamlined." Reducing wind resistance to the minimum in the design of our planes . . . reducing water resistance to the minimum in the design of our ships . . . *reducing all impeding resistances to the minimum* in all design.

So much for the principle of economy.

3. THE PRINCIPLE OF FUNCTIONALITY

In the light of the recurring stress on the concept of Function in this book, it might have been thought wise to have stated it as the first rather than the third principle of Form. It was, indeed, the first of the concepts to be recovered by the expressive artists of our time. When dealing with the practical materials of the constructional arts, that should perhaps be done. Louis Sullivan gave his life to the search for a principle of form in architecture "that would have no exceptions." He found it in "function," asking of every member of a building:

“What kind of life is to be lived in this house?” “What is this thing to do? What is the beam or column to hold up?” A quarter century after Sullivan’s death, the architects and industrial designers have sloganized it alliteratively: “Form follows functions”; so much so, indeed, that the more conventional middle-aged ones long ago began to mutter against the elucidations of the obvious — although to their own teachers in the Gilded Age it was a closed book. Frank Wright, Sullivan’s young assistant in the ’90’s, to whom it was an obvious first principle, rather impatiently changed it, saying, “of course, form and function are one.”

Building on the rich body of meaning given to the function principle by the sociological and psychological illustrations in our earlier chapters, we see its manifold revelations in all the arts of expression. Of every word in a poem or prose page, of every gesture of the body, of every activity of the new school, the creative designer, consciously designing the members of the structure, asks: “What is its function? Of what *use* is it? Exactly what shade of meaning is this phrase to convey? What mood is this gesture to evoke? What ideas and attitudes is this activity to develop? Each one he tests: Does this inevitably belong? Is it needed? Is it indispensable? Can I find something better? The painters translate the question into: What is this organization of lines, planes, etc., to do? What role does it play in making my total statement? Again and again — in psychology, in sociology, now in the expressive arts, function, use, implies doing something; it is active rather than passive. These modern expressive Americans — the artists as well as the psychologists and sociologists — are verb men; as Danz says, “verb artists.” Gertrude Stein put it: “Verbs and adverbs and articles and conjunctions and prepositions are lively because they all do something and as long as anything does something it keeps alive.” Little wonder that Veblen and James, Sullivan and Dewey, although separated academically and geographically, were all working with the roots of life, with the same spiritual material; hence irrespective of academic cataloguing they were all action artists, artists of the forces of life, artists of activities. I put these verb artists in sharp contrast to the representative and realist workers, who were all “noun” men; recall the similar difference between the Wundt-Titchener “structuralists” and the James-Dewey functionalists in psychology. Certainly any description that will contrast the dead, “still life” individual from the Person who is concerned with active creative life will serve a useful purpose.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

These, then, are the three design principles of Form:

- Organization — an expressive organic whole
- Economy — nothing can be added, nothing taken away
- Functionality — designed appropriately to use

These are the principles on which the School of the American must be designed.

THE CREATIVE ACT: HOW THE ARTIST WORKS

We can now gather together the essentials of the process by which the artist produces a work of art. Starting with his own imagined conception — a concept, a felt-attitude, perhaps a mere urge to get something down in objective form — the artist selects material and molds it into an organization. The material consists of anything physical, mental, spiritual, human or non-human. His working process is essentially that of organizing forces — relating elements into a unity — not of arranging things. The drive behind this organizing process is his fusion of feeling, concept, and attitude.

He works under the limitations of his materials and his instrument, and he works creatively only to the extent that he understands and respects both their limitations and their potential capacities. Consider, for example, the difficult conditions imposed on the photographer who wishes to work as creative artist. His instrument is a camera, an intricate *mechanism*. His materials are the still and moving appurtenances of nature and civilization, the world of people, houses, communities, factories, trains, what-not, observed under the conditions of light, color, mist, fog. They are the far-flung scene of heaven and earth and the atmosphere in between. A fusion of still and moving scenes, moment by moment these materials put themselves together in chance arrangements. It is impossible to speak of nature as being organized, although human beings sometimes see it so. (Contrary to the popular shibboleth, nature is not "beautiful." It is not *organized*; it is an *arrangement of things*, in an infinite number of permutations and combinations. Only under rare exceptions does man encounter natural objects which he appraises as beautiful. Order, beauty, is man made; it is not a function of nature, which is subject to the laws of chance. If you doubt my generalization, organize your garden, go away and leave it for a month, then return to the anarchy into which nature has thrown it.) But to return to the photographer; working

EXPRESSION AND THE CREATIVE ACT

as artist he is required to put this chance-like miscellany of materials together in an organization.

In the graphic and plastic arts, the artist's materials may be a canvas or a wall — a single plane bounded by a frame — and his paint, water color, crayon, what-not. In music it will be tones produced on metal strings or tubes or bars, or blown through tubes. In that marvelous organization we call the theater they may be constituted of a vast range — the moving actor, his spoken or sung words, the choral speech of groups, electric light, the architecture of the stage and its physical objects, the organized movements of individuals and groups of people, and the concepts and moods evoked by the words of the script. They may be the stone, wood, brick, iron, or prefabrication of the House with its organization of people, landscape, geography of the region and the community, and the paraphernalia of power, transport, communication.

But irrespective of what the artist's materials are, they are a miscellany, and man works as artist by selecting those that are useful to his purpose, molding them into an organization of unified form that expresses his feeling for order.

ABSTRACTION AND DISTORTION AND THE ESTHETIC ACT

One fundamental concept of the esthetic act I have left to last — Abstraction. To carry us to the root of the problem, I'll generalize at once:

Every esthetic act abstracts; hence every esthetic act distorts.

Among its many definitions of "abstract" the Oxford Dictionary says: "An abstract name is a name which stands for an attribute of a thing." The abstract is "opposed to concrete," it is "withdrawn or separated from, matter; from material embodiment, from practice, or from particular examples."

"An attribute of a thing." But that is exactly what the expressive artist expresses — attributes, forces, relations, — all fair synonyms for the one central concept. Every expressive act, therefore, if it expresses "the attributes of things," is an act of abstraction.

Cheney defines an "abstract" as "the essence" . . . "an idea stripped of its concrete accompaniments," and says that the artist "expresses something found in the phenomenal world . . . but it is the essence, superior to surface reality, only because it breathes rela-

tionship to the source of all that is, because it is micro-cosmic, crystallizing in little the architecture of the universe." The insistent attempt of the expressional artists

"to reveal the expressive form quality, the dynamic order, has led to increased *abstraction*. There has been progressive neglect of nature's casual aspects, even what some would call nature's beauty; distortion of natural shapes and textures; and in frequent cases, utter abandonment of recognizable objectivity."¹

*Distinguishing Abstract Art
from "Nonobjective" Art*

As our expressional artists — poets, painters, musicians, what-not — have freed themselves from the picturesque depicting of superficial things, their expression has moved in two totally different channels and resulted in two very different kinds of product:

- Abstract art
- Nonobjective art

The abstract approach starts its "seeing" with the objective world of physical things, human beings, landscapes, the birds and the beasts and the flowers. Its chief exponents, for example, in the world of the graphic and plastic arts are such artists as Paul Cézanne, Matisse, Picasso (at times), Lehmbrück, Maillol, Marin, and O'Keeffe (most of the time). The products of this approach can be visualized along a scale of objective likeness from those which show at one end marked approximation to physical representation — such as those of Cézanne in painting and of Maillol in sculpture — to those at the other end which show very little of the recognizable shape of the physical world — as illustrated by some of Marin and O'Keeffe and most of Picasso.

The nonobjective approach has tended to start with the artist's imagined conception, divorced from "seeing" the objective world. It is a generalized concept, or a mood or feeling, which the artist expresses by the juxtaposition of lines, planes, volumes, colors. Their products can also be visualized along a scale from those with little resemblance to recognizable objective likeness — as in Feininger — to those which have none at all — as in Kandinsky and Klee and some of O'Keeffe in painting, and Brancusi in sculpture. (I am still ruling out entirely Dali, Miro, and the "Super-Realists.")

If our study of this tremendous problem of abstraction is to be

¹ *Op. cit.*, *Expressionism in Art*, pages 58–59.

clear, we must discriminate definitely between these two approaches. Moreover, we must bear in mind that both approaches, assuming competence in design and technique, have produced authentic expression; neither one can be rated as superior to the other where technical skill is present. Both must be respected.

The Corollary Technical Problem of Distortion

If every expressive act *abstracts*, then every expressive act *distorts*. Distortion is the name given to the technical process of producing an abstraction. It shows itself physically in any consciously produced deviation of a painting, sculpture, theater piece from the objective physical likeness. The modern view of the Self that has been built up in this book makes it almost unnecessary to argue the thesis that every esthetic act is an act of abstraction and hence of distortion. Briefly rehearsed, the steps of the logic are these:

First: It is the Self that does the expressing. The Artist-as-Self expresses his own unique philosophy and "interests"; his view of the function of art and his concept of "seeing"; for example, contrast Edward Hopper and John Marin.

Second: The Artist-as-Self expresses *his* unique view of life, as stimulated by the subject with which he starts — physical thing, imagined conceptions, what-not. Only by chance alone could it be a photograph of the subject.

Third: It is the act of distortion that produces "unity" and hence a "work of art." As Stein says, "*It is the essence of aesthetic expression.*" He tells how Matisse said to him repeatedly:

"during that period when his pictures showed the most extreme distortions of natural forms . . . that he never began a picture without hoping that this time he would be able to carry it through without any distortion that would disturb the ordinary onlooker. But his greater demand was for certain qualities of plenitude and rhythm, and before he managed to work up his inventorial items of human bodies and accessories to the conditions of his pictorial intention, they had been pulled entirely out of shape."¹

"In Cézanne's pictures the conditions of distortion were the same . . . The kind of result that he was after could not be obtained by keeping a group of normally seen objects constant to their normal appearances. No esthetic whole would allow of this completely, and Cézanne's less than some others."

¹ Leo Stein: *A-B-C of Aesthetics*, page 124.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

To the photographically minded who want an expressive statement to be a likeness to life all distortion is "bad art," a sign of incompetence in seeing and technique. It is either caricature or some other kind of deliberate exaggeration. The Parisian academicians said Paul Cézanne, in his later days, was "astigmatic"; he needed glasses, he couldn't "see." But the careful study of statements made by the artists themselves shows that to be a completely false interpretation.

Expressive artists therefore agree with Stein:

"An esthetic object is authentic if at any moment it is actually perceived as such. No picture is invalid or definitely bad, if it represents any person's seeing. All we need to do is to put ourselves in that person's place, and we too will see it so."

A visitor to the Lincoln School when I was there said to an eight-year-old boy painting at an easel: "What is that?" He told her; she shook her head and said: "But it doesn't look like that to me." Going on with his painting, he murmured: "But it would if you were I." Only a personal appreciation can be taken as the "measure (of) the purity of a work of art as an esthetic object."

For example, a Marin painting and his own writing about his work postulate a vast amount of distortion — enough, indeed, to have the conventionalist call it "crazy" or "chaos." Yet the true chaos lies in the city itself, and that is exactly what John Marin is trying to paint. He is showing that the utterly technologically correct buildings, streets, automobiles, and other objects of the great city when subjected to the push and pull of the destructive forces going on in the city are actually psychological anarchy. It is the city that is "crazy," not the artist. To put down on a canvas his feeling for this chaos Marin must "distort" the likeness of the city.

THE RELATION OF THE SCIENTIFIC TO THE ESTHETIC WAY OF WORKING

The profound difference between expressive abstraction and photographic likeness is precisely the difference between science and art; hence the failure of all thoroughly pragmatic and instrumental philosophies to understand esthetics. The latter always "see" scientifically and put down photographically. The contrast in purpose is clear: science documents . . . art expresses. The acme of scientific statement is the scale drawing; from the precise dimensions of the

scale drawing the physical object can be, must be, exactly reproduced. Duplication — that is, standardization — is both the end and the technique of science. Verification is its chief criterion; no scientific discovery is really acclaimed until it is verified by independent duplication — either of experiment or logic.

No esthetic object, on the contrary, *can* be duplicated. The Artist-as-Self is unique. His interests are unique, his purposes and his seeing are unique. Each of his products is unique.

Hence we must definitely distinguish scientific from esthetic abstractions. Both are statements of relation, but the abstractions of science are relations between isolable elements, whereas those of art are unified expressions of whole personal views. Science measures material things by analyzing wholes into parts or elements; it then documents, measures, the relations between isolable elements which have arbitrarily been "held constant." Science rests upon a hierarchy of exactly scaled measurements and assumptions of relationship. Hence technology duplicates the dimensions of every part; the parts must undergo no change in being scaled and "represented in drawings." Moreover, these measurements are of actual material dimensions; science cannot measure relations, or forces, directly; it can only infer them from discernible physical changes in elements. We call the end-result "*scientific law*" and dare to announce it only when verification by duplication of experiment and logic has been carried through. It is the peculiar property of art, on the contrary, that the material objects undergo changes because the Artist-as-Self is putting down his *expression* of the forces, not a statement of the dimensions. Hence art works *in the world of organism*. The Self measures forces directly through the agency of the feelings. Now we can see the profound importance of the concept of *the primal awareness of the knower* which was discussed in Chapter VII.

At one stage of the work, in science, the Self works through the "feelings," rather than through the separate senses. As Frank via Whitehead said it: "A prehension (an intuition) must infuse the whole experience before the reports of the senses can make sense." This is the "intuitive flash" of the scientist from which he gets his hypothesis. This is the scientist working through the primal awareness of the organism-as-a-whole, working indeed as artist. But the "knowing" must be documented. Proceeding through the reports of the separate senses, the scientist isolates elements, keeps some constant, measures others, brings about physical changes in them, measures them again.

THE ESTHETIC FRONTIER: A NEW ESTHETICS

He repeats the whole process time and again; finally, when verification has come, he announces *scientific* law. But even the scientific law is an approximation and thus far, in five hundred years of science, has always been theoretically "untrue"; witness Newton's "laws," which were true enough for technological purposes but untrue in terms of "pure science." Hence, once the hypothesis is drawn, the psychological method of science from then on is *inference from the reports* of the separate senses; hence also the method of thought in science is *problem-solving thinking*, best described by Dewey. But the method of art is the *primal awareness of the reports of the organic feelings*. Hence science concentrates on parts; art concentrates on wholes.

MORE ESTHETIC CONCEPTS FOR EDUCATION

This completes our analysis of the creative act. Another body of concepts can now be stated for use in educational reconstruction.

- Expressive and appreciative acts can and do take place through any medium within the experience of the human being.
- Every human being has within himself some potential capacity to express himself in some medium and to respond appreciatively.
- But there are vast individual differences among the people in sensitivity and potential creative capacity — any population will reveal a few persons of genius, a large number of considerable talent, a great mass of mediocre capacity, and a few persons of very little sensitivity.
- We distinguish again the Thing People from the Force People and the corresponding dichotomy in attitudes toward life and expression . . . The Thing People are superficial, centered on Things; the Force People profound, centered on relationships. The Thing People see the shapes of the surface contours, and the measure of their work is likeness. The Force People feel the depths of life and the measure of their work is Form.
- Expressive art, therefore, is the art of forces . . . forces are felt-relations . . . feeling is central to the esthetic act.
- Summed up succinctly, the creative act is: "I say (the Self makes its personal statement) . . . what I see, my unique way . . . with Form."
- In the esthetic act the Self is focal.
- The concept plays a central role in the art of clear seeing.

EXPRESSION AND THE CREATIVE ACT

- There are three measures of form in the creative act: (1) the principle of organization – the expressive whole ... (2) the principle of economy – nothing can be added, nothing taken away ... (3) the principle of functionality – the product designed appropriately to use.
- Every esthetic act abstracts; hence every esthetic act distorts.
- There is a profound difference between the scientific and the esthetic ways of working; it is the difference between photographic likeness and expressive abstraction ... science documents, art expresses. The acme of scientific statement is precise reproduction, duplication, standardization. But since the Self, the interests, the purposes, and the products of the artist are unique, no esthetic object can be duplicated.

Part Five

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS FOR A NEW EDUCATION

We come finally, in our study of the foundations of education, to the roots of human character; to the governing morals and ethics of our people's behavior. In a sense this takes us to the very depth of the life of the school to a degree that the study of the other three frontiers has not done. Although the others have made marked contributions to it, their primary functions are to build the content and organization of the program of work and study. But in addition to what the social, psychological, and esthetic frontiers have given us, we need a basic body of ethical principles. Once more the perennial philosophic-religious question confronts our people and their educators: "What shall it profit a man if he gain the whole world and lose his own soul?" Earlier we queried about our people's traits: "They are strong enough, but are they wise enough?" Now we must ask: "Are they good enough? Have they integrity enough to solve the staggering moral problem of our time?"

It is the task of Chapter XV to state that problem. Most of the makings of the statement are available in the first fourteen chapters of my book; the task now is to gather them, organize them, and focus them on the moral-ethical problem of our changing society in mid-twentieth century.

❖

The Problem of Ethics in a Changing Society

Disorder in the Schools

There is disorder in our schools. Almost incredible reports come to me of the frightening immaturity and lack of self-control of youth in American high schools, and the utter inability of teachers to cope with it. These reports picture actual psychological anarchy among post-adolescent youths who, chronologically, are old enough to exhibit adult self-control and social coöperation. In the vocational schools of our largest cities, in the year in which I write, young women teachers not only confront the gravest difficulties in maintaining physical order while study and discussion are going on (which in a good school would never be a problem); they are in addition subjected to constant indignities, even to flagrant insults and indecencies. There is widespread lack of respect for public property. Gangs of adolescent youths of one religious faith beat up boys of another. Hoodlumism abounds and actual crime is rampant among high school youths in some sections of the city.

In our private progressive schools there is another kind of disorder, and I have seen it firsthand. In a few instances these schools have reverted to the "absence of restraint" mood of the 1920's. The atmosphere in their classrooms is garrulous, even noisy in the worst way; I mean noise generated by thoughtless inattention, not the noise that is the product of enthusiastic activity of young people devoted to creative endeavors of their own. Attention span is childishly short. I have seen classrooms recently where young people of a high order of intelligence, from well-to-do and socially superior homes, showed such utter lack of self-control that fine teachers were unable to build a continuously developing line of thought in the course of an hour.

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

Within the schools the disorder can be traced to the lack of a consciously designed philosophy of freedom and control. Fifty years ago, confronting authoritarian schools in a nation-wide regime of conformity and regimentation, our pioneer educational forefathers took drastic steps of reform. "Take off the lid," they said. "Free the legs of the child and let him move about. Free his larynx and let him talk. This is the first step toward freeing the child; freeing him to investigate life for himself, to think about its problems, to imagine and experiment with new and better ways of living." Under the leadership of Parker and Dewey many of the new progressive schools put this new freedom to work. Dewey himself knew full well the danger in it and, to guard against it, designed a carefully rounded theory of freedom and control.¹ But most of the new schools neither studied and applied Dewey's theory of control nor built adequate ones of their own. The conspicuous consequence of this neglect is the present disorder.

THE CULTURAL ROOTS OF THE EDUCATIONAL DISORDER

This psychological anarchy can be traced to several factors in the culture itself. In the first place, the marked increase in the holding power of the school, commented on in Chapter I, has held into the higher schools millions of youth who in Victorian times would have been out of school, at work. They are not only of lesser intelligence, but are also of meager social sensitivity. This is particularly true of our larger cities, where the behavior problems are most intense.

In the second place, the chaotic individualism of the schools is a clear symptom of the culture-wide revolt against the Puritan repression of the Victorian era. The present generation of young parents is revealing the effect of the last four rebelling and innovating decades — an extreme lack of educational responsibility in the homes. I find that the parents of our school children have themselves a grossly divided interest. In our sophisticated groups mothers as well as fathers are all too frequently away from their homes in the out-of-school hours when their young people should have companionship and direction. Hence the morale of post-adolescent youth is marked by

¹ See his *Democracy and Education*; also the statement of theory in *The Dewey School*, Appendix A, and my Chapter XVII.

insecurity at the very moment when there should be constant adult interest and guidance.

The third root of the educational license is an accompaniment of the second: an unwillingness and lack of preparedness on the part of our parents to confront the problem of freedom and control. The traditional culture-pattern of our people of evading problems and decisions, of leaving them to the current of events, is reflected in their failure to confront the problem of the constant guidance of their children. It is perhaps the most subtle and baffling problem of parenthood. To solve it requires sacrifice on the part of parents, and great sensitivity and patience; it requires indeed the very traits that our people have tended to negate.

/ / /

I take this brief reference to the current disorder in the schools and the culture as a springboard from which to state the conditions of the moral-ethical problem of our times. First we pause for a few necessary definitions.

Defining Morals and Ethics

By morals I shall mean rules of conduct developed through the social practices of the people; by ethics, the principles which determine the rules.

Rules of conduct emerge and get defined in every phase of society to guarantee orderly processes: in the relation between husbands and wives, children and parents, neighbors in the community, citizens and their government, employers and employees, buyers and sellers, owners and renters; in the regulation and protection of life and health and property. These rules of behavior have evolved with the evolution of social practices. Men find what will work, and when public opinion and unwritten rules fail to guarantee orderly processes, write them into law and build up a systematic body of judicial interpretation of great prestige and established precedent. As Russell says:

If we need support from the students:

“The rules of morals differ according to the age, the race, and the creed of the community concerned, to an extent that is hardly realized by those who have neither traveled nor studied anthropology.”¹

¹ Bertrand Russell: *Philosophy*. W. W. Norton & Co., Inc., New York.

THE MORAL-ETHICAL FRONTIER: 'A NEW ETHICS

The Oxford puts it:

Ethics is "the science of morals; the department of study concerned with the principles of human duty." . . . "in wider sense: the whole field of moral science including besides Ethics properly so called, the science of law whether civil, political or international."

Dewey and Tufts:

"Ethics aims to give a systematic account of our judgments about conduct in so far as these are estimated from the standpoint of right or wrong, good or bad."¹

Bertrand Russell:

"as a provisional definition, we may take ethics to consist of general principles which help to determine rules of conduct . . . it is not the business of ethics to arrive at actual rules of conduct, such as: 'Thou shalt not steal.' This is the province of morals. Ethics is expected to provide a basis from which such rules can be deduced."

Summing up, then: morals are rules of conduct, ethics the principles which determine them.

What Constitutes a Moral Situation?

Students of human conduct have canvassed this problem from time out of mind, and the literature is as "long as the moral law itself."

¹ *Ethics*, page 1.

SELECTED SOURCES

1. Dewey and Tufts: *Ethics*. (This is, perhaps, still the best single statement of the current consensus; it rests upon an interpretation of such classic sources as: Spinoza's *Ethics*, Hume's *Principles of Morals*, Adam Smith's *Theory of Moral Sentiments*, Bentham's *Principles of Morals and Legislation*, Kant's *Critique of Practical Reason*, Comte's *Social Physics*, Spencer's *Principles of Ethics*, Green's *Prolegomena of Ethics*, Sidgwick's *Methods of Ethics*. See also special articles in Baldwin's *Dictionary of Philosophy and Psychology*.)
2. Niebuhr: *Moral Man and Immoral Society*
3. Lippmann: *A Preface to Morals*
4. Dewey: *Philosophy and Civilization . . . The Problems of Men . . . Reconstruction in Philosophy*
5. Cohen: *Reason and Nature*
6. Broad, C. D.: *Five Types of Ethical Theory*

It is no proper function of this brief chapter systematically to review that literature. There is discernible in the recent discussion, however, a trend toward a consensus, and I shall make a brief interpretation of it.

First, the moral act is voluntary, made without coercion; but obviously not all voluntary acts are moral. Much of life is habitual as well as voluntary, made up of acts of immediate response; many of these are amoral. Other voluntary situations lead to esthetic acts of appreciation; these also are amoral.

A second criterion is that the moral act is an act of problem-solving thinking — that is, of choice between alternative lines of conduct. But there are many acts of thought which, although they may involve a choice between good and bad, are not moral. The sculptor says, "This is good stone, or good wood, with which to carve." The farmer, "This is bad soil." Gresham's Law was the economist's way of generalizing "good money" from "bad money." And we all know what a good egg is. There is an endless array of amoral human acts in which decisions have to be made in the moment-by-moment living of the individual: Shall I get up now or later? Shall I dine at home or go to a restaurant? Shall I take my umbrella or risk getting wet? Our lives are made up of an unending succession of problem situations in which no moral decisions are involved. All of these are situations in which we decide what is *desirable*, but not what is *moral*. Apparently the element of choice alone does not make an act moral, although choice is a moral criterion.

Dewey and Tufts add a third criterion: choice measured by "the *true worth* of a given end."

"It is the incompatibility of ends which necessitates consideration of the *true worth* of a given end, and such consideration it is which brings experience into the moral sphere. Conduct as moral may thus be defined as *activity called forth and directed by ideas of value or worth, where the values concerned are so mutually incompatible as to require consideration and selection before an overt action is entered upon.*"¹

This much-quoted definition can be accepted as a guide to the consensus, if we clarify one important limitation upon it. This act of problem-solving becomes a moral act with the special proviso that the activity is "*directed by ideas of value or worth which are in conflict and must be appraised against social standards.*" The moral act is

¹ *Op. cit.*, Dewey and Tufts, page 209.

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

a peculiarly social act; by definition, no asocial act is a moral act. Ideas of value or worth become moral only when they are defined against a code of behavior — either written or unwritten — that has been made by the larger social group; in fact, our term moral derives through the Latin term “moral” from *mores* or customs. Customs, *mores*, moral acts, are acts approved by the social group. Apparently Dewey and Tufts mean this, for on page 3 of their book they say:

“to study choice as affected by the rights of others and to judge it as right or wrong by this standard is ethics.”

HOW THE MORAL CLIMATE OF OPINION IS FORMED

1. *The People's Naïve Responses to the Current of Events*

Here we build on our previous social-psychological discussion of the day-by-day current of events. Recall the process in the carrying on of the social life of groups — business, industry, government, schools, press, church. Much of this is below the threshold of conscious weighing of moral standards. The people naïvely do what is “right,” “stay within the law” — perhaps infringing a bit here and there on accepted codes of behavior. Some go too far to get by and get checked up by the community, even by the law; others merely get talked about by the community, appraised pro and con. Here the personal face-to-face factors in the society and culture are at work, and molding and guiding them the climate of opinion, the dominant ontology of the people. The entire process develops within the shaping framework of the culture-patterns of the people.

This “moralizing” goes on constantly in the moment-by-moment life of the community. Behavior is “appraised,” measured hourly against the popular code. Most events and appraisals are concurrent and on a naïve level. But events that are above the level of the commonplace — the “man-bites-dog” news kind of thing, the marked exception to the accepted ways of behaving, or the overt infringement upon the legal code — these are taken up conspicuously and subjected to more critical appraisal. Here and there the homespun philosophers of the neighborhood — back fence, front stoop, barbershop, or bus and streetcar — pass their comments, and fuse their novel bits into the changing climate of opinion.

2. *Moral Interpretations of Events by Special Agents*

But in complex and sophisticated societies such as our Western ones are coming to be, this is done more deliberately and systematically by appointed or self-appointed persons set aside for the task. Several thousand newspaper writers and columnists, radio commentators, pass upon the events of the day, generalize upon social trends, piling up moral appraisals. Day by day mayors, governors, the President, Cabinet members, an army of governmental executives pronounce moral judgments on the vast range of local, state, national, and world events. Hundreds of thousands of ministers and priests in their churches, professors and teachers in their academic posts. Many get interviewed in press and radio. College administrators speak over the national sounding boards of their presidencies, shaping moral judgment of human behavior. There are countless legislative debates on proposed laws, Congressmen sounding off on the floors of House and Senate while an army of lobbyists exploit the microphones of legislative "hearings." Judges of the courts interpret the law and pronounce final judgments on controversies of moral conduct. The bishops of the established church make far-reaching moral judgments to their millions of members. And countless acts of propaganda and censorship are woven into this process of the moral stereotyping of human behavior.

Some of this interpretation, perhaps the bulk of it, is bred of the loyalty of partisanship; all of it is colored, of course, by the peculiar biases and party, religious, economic affiliations of the commentator. But it all carries the weight of his prestige and of the economy of creative effort — giving readers and listeners ready-made generalizations. Indeed, the essence of the press, radio, and other comment is quick-and-easy-generalization. What is effective and right is decided for the hundred million by a few thousand. Thus the events and their moral interpretation are woven hour by hour into the psychological culture-patterns of the people and moral codes of behavior are fashioned and refashioned.

3. *Some Moral Judgments Become Law*

There is a third phase in the process. Many of these moral judgments are regarded as so critical for the security of society that they are enacted into ordinances of the local community councils or the

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

laws of states and nation. Here we need not inquire more fully into the process than to indicate the way in which certain conspicuous characteristics point to important problems of reconstruction. In our democratic way of life the initiation of the lawmaking process emerges from the voluntary action of many interested sources — public-spirited private citizens or officials, representatives of the manifold interest-groups that comprise the community, and special legislative and judicial agencies. As we pointed out in Chapter XII, the process is not primarily a scientific one — neither is it one based on profound thought; it is rather a give-and-take compromise method of reconciling opposed interests. As a consequence multitudes of moral rules are added to the written law each year. Although demands are heard constantly from public-spirited individual groups and officials, the systematic appraisal of these codes of behavior is not undertaken. Social practices and the climate of opinion change swiftly; laws become outmoded but are seldom deliberately taken out of the legal codes. Thus written moral codes lag far behind the living practices of the people.



This, in barest outline, is the manner in which the moral climate of opinion forms and reforms and codes of behavior get stated. Again we have illustrated the principle of cultural lag and with it the frightening inefficiency and even downright injustice of much of our moral control of conduct.

HOW ETHICAL PRINCIPLES GET STATED

Every society evolves a naïve body of morals, but only mature societies build ethics — critically thought-out principles upon which moral rules are founded. This process too is a complex one, and its lag behind the current of events and social trends is the greatest of all the phases of the culture. In contradistinction to the people's naïve formulation of moral judgments the statement of ethical principles is a profoundly creative process. At intervals of considerable length professed philosophers and students of society and the culture stand above the current of events, study the culture-patterns, the ontology of the people, and the emerging rules of moral conduct and formulate new statements of ethical principles. Thus a Dewey and a Tufts write their *Ethics*, which in a generation influences thousands of teachers,

ministers, professors, students, judges, executives, and literate citizens. Thus a Niebuhr writes his *Moral Man and Immoral Society*, a Lippmann his *Preface to Morals*, a Russell his *Philosophy*. And at vast intervals of a hundred generations great religious seers — a Christ, a Buddha, a Mohammed — generalize the principles of human conduct and their words are hymned by a thousand million human beings. And all of this gets passed on and diluted from generation to generation through the commentary of lesser minds and wills.

Within the lifetime of a single generation the achievement of new ethical principles to fit the changing conditions of society is well illustrated by the record of our creative judicial minds. Three from our own times — Supreme Court Justices Holmes, Brandeis, and Cardozo — have produced such great reinterpretations of social movements and of legislation that they eventually altered the creative climate of opinion and gave ethical criticism a new direction. This is of such importance in our own times and adds so effectively to the documentation of the role of the philosophy of experience in cultural reconstruction that I shall pause to illustrate briefly from the work of one of them.

**MR. JUSTICE HOLMES: THE PHILOSOPHY OF
EXPERIENCE STATES GREAT ETHICAL PRINCIPLES**

If I had to name a fifth seminal mind to stand from jurisprudence as a fitting mate for Peirce, James, Dewey, and Veblen, it would be Oliver Wendell Holmes, Jr. He was the boyhood friend of Peirce and James in Cambridge and fellow debater in their Metaphysical Club in the late '60's and early '70's. In her biography of him Mrs. Bowen says:

“Wendell brought home young men studying law or medicine at Harvard, drew them upstairs to his room under the flaring gas lamp. William James and Henry Bowditch, both medical students. Charles Peirce, the black-eyed, ferocious young philosopher, son of Professor Benjamin Peirce. T. S. Perry, Chauncey Wright, . . .”

Later she adds:

“At the Metaphysical Club on Quincy Street, Holmes was curt, opinionated. Standing with his arm on the mantel, gesticulating with his pipe, he told off James and Wright, tried even to

demolish Charles Peirce and could not. Always, Holmes's arguments came back to the law. There were other proofs in the world, James said angrily. There was the utilitarian proof of result, consequence. There were also men's feelings, their intuitions." ...¹

That the discussions affected Holmes's thought deeply is shown by his long life of legal writing and rendering of judicial opinions related to social trends. Indeed, one does not go too far to say that the basic ideas of the philosophy of experience which were aired in that little club were one of the most important single influences in the building of new legal interpretations to fit the conditions of mid-twentieth-century America. I shall illustrate briefly, from his writings and a few of his famous dissents.

Ten years after the Metaphysical Club meetings (1881) he was writing on the first page of his only book, *The Common Law*:

"The fact is that legislation ... is empirical ... The life of the law has not been logic: *it has been experience*. The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men, have had a good deal more to do than the syllogism in determining the rules by which men should be governed."

In his speech on "The Path of the Law" (1897) he put social practice above logic:

"The danger of which I speak is ... the notion that a given system, ours, for instance, can be worked out like mathematics from some general axioms of conduct... You can give any conclusion a logical form. You always can imply a condition in a contract. But why do you imply it? It is because of some belief as to *the practice of the community or of a class*, or ..."

And later:

"The first requirement of a sound body of law is, that it should correspond with *actual feelings and demands of the community*, whether right or wrong... I therefore repeat, that *experience is the test* by which it is decided whether the degree of danger attending given conduct under certain known circumstances is sufficient to throw the risk upon the party pursuing it."

¹ Catherine Drinker Bowen: *Yankee from Olympus*, pages 210, 253.

Max Lerner,¹ in an excellent digest and interpretation of his writings and decisions, says of his valuing of social experience above legal logic:

“For Holmes, it was no small part of the ‘spirit of the common law’ that it was *common* and not individual. This did not mean that he ceased to be basically a capitalist or that he became a collectivist. But it did mean that he was impatient of the attempts to extend capitalist entrenchment through the sheer logic of individualism.” . . .

*Free Competition . . . “Socialism,”
and the Organization of the World*

Holmes, a conservative man of property, a capitalist, even a patriotic near-militarist, was above all a student of human history. He saw the advances of We over I that inevitably were taking place in industrial society. He saw the growth of labor unions and the use of the strike as a phase of “the advance of socialism” and of the “inevitable organization of the world.” In 1892 in one of his letters to his friend Frederick Pollock, the English jurist, he said:

“I must not write long, for this morning I must prepare to give my opinion to the legislature whether they can authorize municipal wood and coal yards — step towards Communism.”

In his dissent from the majority of the Massachusetts Supreme Court which denied the State this right, he said:

“I am of the opinion that when money is taken to enable a public body to offer to the public without discrimination an article of general necessity, the *purpose is no less public* when that article is wood or coal than when it is water, or gas, or electricity, or education, to say nothing of cases like the support of paupers or the taking of land for railroads or public markets.”

“I see no ground for denying the power of the Legislature to enact the laws mentioned in the questions proposed. *The need or expediency of such legislation is not for us to consider.*”

And in his famous dissent in the Massachusetts case of *Vegelahn vs. Guntner* (1896):

“. . . It is plain from the slightest consideration of practical affairs, or the most superficial reading of industrial history, that

¹ *The Mind and Faith of Justice Holmes*, pages 45–46. [My italics throughout.]

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

free competition means combination, and that the organization of the world, *now going on so fast*, means an ever-increasing might and scope of combination. It seems to me futile to set our faces against this tendency. Whether beneficial on the whole, as I think it, or detrimental, it is inevitable, unless the fundamental axioms of society, and even the fundamental conditions of life, are to be changed." [My italics.]

The basic conflict between the individual and society he saw clearly; concluding that in a democratic society, freedom to compete and to take necessary steps to achieve equal bargaining power was an imperative right of both sides:

"One of the eternal conflicts out of which life is made up is that between the effort of every man to get the most he can for his services, and that of society, disguised under the name of capital, to get his services for the least possible return. Combination on the one side is patent and powerful. Combination on the other is the necessary and desirable counterpart, if the battle is to be carried on in a fair and equal way."¹

But this meant combinations of workers — labor unions — as well as of owners — capitalists. In one dissent after another he said that the effort of the workers to combine to match their bargaining power with that of owners was a part of "the struggle for life" that was going on throughout the entire economic system. That he did not "believe in strikes" is clear from his dissent in the Massachusetts case of *Plant vs. Woods* (1900); but in many decisions, including *Vegeahn vs. Gunter*, he made clear his conviction that labor had the right to organize and to strike:

"If it be true that workingmen may combine with a view, among other things, to getting as much as they can for their labor, just as capital may combine with a view to getting the greatest possible return, it must be true that when combined they have the same liberty that combined capital has to support their interests by argument, persuasion, and the bestowal or refusal of those advantages which they otherwise lawfully control. I can remember when many people thought that, apart from violence or breach of contract, strikes were wicked, as organized refusals to work. I suppose that intelligent economists and legislators have given up that notion today. I feel pretty confident that

¹ *Ibid.*, pages 115-116.

ETHICS IN A CHANGING SOCIETY

they equally will abandon the idea that an organized refusal by workmen of social intercourse with a man who shall enter their antagonist's employ is wrong if it is dissociated from any threat of violence, and is made for the sole object of prevailing if possible in a contest with their employer about the rate of wages."

A year later (1897), in his address "In the Path of the Law," he said:

"When socialism first began to be talked about, the comfortable classes of the community were a good deal frightened. I suspect that this fear has influenced judicial action both here and in England, yet it is certain that it is not a conscious factor in the decisions to which I refer. I think that something similar has led people who no longer hope to control the legislatures to look to the courts as expounders of the Constitutions, and that in some courts new principles have been discovered outside the bodies of those instruments, which may be generalized into acceptance of the economic doctrines which prevailed about fifty years ago."

For many years a majority of the Supreme Court had used the Fourteenth Amendment to the United States Constitution — the "due process of law" article — as a defense of property as well as of life. Against this Holmes, in spite of his affiliations with the propertied interests, stood adamant. He regarded the Fourteenth Amendment as an example of "the delusive exactness of the law"; this was "the curse of legal thinking; men should think things, not words." Mrs. Bowen concludes that Charles Peirce had taught him that, "Peirce the black-browed, the magnificent." In his dissents over many years, from *Lockner vs. New York* in 1905 to *Truax vs. Corrigan* in 1921 Holmes disagreed with the majority of the Court; in the latter case he said:

"There is nothing I more deprecate than the use of the Fourteenth Amendment beyond the absolute compulsion of its words *to prevent the making of social experiments that an important part of the community desires*, in the insulated chambers afforded by the several States, even though the experiments may seem futile or even noxious to me and to those whose judgment I most respect."

As for the Constitution, he said it is "not intended to embody a particular economic theory, whether of paternalism . . . or of *laissez faire*. . . . Constitutional law, like other mortal contrivances, has to

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

take some chances. . . . *The Constitution is an experiment, as all life is an experiment.*"

Summing Up

These excerpts from Holmes's interpretations of our people's changes in conduct, brief though they are, must serve as a sufficient illustration of one major way in which ethical principles become reformulated over long periods of time. As the material culture changes, customs change and novel social conflicts arise, causing the necessity for new legislation. The new laws conflict with the entrenched ontology and culture patterns of the people, and are called in question. Brought into review in the courts, most of the judges tend to appraise their validity in terms of old ontology and established economic interests. Thus the *prestige of precedent* in jurisprudence clouds the clear appreciation of social change, and the judicial recognition for the necessity for both new ontology and new law lags far behind. But from time to time independent mutants emerge who throw off the blinders of precedent, create new law, and state new principles of conduct. Holmes is the greatest of these in our times. In fifty years of membership on two Supreme Courts he molded the thought of young judges and lawyers. Slowly his utterances reached a larger lay public, frequently the theme of newspaper and magazine comment, finally becoming the basis of study in schools and colleges. Thus judicial interpretation of the social changes and the control of behavior takes its place beside the philosophers' syntheses in the slow evolution of a new ethics.

THE MORAL-ETHICAL PROBLEM OF OUR TIMES

Of all the tasks of post-war reconstruction that confront our people perhaps the most difficult one is to grasp the moral problem. To state it and to indicate the direction of its solution will engage the energies of students of conduct for many years. In confronting it here with my colleagues in education, I remind them that in addition to all their other foundational problems they must take on this one. I recognize that the total burden of scholarship already put on them may seem to be an impossible one: first to be students of the psychological knowledge of our times, second to master the wealth of trend and concept in the developing society and culture, and third to become students of esthetics in order to create within the school

the conditions of the expressive act. To all that we now add the requirement that they understand the moral-ethical problem of our time and it *is* a staggering burden, but no other large profession in the culture is prepared to carry it. So we must undertake it. The first step is to set out clearly the conditions and factors of the problem.

Its Two Phases: Self and Society Again

First, we note its twofold nature. The moral problem confronts us once more with the much-discussed dichotomy of I and We. As Reinhold Niebuhr wisely says:¹

“a sharp distinction must be drawn between the moral and social behavior of individuals and of social groups, national, racial, and economic . . .

“Individual men may be moral in the sense that they are able to consider interests other than their own in determining problems of conduct, and are capable, on occasion, of preferring the advantages of others to their own. They are endowed by nature with a measure of sympathy and consideration for their kind, the breadth of which may be extended by an astute social pedagogy. Their rational faculty prompts them to a sense of justice which educational discipline may refine and purge of egoistic elements until they are able to view a social situation, in which their own interests are involved, with a fair measure of objectivity. But all these achievements are more difficult, if not impossible, for human societies and social groups. In every human group there is less reason to guide and to check impulse, less capacity for self-transcendence, less ability to comprehend the needs of others and therefore more unrestrained egoism than the individuals, who compose the group, reveal in their personal relationships.”

This is a thesis of major importance, and much documentary support for it has already been supplied in my earlier chapters. Certainly upon two prior generalizations we can build: first, the moral-ethical problem of our times must be solved with the moral resources which we now command; second, the first step in meeting it is to recognize clearly the obstacles which confront us. Since these emerge directly from the documentation of Part III, let us begin with those.

¹ In his *Moral Man and Immoral Society*, pages xi-xii. He is Professor of Applied Christianity in the Union Theological Seminary, for many years vigorous Chairman of the Union for Democratic Action, and one of the four Americans in sixty years to be asked to give the Gifford Lectures at the University of Edinburgh.

I. THE OBSTACLES IN THE CULTURE

1. THE MORAL CLIMATE OF
THE EXPLOITIVE TRADITION

The first and most pervasive cultural factor that we have to reckon with is the exploitive ontology and culture-patterns that we have inherited from our fathers. Cultural roots were northwest European and the rules of conduct were those of Christian, capitalist, *laissez faire* society. While they had been bred of two thousand years of the Hebraic-Christian tradition and formulated especially by the Roman Church and its Protestant deviates after the Reformation, they were given a special economic definition by industrial capitalism as it developed in northwestern Europe during modern times.

The moral philosophy of this property-money civilization that ruled the classrooms of America down to the twentieth century was essentially an expression of the supernatural faith and utilitarian economics that pervaded the family and the pulpit as well as the business life of the community, the legislative chamber, and the courts. What Veblen called "the received tradition" maintained, as the Reverend Lyman Atwater of Princeton said, that "Civil Government, the family tenure of property, [are] great ordinances of God for the social regulation of man." This tradition taught an ethics of competitive individualism in which the race for success, wealth, and power spurred men on, the prizes went to the strong and the aggressive, and the integrity of the individual was secondary. The Exploitive Tradition was in the saddle. Youth heard on all sides: "Keep off each other and keep each other off," and race with your neighbor for the scarce products of the earth. It was an ethics of a rank-order society, and its chief slogan was *laissez faire*. As a student of the times wrote,

"the daydream of the nineteenth-century producer was to gain absolute control of the supply of some necessity of life so that he might keep the public at the verge of starvation and always command famine prices."

The ethical principles that underlay the moral rules of conduct, phrased for the businessmen by the professors of the universities, were based definitely on the individualistic doctrine of "natural rights." The college textbooks of the day taught that "competition is 'a beneficent, permanent law of nature,' and self-interest is 'the mainspring

of human exertion.’”¹ The Reverend A. L. Chapin, the president of the Congregational College at Beloit, Wisconsin, in his textbook on political economy said: “The exertion of labor establishes a right of PROPERTY in the fruits of labor, and the ‘idea of *exclusive possession*’ is a necessary consequence”; as Professor Bowen of Harvard stated it, the right of property was “a law of natural justice.” The economists of the day assumed that there was a “tendency to an unequal distribution of wealth.” They believed that the “enforced equality of property would destroy emulation,” that laws regulating usury “violate the right of property.” Strikes were a “violation of a most sacred right” . . . “to do what [a man] will with himself, his time, his strength, his skill.” A widely used textbook of the 1880’s said that the idea that government should alleviate unemployment “is the most subversive of all social order.” But I know no more perfect epitome of the ethical principles which guided competitive men in America at the turn into our century than the blunt affirmation of Harvard’s Professor of Literature, Paul Elmer More:

“Looking at the larger good of society, we may say that the dollar is more than the man and that the rights to property are more important than the right to life.”

Incredible, perhaps, but there it is!

Conflicting Doctrines: Competition and Conformity Produce Widespread Hypocrisy

In this moral climate of opinion American youth were taught allegiance to two deeply rooted but inconsistent ideas. The first was competition — the stock method of achieving success. Throughout the first stage of industrial capitalism the culture said to the growing young American: “This is a hard, competitive world. You will have to fight your neighbor for whatever money, power, and glory you are to get. So be tough, but always within the rules of warfare, of course.” The history of the conquest of the American continent is a detailed documentation of this idea.

But while the community preached competition with one breath, with the next one it insisted upon conformity to the social group. “Compete as hard as you can, but remember that you must also serve your fellow man. You must conform to the ways of living and stand-

¹ Dorfman: *Thorstein Veblen and His America*, pages 23–25.

ards of conduct in the community. Beat your neighbors, but serve them. Win at their expense, but conform to the community which they comprise.”

Growing up in this climate as a ninth-generation Massachusetts Nordic during the very years which have been under discussion, I have never been able to see how these conflicting values could possibly produce the personal integrity which is the goal of moral life. The pressures of home, neighborhood, and community life assailed my contemporaries and me hour by hour; unbridled liberty and subservience to community opinion were preached at us and practiced around us in utter cultural confusion. Of the effects, the least evil one was personal confusion, drift, opportunism; the worst and more common one was sheer hypocrisy. I am convinced that our condition was typical of the whole country. The two world wars and the two decades of artificial prosperity and stark depression between them merely accentuated it. The consequence is that today, as we confront history's most devastating economic and political problems, a deep hiatus exists between what we profess and what we are. Our culture is honeycombed with this dishonest pretense; in many parts of it a veneer of respectability covers an inner life of racketeering — in business and finance, in the press and the pulpit, in agencies of communication, even in the school.

2. MORAL CODES LAGGED BEHIND CHANGING SOCIAL PRACTICES

The second social obstacle is the lack of a sound moral basis for direct, humane, and courageous action. The chief factor bringing it about is the lag of moral codes and ethical ideas behind the transforming social practices of our times. Recall the latter quickly from our documentation in Part III:

- From the Little to the Big ... from a society of decentralization — the Local — to one of regional and national centralization.
- From a simple face-to-face society to one of accelerating bigness, complexity, anonymity, and personal unresponsibility.
- From a society of essential self-sufficiency to one of increasing interdependence; from one of comparative national isolation to one of compulsory world organization and coöperation.

- From an inefficient social order of scarcity producing for immediate and local consumption, to one of technical efficiency, limitless power, and potential abundance producing for remote consumption, both in time and place.
- From a society of vast surplus of free land to one in which all geographic frontiers have passed away.
- From a virgin continent in which first-come could be first-served without too much social strain, to one in which not to plan is to court national and world disaster.
- From a society in which production still rested on free and flexible individual initiative to one in which concentration and integration in corporate industry had enhanced monopoly control.
- From a society in which the less government was the better to one in which more and more government appeared to be necessary.
- From a society of predominantly young people, swiftly multiplying in numbers, to a static and rapidly aging population.
- From a society of producing owner-workers to one in which control resides in absentee owners, financial middlemen, and technical experts whose work is appraised only by the efficiency of profit-making.

Every one of these changes affects our consideration of the moral problem today. If they had evolved slowly in the course of centuries, no doubt corresponding beliefs, values, and moral codes would have evolved with them. But, as we know, the social changes came with revolutionary suddenness and the phenomenon of cultural lag received impressive confirmation. Not only did social customs change; their rationalization in moral codes changed also, although much more slowly. In the past half-century the entire culture reflected the rebellion against the molding power of the genteel tradition and the improvisation of new ways of living. The process had started soon after 1900, but World War I accentuated it and a widespread mood of eat, drink, and be merry developed in the 1920's. The coming of prohibition replaced the poor man's club with the rich man's sleazy speakeasy; middle-class rebellious homes, even distinguished creative leaders, defiantly turned to bootleg liquor. Crime and racketeering flourished under the anonymous conditions of the cities. It was the jazz age. All ran wild — the middle-aged elders, born in Puritanism

but suddenly released by the New Freedom, as well as their young. The American woman asserted her independence, left her home for the office and the shop, art, the profession, or the trade. She bought the family food at the corner delicatessen, smoked cigarettes and drank highballs with her man, and spent an increasingly large proportion of the family budget at the new beauticians. Thus throughout the entire culture spread the revolt against authoritarian repression.

Disappearing Loyalties . . .

Lost Individuals

But the most devastating change was the disappearance of long-established objects of allegiance and the lack of clear new acceptable ones to take their places. Through a dozen generations of Puritan Society the behavior of man had been regulated by both a written and an unwritten moral code. The loyalties of men were clear — the integrity of the home . . . the respect for and obedience of children to their elders . . . the worship of God and allegiance to the Church . . . loyalty to the personal ruler — King, Emperor, Pope, Priest, Teacher. Sharp and clear were the objects of allegiance. Fathers passed them on to their sons, mothers to their daughters, each generation to its younger one. Sharp and clear, I say, each one personified overtly — by the image of the ancestor on the walls of homes and public buildings, by the statue of the ruler in the city square and in the state and county capitols. Ritual and ceremony clarified objects of allegiance in an ordered world.

But with the coming of the great industrial expansion, particularly after the middle of the nineteenth century, the disintegration of this ordered world accelerated swiftly. On every side men and women lost their mooring masts. Lost their faith in their ability to master their own destinies. Lost their assurance in the rightness of the established loyalties, questioned old truths, rebelled against imposed authority. Having no clear objects of allegiance with which to replace the fading ones, multitudes of people, especially the younger ones, became lost individuals. As the jungle of industrial urban capitalism became more tangled and confused, the equilibrium of great sectors of Western society became upset. The old ideas and the security of the life to come crumbled before them.

*An Insecure World: The Matrix
of the Moral-Ethical Problem*

In building the philosophy of the post-war school, therefore, the most important fact to bear in mind is that *neither the children today nor their parents have ever lived in a secure world*. This is a new phenomenon, peculiar to our times and to our social order. Today the school parents are perhaps thirty to fifty years of age. Born in the years of World War I or just before, most of them spent their childhood or youth in the booming '20's, their young manhood in the years of the Great Depression and of World War II. They saw *their* Victorian parents — the grandparents of the present school pupils — make the drastic shift in the social customs to which I have just referred, saw them overwhelmed by the swift breakdown in old loyalties and the failure to find new ones around which to establish home and family life. During that time only a few of these parents or their children ever knew economic, social, or psychological security. F. Scott Fitzgerald described the younger ones well in his *This Side of Paradise*: "Here was a new generation . . . grown up to find all gods dead, all wars fought, all faiths in men shaken."

Veblen had seen much of this drastic and confused change coming and had warned against it in 1914. Ogburn and his *Social Trends* colleagues stepped up the warning in 1933. My colleagues and I of the *Social Frontier* have been saying for fifteen years that a New Day has been ushered in; that new conditions can be grasped and new problems solved only with new and appropriate ideas. New social practices can be judged and controlled only by new and appropriate moral codes. But there can be *no fundamental reconstruction without clear vision of first principles* of human behavior. On this concept the warring groups of education — progressives, essentialists, scholastics — stand together.

/ / /

As a consequence the steps in the cultural lag became even more sharply defined. Witness:

As scientific and technological progress is made:

- the productive material culture changes very quickly.
- the institutions — family, government, corporate way of life, and the like — lag behind, changing, but more slowly than the economic machinery.

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

- the psychological and moral factors – values, beliefs, definitions of basic concepts, fundamental concerns of the people, the climate of opinion – lag still farther behind, indeed change very slowly. Among them, however, the lag varies greatly. Those that are directly connected with economic ownership and control (recall, for example, the swift change from an employment old-age dead-line of sixty-five to a young middle-age dead-line of forty) change with distressing rapidity, while others – such as the concept and mood of *laissez faire* – resist alteration.

3. OLD CULTURE-PATTERNS WORK AGAINST NEW ETHICS

The psychological confusion was further increased by the slowness to change of the established culture-patterns and the dominant ontology of our people; a review of them is an impressive reminder:

- the chronic tendency of the people to leave decisions to the spur of the moment and the casual shifts in the current of events . . . reliance on sentimentalism and escape devices rather than on the maturity of the thought of the group as it directly confronts its social problems.
- the belief in the necessity of leaving the individual as free as possible in as many areas of life as possible – *laissez faire*.
- the conviction that freedom to compete is the healthiest economic condition for a people . . . that competition is the motive power of a society that will supply the maximum national wealth and income.
- the notion that social planning, because it carries social control, is essentially an encroachment on the individual and is therefore not appropriate to the American way of life.
- the belief that in an individualistic competitive society we must not only struggle, work hard, persist, that life is a hard game, hence we must “be tough” – but “fair,” of course, never hit below the belt.
- the belief in the less government the better . . . pass a law only when a crisis compels or social practice reveals actual

necessity — never in designed anticipation of the social danger.

- the tendency to live in the present and the future . . . skepticism about putting down permanent roots, lack of respect for the constructive contributions of the past.



This basic tug of war between the struggling forces of I and We defines the conditions and obstacles in the culture in which the moral-ethical problem of our times must be grasped and stated. Succinctly restated we have:

- A confused moral climate of opinion thoroughly exploitive in character, marked by the conflicting doctrines of competition and conformity and a widespread spirit of hypocrisy.
- Moral codes lagging behind social practices, producing a new social order and new problems with which the people are trying to deal by means of old and outmoded ideas.
- This perpetuation of old culture-patterns and ontology standing as an obstacle in the way of creating a new ethics.

II. THE OBSTACLE OF SELF-INTEREST

I. In the Nature of the Individual

Matching the cultural obstacles to the solution of our moral problem is the ever present power of self-interest within the human individual. The Self domineered over every phase of our psychological discussion (Part II). To James the Self was the focal agent, driving, directing, inhibiting behavior, forming ideas, undertaking reasoning and determining beliefs by its wish and will, and shaping thought by its pursuit of practical programs of action. Dewey agreed: the Self is the unifying factor, the complete act is the Self in expression; impulse is Self, the developing ideal is Self, "the entire voluntary process is one of . . . coming to consciousness of Self." Most of the modern psychologies — those of Freud, Adler, Jung, of Baldwin, Cooley, Calkins, and Thomas — are Self psychologies. Freud made the repressed wish of the Self the "main pillar upon which rests the edifice of psycho-analysis," and built heavily on the sense of inferiority and the Self-defensive mechanisms. Students in other disciplines likewise.

buhr insists that we must recognize "that the force of egoistic impulse is much more powerful than any but the most astute psychological analysts and the most vigorous devotees of introspection realize."¹ Leo Stein and other students of esthetics give the Self the central role. A century ago Jeremy Bentham said: "Man, from the very constitution of his own nature, prefers his own happiness to that of all other sentient beings put together."

The consensus is clear: at the center of every personal problem stands the Self and its interests. Its will-to-power, will-to-security, will-to-comfort, will-to-glory is in every moral act, and is confirmed by the competitive drives in the individualistic culture surrounding it. No appraisal of the moral problem today can dodge that fact.

2. Self-Interest: Even Stronger in the Group

History has taught us also that we must not count on the accelerating spread of group loyalties to transmute the selfishness of the individual into a better moral force in the world. Consider the rise of nationalism and patriotism in the nineteenth century as a single example. Recall how, with the emergence of the Indo-European languages by 1500 A.D. and the building of several modern nations — England, Spain, Portugal, and France — the process of cultivating loyalty to the nation swiftly advanced. The concept of nation itself became defined as a community of people that (1) speak a common language, (2) give allegiance to one government, (3) feel a sense of "nationality" — that is, a feeling of truly belonging to the same group. As a consequence of the spread of common languages, strong nation-states, and a feeling of nationality, the world, even before World War I, was divided into some seventy recognizable nations. Under the economic conditions created by the race for trade, markets, and natural resources — economic imperialism — the spirit of intense national patriotism spread around the world. Ideally conceived, patriotism is based upon a deep personal love of country which emerges in a body of loyal acts which in turn reinforce the patriotic allegiance of the individual. But patriotism reveals the same vast scale of individual differences as every other human trait. Within any country we find a few altruistic, idealistic persons unswervingly acting unselfishly to conserve the good of the country. At the other end of the scale we find a deep body of

¹ *Moral Man and Immoral Society*, page 40.

hypocrisy, the mouthing of lip-service slogans of loyalty, and a generally unintelligent and uncritical attitude — even of downright subversiveness to the true good of the people. Between these two extremes tens of millions of the population scatter themselves in “patriotism.”

Büt, as Niebuhr says, there is a curious “ethical paradox in patriotism.” The very unselfishness, the essential urge to sacrifice in selflessness in the individual because of his loyalty to his country, builds selfishness in the nation. Harold Laski, discussing this problem, quotes the Catholic leader Tyrrel: “So far as society is a self it must be self-assertive, proud, self-complacent, and egotistical.”¹ Niebuhr calls it “an alloy of projective self-interest.” Wilfred Blunt, who saw patriotism as another form of selfishness which will become terrifyingly powerful in the world and defy other social restraints, once said that in people like Winston Churchill “it is the vanity of aggrandizement.” The national egoisms will defeat man for a long time in his attempt to create an international community. We must not deceive ourselves that we can sublimate the self-interest of the individual into some altruistic group loyalty without at the same time imposing carefully designed social controls; otherwise we shall merely create “larger units of conflict,” and not succeed in abolishing conflict itself.

This is of very great importance to us today because we are now engaged in the process of trying to turn such altruistic passions as the individual may have into unselfish loyalties to still larger and vaguer communities — for example, the community of mankind. There is nothing in the lessons of history to encourage us in the belief that we shall succeed in any early generation unless we use more realistic methods than that of building social loyalties upon some assumed love of fellow man.

We must approach this difficult problem of the morality of groups, therefore, with a thoroughly realistic attitude. We must ask bluntly: Will the moral resources that solve the problems of relations between individuals also serve to solve the moral problems of nations?

/ / /

So much for the obstacles in our path. We turn then to an appraisal of our moral resources.

¹ Laski: *Authority and the Modern State*, page 274.

OUR MORAL RESOURCES

1. THE SOCIALIZING COMPULSION OF CULTURAL CHANGE

Fortunately the very social trends that have precipitated devastating moral problems upon us have also been building resources with which to meet them. I think the greatest is the social compulsion of cultural change. Working against the constant presence of Self-interest and the selfishness of groups is the actual practice of social coöperation. The necessities imposed by advancing social trend has increasingly compelled men to work together; the accumulating record of the controls laid upon the social system in the past seventy-five years is the proof. Even though our people put off the evil day of social planning until an actual crisis is upon them, eventually they always take steps together. As they do so each event of social coöperation builds in them just that much more sense of "We," weakens the individualism of "I" just that much. It is the actual social *doing* that, step by step, builds the social *feeling*. Thus, in long-time perspective the compulsion of the socializing process builds a positive and powerful moral resource.

2. MORAL RESOURCES WITHIN THE INDIVIDUAL

Three Great Resources Relied on in the Past

Fortunately we do not have to start from scratch in our attempt to state the moral problem of our new society. We have, in the lessons of history, a voluminous record of heroic effort by saints and philosophers and artists. All have perceived the inherent self-interests of the individual and many have recognized that the group is even more selfish. The history of man's creative ordeal reveals three distinctive attempts to transmute the selfishness of man:

1. *Love*. The way of the religious leaders: to build love for one's fellow man, to substitute selflessness for self-aggrandizement . . . the method of sacrifice.
2. *Reason*. The way of the philosophers of reason, intelligent planning, and coöperation . . . the way of the pragmatic students of the scientific method.

3. *The self-affirmation of integrity.* The way of the creative artist and the true democrats ... the way of the building of the Person.

The consensus is clear that men are not wanting in certain endowments for the solution of the moral problem of human society. They are equipped with both selfish and unselfish impulses; they have the capacity for altruistic as well as predatory interests. All of those who throughout human history have sought to build a just society have postulated man's potential good will toward his fellows. If this had not been done, society could not have made such enormous social gains as have been achieved in the last few centuries. The very social nature of the act of human response to which we have paid so much attention is also evidence of it. Throughout American history the story of "We," of one advancing frontier after another, is filled with its episodes. Whatever we call it — natural impulse, or spark of good will, conscience, or what — the drives within a man make him act in the long run so as to get along with other men. While most of us subscribe to the idea, "live and let live," an astonishing number go farther and say, "live and help live." Every day in the year America's million neighborhoods show kindly acts of good spirit. As Broad puts it,¹ most people express "the desire to do right" in their impulsive behavior; they possess "a sense of obligation toward the good." Niebuhr says:²

"the social character of most moral judgments and the pressure of society upon an individual are both facts to be reckoned with; but neither explain the peculiar phenomenon of the moral life, usually called conscience."

Conscience, he says, is:

"a principle of action which requires the individual to act according to whatever judgments of good or evil he is able to form." [But] "it is more potent when it supports one impulse against another than when it sets itself against the total force of the individual's desires. It operates more effectively when it consolidates and stabilizes socially valuable impulses ... than when it attempts to carry impulse beyond the objectives determined by the forces of nature."

¹ In his *The Five Types of Ethical Theory*.

² *Ibid.*, page 206.

And Leslie Stephen: ¹ "Deduct from repentance all that is not purely moral and we must admit that conscience is not so strong *de facto* as it perhaps ought to be *de jure*." It may be, as Stephen says later, that "the sense of duty, faint and flickering as it is in most men, is sufficient to keep the social order from disruption."

Looking more systematically at the lessons that history teaches, we see that this "desire to do right" . . . "spark of good will" . . . "conscience" — call it what we may — can be traced to three different foundations — love, intelligence, and the sense of the dignity, worth, and integrity of the individual. A brief appraisal of each of these.

1. *Love — The Moral Resource of Religion*

Throughout long periods of history those who have relied upon religion to build a just society find the chief moral resource of the individual in his capacity for love of others. Love your neighbor as yourself is the key message, the way out of conflict. It is a truism of human personality that the individual human being has the capacity to love his father, mother, children, others close to him. The records of personal living reveal love, therefore, as a tremendous moral resource. That it does actually solve many of the moral problems of relations between individuals is established beyond doubt.

Men agree also that, in profound instances, it produces far-reaching events of sacrifice, substituting selflessness for selfishness. In such episodes the destructive traits of self-aggression are defeated by positive ones of self-abnegation. Coöperation with your neighbor, even sacrifice for him, takes the place of competition for the prizes of life. In such cases the power of love to resolve conflicts between individuals becomes a truism of personal life and needs no further documentation here. Whatever its motive power is — whether the sex drive as Freud insisted, or a derivative emotional will-to-power, will-to-security, will-to-glory as others have maintained — we know that this impulse called love is a tremendous powerhouse of human behavior. The harnessing of its vast energy is the special genius back of the great religious leaders' plans to build the Good Society. That they succeeded for the moment is shown by the brief successes of the pure religious communities that they built; to some adherents they gave promise that this might become the practical route to the redemption of human society.

¹ In *The Science of Ethics*, page 306.

But in every one of these religious movements the selfless behavior of the group was short-lived. The sad historic fact is that every such movement that finally became strong and attracted large numbers of men did so through skillful organization and the use of force. The "church" that each one erected as its institutional agent succeeded only by behaving with the ideas and the instruments of power. The spirit of love, while it certainly solves some of the problems of face-to-face relations, has never yet succeeded in solving the complex problems of larger groups even within the church itself; witness the hundreds of quarreling sects within each of the great religions, the mass failure of religious precepts to prevent wars, and the conflicts between competing economic, social, and racial groups. The laws governing political action in communities, regions, and nations are not laws of love; they are laws of power and are deeply rooted in economics and psychology. This is not to say that spiritually sensitive people should relax their efforts to spread the power of love between human beings. There is here a great moral resource, and we must work with it and expand it; but we shall never forget that it will be a minor resource in the giant struggle for power which now confronts us on every side.

Is There Self-Interest in Acts of Love and Sacrifice?

Moreover, skeptics warn us not to be gullibly romantic about the possibility that love of fellow man will dissipate self-interest. Even these social impulses and acts of love may themselves be revelations of the Self's skill in calculating and securing its own interests. Most of the kindly acts of neighborliness among men are committed in uncompetitive situations in which the individual's interests are not menaced, where there is no encroachment upon his security or prestige. Let the situation change, become loaded with personal threat, and altruistic behavior changes to aggressive defense. Even in the love relationships there frequently resides such a subtle but powerful factor of self-security that the sacrificial act may basically be an act of exploitation. I may give up for my neighbor really because in some hidden way my organism knows that I need that form of self-satisfaction. In many such acts there is a kind of appraisal of what the individual wants most or fears the loss of most, appraisals that may be hidden even from the Self. And aside from the situations among loved ones countless human acts are motivated and directed by a shrewd under-

standing of the compromises necessary to live and let live in a power society like ours.

Confronted by countless examples of such behavior, I have been forced, as the years of study have passed, to ascribe tremendous force to the role that the egoistic impulse plays in human conduct. Apparently Niebuhr agrees:

"This insinuation of the interests of the self into even the most ideal enterprises and the most universal objectives, envisioned in moments of highest rationality, makes hypocrisy an inevitable by-product of all virtuous endeavor . . . even a conscious attempt to eliminate dishonest and ambiguous motives is no perfect guarantee against hypocrisy; for there is no miracle by which men can achieve a rationality high enough to give them as vivid an understanding of general interest as of their own."¹

2. *Intelligence – The Moral Resource of the Philosophers of Reason*

Next in importance to the religious effort to redeem society through love is the faith of the leaders of pragmatic philosophy and modern education that intelligent understanding will solve the problem. In our own day Mr. Dewey has been the chief protagonist of the view that the cure-all for the moral ills of our society is education.

"It is," he says, "our human intelligence and our human courage which is on trial . . . what stands in the way (of an intelligently designed way of life) is a lot of outworn traditions, moth-eaten slogans and catchwords that do substitute duty for thought, as well as our intrenched predatory self-interests."²

Although he too recognizes the power of "intrenched predatory interests," he puts his faith primarily in knowledge, thought, intelligent understanding. The pragmatists assert, but without proof, that if the individual knows how he should act to bring about certain results, he will act effectively. Even more important, they assume that knowledge of causes, factors, and consequences will put self-interest in its place. Thus education, and especially the building of understanding, is their great reliance for the redemption of society. The data of Part II show that this has been the chief drive behind the entire progressive movement of our times. Throughout all my own work I have

¹ *Ibid.*, page 45.

² John Dewey: *Philosophy and Civilization*, page 330.

accepted it as one of the great moral resources of mankind — but as only one of several necessary ones.

It is to be deeply regretted that no inclusive measure of its truth has been made during the lifetime of Mr. Dewey and his associates. Thousands of classrooms have been energized by the progressive spirit and concepts, courses of study have been definitely reconstructed around the focal purpose of critical knowledge and thought. As a consequence some millions of young Americans today, I am confident, know more of Self and Society and think better about their problems than did their Victorian fathers. That Intelligence is one of the great routes to the better moral life there can be no longer any doubt. This will be made very clear as we confront the problem of morals realistically in a society that on both the world and domestic fronts is marked by a struggle for power. It has become increasingly clear that we shall not build sound political solutions for the problems of a power world except through a hard-boiled and intelligent confrontation of the problem of power. That we shall employ the method of intelligence in doing this is obvious, but that we shall rely upon it as the sole method is becoming dubious indeed.

Moreover, grave doubts are thrown upon its efficacy when we confront again the obstacles that lie in the Self. The logic of our data raises serious questions as to whether knowledge and reason can produce conduct contrary to the dictates of Self-interest. One of the lessons of history is that in situations where the Self's interest are not attacked, intelligence is a sound guide to conduct. The rational appeal to the individual's sense of the greatest good for the greatest number will make sense to the greatest number that have everything to gain by it. But under the actualities of our power world a tiny minority of economically and politically powerful individuals controls the larger group. These ruling few have everything to lose and nothing to gain by imposing upon society the coöperative intelligence of the larger group, and they have also the economic strength to remain in political control. Thus history reminds us that the will-to-owning, will-to-security, will-to-power of those who own the things that men must have will inevitably work against any widespread social success of the method of intelligence.

Finally, one other psychological deficiency in the method of intelligence shows it to be a dubious resource for the improvement of society if unaccompanied by others. I refer to the apparent lack of motive power in ideas. That they are the indispensable guide to the

analysis and solution of human problems we now know. But that they have within themselves the power to lift men up and get them into action, individually or collectively, we are not so sure. As is frequently said, "Men will not die for an idea, but they will give up their lives for a deeply rooted belief." We saw this beautifully illustrated in World War II. Even before it began many intellectuals began to sense the inertness in the abstractions of democracy. A converted pragmatist friend of mine vehemently exclaimed in the midst of one of our many conferences on the American Way of Life during the late 1930's, "If democracy is to work, we must make a religion out of it." He sadly admitted, at the age of seventy, that intelligence was not enough. The scientific method and its accompanying erudition did not provide the emotional doctrines and beliefs which would drive behavior. Thus, knowledge, reason, intelligence, indispensable though they are to provide direction, planning, strategy, and tactic for programs of action, must be supplemented by another source of motive-force.

3. *Self-affirmation, the Integrity of the Person — the Moral Resource of the Creative Artist*

There is, finally, a third method of improving the individual and society — the Self-affirmation of Man-as-Person. This is the central doctrine of Man-as-Artist building his society on the Great Tradition. Far at the opposite pole from the Self-abnegation of the method of religion it appears to stand. Yet in a profound sense they are not to be contrasted. The concept of Self-affirmation is not to be taken in any rank-order sense. Man-as-Person does not affirm his superiority to any other individual. He *asserts the superiority of all human beings as Persons*. Walt Whitman saw it clearly and said it best:

"Did you suppose there could be only one Supreme? We affirm there can be unnumbered Supremes, and that one does not countervail another, any more than one eyesight countervails another . . . and that men can be good or grand only of the consciousness of their supremacy within them."¹

This is the expression of the Person, obdurately insisting upon his integrity, demanding of Self honesty and sincerity in all things. The Person — aware of others as Persons and, because of his inter-

¹ From the prose Preface to the first edition of *Leaves of Grass*, page vii (1855).

dependence with them, aware also of the necessity of frequent social communion. The Person, knowing himself, steering a straight course on the rising gradient of life, with the ballast of a consistent philosophy of living. The Person of competence saying with adamant insistence what he sees his own unique way, but saying it with the most rigorous use of the norms of Form; technically competent because he has placed himself in the most strategic positions in which to master all the available competencies. The Person who has succeeded in resolving the eternal problem of I and We:

“Everyman is a deep dichotomy . . . he is Two Men
 In everyman —
 there is authoritarian . . . and democrat,
 pragmatist . . . and poet,
 exploiter . . . and sustainer-of-the-yield.
 there is a pride of Self . . . and a sense of neighbor
 — a practical opportunism . . . and an adamant
 idealism.
 there is the aggrandizing I . . . and the balancing
 We.

But to make these two men one —
 That is the eternal problem.”¹

/ / /

Here, then, are the three chief resources that men have relied on in the past: the deep running love of man for his fellow man, the capacity for reason and the sense of dignity and worth in every human being. If history gives us anything definite to use in the solution of the moral problem, it warns us against relying on any one of these to the exclusion of the others.

THE MORAL-ETHICAL PROBLEM AND THE STRUCTURE OF POWER

But we cannot use these moral resources effectively apart from the rigorous confrontation of the actual conditions and characteristics of our society today. We must focus our study directly upon Ameri-

¹ Harold Rugg: *Now Is the Moment*, page 49.

can life as it is today, and the nature of this has now been stated clearly by the New Sociologists. Their facts show that we are living, as our ancestors did, in a ruthless power world. On both the world and domestic fronts great forces are contending for supremacy. On the world front the nations are aligning themselves in two great blocs of power: one around Britain and the United States, the other around Russia and its great central Eurasian core bordered on the west by its satellite eastern European states. In addition, minor concentrations of force are locked in regional struggles for power in such centers as eastern Asia and the eastern Mediterranean. But the driving forces that set these regional stages reside in and are affected by the struggle for power that is going on within each of the major industrial nations.

On each of these domestic scenes the same six factors align themselves for a national struggle for power — four individualistic “I” factors against two social “We” factors:

Four Individualistic “I” Factors:

- the banks and other investment credit agencies, well organized
- business structure — manufacturers and merchants, large and small, well organized
- the farmers, only a small minority organized
- the workers: labor, one fourth organized

Two Social “We” Factors:

- the coöperatives, few in number, but growing steadily
- the government, advancing in power, but lacking a continuous and steadily maturing policy, either for domestic or foreign affairs

The building of a social ethics for the post-war world will be accomplished, therefore, only as our people define the role of each of these six factors in the social-economic-political system. How much free enterprise shall there be in every phase of the culture? How far shall the social factors — the coöperatives and government — be in the saddle? How much of the social system shall be private? How much public? Central to the whole struggle is the question: How much government?

“Economic Power Secures Political Power”

Certain basic principles of the struggle of social forces that were stated in our consensus can be assembled for our use in this realistic

analysis of the moral problem in a power world. Perhaps the most important is that so well phrased in Frederick Jackson Turner's essay¹ — "*economic power secures political power.*" The ancients knew the importance of economic ownership in deciding who rules whom in our human world; Siculus put it clearly: "It is absurd to entrust the defense of the country to people who own nothing in it." Two millennia later one of the provocative students of our own times, Edward Bellamy, uttered the profound generalization that has been quoted and requoted for a half century: "*He that owns the things that men must have owns the men that must have them.*" Veblen was deeply swayed by it, Beard documented it in the study of the making of our national Constitution, and the whole army of New Sociologists confirmed it as a basic principle of the struggle for power.

Three Psychological Factors Created Our Special Problem of Power

Moreover, our historical sketch has shown that, while this struggle for power is common to all epochs in man's recorded history, three factors working together in centuries of exploitive history account for its special nature in our own times:

- *First:* The psychological drive for a better living. The incentive was a rich virgin continent, a fortune ready to be taken.
- *Second:* The nation-wide belief that every man was free to pre-empt and exploit without let or hindrance. The culture lived the slogan — *laissez faire*.
- *Third:* The psychological law of individual differences.

These three factors working together gave an infinitesimal minority among the people a stranglehold on economic resources and hence on political power. Thus, because of the lure of gain, the public sanction of *laissez faire*, and the law of individual differences, the problem of the power and the glory emerged again. These psychological factors must all be studied together if the ethical problem of freedom and control in our modern society is to be understood and solved.

¹ *The Significance of the Frontier in American History.*

THE STAGE SET FOR
THE STRUGGLE FOR POWER

*Special Characteristics of Industrial Society
Which Frame the Structure of Power Today*

But the great consensus of industrial society and culture has established the actual conditions under which power is structured today. Succinctly brought together from Part III, they are:

- The American social system is a large-scale one, approaching limitless physical energy and approximate technical efficiency. Its physical power, until recent date molecular, now revolutionized by atomic fission, requires gigantic concentration of financial support. This, in turn, presents the menace of monopoly, either private or public, and the parallel necessity of national, even of world, centralization and control.
- Such a system sets the stage for the focal economic problem: *full employment at a high standard of living under the conditions of democracy.* This problem is unique in man's history. The production system has now reached such technical efficiency that there is little likelihood that the accelerating technological displacement of workers can be offset by predictable gains in new kinds of employment. This, in turn, increases the encroachment of government control on private enterprise; the history of the business cycle has given little promise that competitive free enterprise can, unaided, provide full employment on a standard of living commensurate with our natural and human resources.
- The trend toward social control and centralization has already turned all of the major social systems except the Russian into Mixed Economies (sometimes called "compensating economies") — part private, part public, part decentralized, part centralized — with the promise of more rather than less centralization and control in the future.
- These economic systems are all pecuniary social orders resting on money and price; within the major ones nearly everything needed for self-sufficient production on a high level is available except "the money." The expansion and stability of the

system rest upon the stability and adequacy of the units and levels of money, price, and wages, and their interrelationships with profits.

- These economies are competitive systems, still primarily private enterprise in nature, although in Europe they are changing rapidly into public enterprise systems. *These systems can prosper only as they expand continuously.* A novel question must be faced: Can these private enterprise systems, living by uninterrupted expansion, grow at the needed rates while depending on voluntary investment of private savings or private creation of credit (debt)? The transitional nature of our economy reveals many other unanswered questions; for example: What is the extent to which government financing ("deficit financing") must and can safely be employed? What is the danger level of the public and private debts and their relation to national wealth and annual national income?
- Finally, we have in such national systems the crucial question of: What buyer can provide large-scale and uninterrupted orders to guarantee continuous production? How far can private enterprise do this? How far must government interject itself?

Succinctly stated, these are the determinative characteristics of the major industrial societies in which the struggle for power is now going on. No intelligent consideration of the moral-ethical problem either on the world front or within the various national scenes can be carried on except in this intellectual framework.

Organization — the Critical Factor in the Structure of Power

Our world being what it is today in ontology and dominant culture-patterns, with the six factors of the social system confronting one another with varying bodies of power, the key to the situation is organization. Those who created the great corporate enterprises after the middle of the nineteenth century knew it; the leaders of labor likewise knew that equality in bargaining power between worker and owner could be secured only by the mass organization of the workers; the farm leaders knew it and the leaders of consumers and of small private producers who organized the coöperatives.

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

Consider, to take a single example, the manner in which great "*Spitzenverbände*" — peak-trade associations — were organized in each of the six major industrial nations — America, Britain, Germany, France, Italy, and Japan — after 1890. Robert Brady¹ has shown that these arose simultaneously and independently in the "totalitarian" countries — Germany, Italy, Japan, and (as he includes) France, as well as in the "democratic-liberal-capitalist" ones — Britain and the United States — and by approximately the same six routes:

1. Control over popular organizations — the company union and organizations of combined employers and workers
2. The militarization of employer-employee relations
3. "The evolution of a 'harmony-of-all-interest' propaganda in which the employer appears as benevolent pater familias"
4. An "educational emphasis" which "neutralizes the hostile among adults while engraining 'loyal' staff and especially the younger generation 'through the doctrine of the organization itself'"
5. Political control
6. Two inherently expansive power complexes: the tendency of all democratically irresponsible power aggregations to expand without limit and — given control of decisive power to influence the national state — the inevitability of imperial expansion

With statistical and factual detail Dr. Brady describes the development, ramifications, and interconnections of these trade associations in a world-wide centralized scheme of business power. They evolved, from the 1890's on, into a hierarchy of organization, controlled in each country from the top by a few dominant and small groups, exerted strategic political power through their economic power, broadcast their policies and "educated" the people through vast "public relations programs" which are remarkably similar in each of the six widely differing nations. All these developments appear now to be the inevitable outcome of the past century and a half of "the logic of technology as operated under capitalism," irrespective of political ideology.

The students are increasingly concluding that corporate organization in all six countries has in recent years "pocketed production," and — as Robert Lynd implies in his Foreword to Dr. Brady's book — it may

¹ In his *Business as a System of Power*.

lead to "pocketing the nation, including the entire lives of its citizens"; an arresting idea, indeed a frightening one.

/ / /

The Problem of Legitimacy of Power

Space is lacking to recall the parallel manner in which each of the other factors in the social system undertook the task of organizing power in the last century. My summary at the end of Chapter X gives a hint of the extent of their success. But the real task before us in the American democracy can be stated from the facts of historical trend: that is, *to restore control over the social system to the multitudes of individuals who comprise the people*. The curious fact is that under such authoritarian social philosophies as that of Hitler's Nazis, the structure of power was actually legitimate. Power resided in practice where it was placed in theory — in *the Fuehrer*. The entire system was a hierarchy of dictatorial control. But in all of the world's democratic systems the structure of power has become, to some extent, illegitimate. Theoretically power should reside in the individuals; actually it has become located in minority spearheads of monopolistic corporate control. Hence the consensus agrees that the problem of power — and a staggering one it is — is to relocate power in the individual.

THE MORAL-ETHICAL PROBLEM STATED

In the framework of our study of the structure of power in industrial society we can now state the moral-ethical problem for our society in our times. It is nothing less than *building in our people an understanding and an acceptance of the moral resources and the obstacles in the nature of man and of society, and the facts of the power world and of creating new ethical principles and a corresponding working body of rules of conduct that will be appropriate to our times and our stage of cultural development*. Thus the problem is really twofold: (1) the technical task of creating new first principles and rules of conduct . . . (2) the educational task of building a new mood of understanding and acceptance of the facts in the people generally. These represent separate and distinct jobs and requirements. The first will demand creative imagination of our most sensitive leaders of thought. The second, while part of our educational

THE MORAL-ETHICAL FRONTIER: A NEW ETHICS

responsibility, will probably ultimately come about only through the accretion of social change and reconstruction. Yet neither can be achieved independently of the other. Of the two the educator's responsibility falls chiefly in the latter, building understanding and a desire for action in the people. We must not expect that either phase of the problem will be solved quickly; the lag behind technological and social change of the solution to the moral-ethical problem will perhaps always be greatest of all the phases of the culture.

As we move into the post-war years we must face the fact that every problem of social-economic-political reconstruction has its moral aspect. We shall be forced to state new ethical principles for every phase of the culture; to illustrate:

- Principles underlying the redistribution of the social income of the people
- The restatement of the law of torts, the law of contract, and the regulation of other relations between citizens
- The systematic recodification of law . . . the calling of conventions for the reconstruction of the Federal and state constitutions
- The redefinition of the basic concepts underlying social relations: for example, the new meaning of freedom, of equality, of property
- The moral clarification of the problem of social, religious, and racial conflict
- The recognition of the moral problems set up by the change from a face-to-face, personal, social order to an urban anonymous and irresponsible one
- A restatement of the ethics of the ramifications of the problem of I and We — of freedom and control
- New principles of use of natural resources; for example, the clarification of the sustained-yield principle

MORE CONCEPTS FOR THE NEW EDUCATION

From our brief study of the moral-ethical problem we can gather up several additional concepts upon which to found our educational reconstruction:

- Several basic definitions: morals as rules of conduct . . . ethics as the first principles upon which they are founded . . . a

ETHICS IN A CHANGING SOCIETY

- moral situation as one in which human acts are voluntary, problem-solving, and appraised against social standards
- The chief steps by which the moral climate of opinion is formed and ethical principles are stated
 - The sharp distinction between the moral behavior of individuals and groups, including nations
 - The chief obstacles in the culture: the exploitive climate of opinion and the conflict of opposed doctrines within it, the lag of moral codes behind changing social practices, the disappearance of old loyalties and the insecurity of the people, the working of old culture-patterns against new ethics
 - The huge obstacle of self-interest in the nature of the individual and of groups
 - The moral resources in the socializing compulsion of cultural change and in (1) love of man for man, (2) intelligence, (3) self-affirmation of integrity by Man-as-Person
 - The moral problem stated, under the actual conditions of the power-world, as (1) creating new first principles and moral rules of conduct throughout the whole culture, (2) building a realistic understanding and acceptance of the actual conditions of the power-world and a desire to do something reconstructive about it

Part Six

THE EDUCATIONAL FRONTIER: 1890'S-1940'S

We have returned to the starting point of this book – the appraisal and reconstruction of the schools of our times. The way has been long but profitable, for we are now equipped to make a critical study of the four formative educational movements of our time:

- Public education – subject-centered
- Liberal education – two varieties, both subject-centered
- Progressive education – child-centered
- Social education – society-centered

The first two of these movements – public education and one variety of private liberal education – both subject-centered, are approximately one hundred years old. The Quincy Grammar School of Boston, opened in 1847, is commonly taken as the date of the first community systematizing of public schools; by that time many private academies for the children of the well-to-do were firmly established. The other two movements are much shorter-lived. Progressive education is just fifty years old if we date it from the founding of the Dewey Laboratory School in 1896; but at that time Colonel Parker's famous Practice School in Chicago had been in existence thirteen years. If one takes the formation of the Progressive Education Association, 1919, as the starting point, progressive education can claim little more than a quarter of a century. As for social education, less than two decades measures the time-space in which the sociologists and their allies have attempted to build a society-centered foundation under American schools.

THE EDUCATIONAL FRONTIER: 1890's-1940's

If one should attempt to apportion the total educational effort of the nation among these movements, I doubt if more than 1 per cent of it went into the work of the entire progressive movement. Certainly the society-centered effort constituted far less than half as much. The work of the liberal arts adherents in the higher schools and colleges accounted for no more than 6 to 8 per cent. Totaling these, we must conclude that, at a liberal estimate, less than 10 per cent of the educational energy of America went into non-public enterprises in the last fifty years. Ninety per cent of the educational enterprise since the 1890's has dealt in one way or another with public and formal education; not much over 1 per cent with the truly experimental reconstruction of education.

But if one asks: How far has each of these four movements changed thought and practice in American education? — the answer is very different. At this point I shall not venture an answer, least of all a statistical one. I shall let the reader build his own appraisal as the contribution of the four movements is traced in the next half-dozen chapters.

A NEW EDUCATION WAS BOUND TO COME IN OUR TIMES

Even if Francis Parker and John Dewey had never lived, America would have produced modern schools in the twentieth century. No doubt the educational revolution would have been delayed; it might, indeed, have followed a different course and produced somewhat different kinds of schools. But by the middle of this century new types of education would have abounded on our continent very similar to those I am describing in this book. The *progressive movement affected every aspect of American life*, and our time was a powerful Age of Expression that found outlets in every phase of the culture. One of these outlets was schools. Many alert young fathers and mothers, surrounded by popular revolt in politics and economic life and hating the repressive education of their own childhood, wanted the New Freedom for their children. "Let us make a good school," they said to their neighbors. And they did — in Quincy, Massachusetts, in Winnetka, Illinois, in Fairhope, Alabama, in Chicago and New York, and near all the big cities. The result, scattered over fifty years, is an emerging new kind of education.

Once started, the educational revolution moved swiftly along two lines:

- The work of the progressive schools which had a great faith in the people and in self-government and were concerned with the self-actuated growth of the child and his life in the community
- The work of the educational sociologists of the social frontier, devoted to the study of the vast changes in industrial culture, convinced that a great age of abundance can now be ushered in and deeply concerned that the schools should be utilized in producing it

Each of these made an important contribution to the betterment of our schools.

Standing adamant against them, gripped by very different social and psychological outlooks, were the defenders of the classical tradition:

- The perennial Scholastics of the trivium and quadrivium, lacking faith in the people and in democracy, believing in the role of an elite and in reserving all advanced education for them alone, respecting above all things the power of words and symbols and especially of their classic expression in the Great Books of earlier and historic cultures
- The Essentialists, giving loyalty to the enduring skills and knowledges of the social heritage that must be conserved through the school, and their job analyses of society



To their appraisal we turn in the next four chapters. To prepare the way for it in Chapters XVI and XVII, I shall first set the pioneer child-centered school of America sharply against a typical formal school of 1890. They must be seen against the spectacular physical achievement of our fathers in erecting a national system of schools in little more than a half century before that time. In 1840 there were no formal community systems, no state or local "boards" of education, no public teacher-training institutions.

But in 1890 American education revealed:

- A twelve-grade scheme of public education, free and tax-supported
- A continuous ladder of educational development divided (with some exceptions) into two major types of schools: an eight-grade elementary and a four-year secondary school

THE EDUCATIONAL FRONTIER: 1890's-1940's

- Universal elementary education as an accepted American doctrine
- Public secondary education and even higher education at public expense, also as an accepted American principle
- The groundwork for carrying into practice the American idea of providing equal opportunities for all to develop to their maximum stature—the very foundation of the American tradition
- School buildings for all children from the ages of six to eighteen
- 12,500,000 children in elementary and secondary schools
- 160,000 in colleges and professional schools and colleges

/ / /

A magnificent physical achievement to have been accomplished in little over a half century!

How good an education did the run-of-the-mine schools of this system provide? How did that compare with the best the creative effort of the country could provide?

In Chapters XVI and XVII both those questions will be answered.

CHAPTER XVI

Two Schools of 1890

I. THE PROCRUSTEAN SCHOOL OF OUR FATHERS' CHILDREN

A Day in a School of 1890

Come a moment into a New England Grammar School of 1890. There it stands – the Day Street Grammar School – a grim two-story rectangular brick structure on a 300-foot grassless lot between Day and Snow streets. Four hundred children, six to fourteen or fifteen years old, are milling about “at recess” on the gravel playground which surrounds the building. A few are simply standing in isolated clumps, but most of them are chasing one another, yelling, pushing, punching, exploding the steam that has been clamped tight under the lid of the regime inside. Two teachers stand guard – policing – not guiding what might have been both exciting play and directed growth. This is American individualism, with the lid off. Freedom at recess – “absence of restraint”! I have long thought that the dichotomy of repression inside and license outside that building was a perfect revelation of our *laissez faire* fathers' conception of democracy.

A school bell swung furiously by a gray-haired teacher in the doorway stills the frenzy. The boys and girls line up and march in separate docile files into the place of silence. We follow them in and pass from room to room. It is an eight-grade school; so there are eight classrooms, eight cloakrooms, eight groups of children. The rooms are arranged in files too, four on a floor, two on each side of the darkly wainscoted corridor. Grades I to IV on the first floor, and V, VI, VII, and VIII on a high-studded second floor above. The principal's office is in the jutting brick rectangle stuck on the front beside the porch.

THE EDUCATIONAL FRONTIER: 1890's-1940's

Like the economic system and the grammar of life of which it is an expression, this is a standardized school. The drab rooms standardized as to size — six files, eight desks to a file, forty-eight children in forty-eight ironbound seats and desks. Standardized, in spite of the fact that no two of the four hundred children are alike. Sizes of rooms the same, blackboards the same, the same dark green paint in rooms and corridors, the same green shades pulled to exactly the same level at the windows, the same bare painted floors.

✓ ✓ ✓

This is the American child's abode five hours a day from September to June for eight years or more. And the educative process that goes on inside? Witness the scheduled day: "9:00 to 9:05 physical inspection of hands, hair, etc." ... "9:05 to 9:20 Service Period (Patriotism and Citizenship)" ... "9:20 to 9:35 Spelling" ... "9:35 to 9:45 Penmanship" ... "9:45 to 10:00 Oral or Written Composition" ... "10:00 to 10:10 that incredible 'recess.'" ... And so the program continues through the scheduled school day — rigid and inflexible, each of the 180 days of the year exactly like all the others. The ringing of bells divided each one into a score of short periods, the young people starting something new and stopping it at command every ten to twenty minutes, and mostly without comprehension. So, through the pigeonholed day we watch the process go on, from Grade I to Grade VIII, from the Little Red Hen to Percentage, Mensuration, and the Constitutional Convention.

✓ ✓ ✓

A mile away, serving the neighborhoods of the small manufacturing city as that Grammar School served Day Street, is the High School. The children are older, fourteen to eighteen, but their education is much the same. Their day likewise is divided into periods, but they are longer, standardized at forty minutes with a few "double" ones for Science Laboratory or Manual Training. The building is somewhat different — "more modern" — three stories, an assembly hall to hold all eight hundred youths and their teachers once each day for announcements and to satisfy a sensed need for some display of school "spirit." There is a library on the second floor and woodworking and metal workshops across the street in a discarded grade-school building.

But the regimen is the same. The bells ring the periods and the subjects in and out. The pupils do more marching from room to

room — from Algebra to English, French to Physics, Latin to Manual Training, because teachers and subjects, rooms and the learnings of the youths, are departmentalized.

The “extra-curriculum,” better adapted to individual interests and abilities — is just coming into American high schools, and this one is no exception. But its activities *are* really “extra” — tacked on to the program in late afternoons — the subjects being thought of as the real curriculum. The seasons’ teams — interscholastic athletics for the physically picked boys . . . the glee club and orchestra for the musically inclined . . . a literary debating society . . . and each class has its organizations. A beginning toward building the active life and program of the school. But — it’s “extra.”

In those deadly forty-minute periods within the classrooms the medieval curriculum of the seven liberal arts still holds sway. In English students are reading and dissecting Shakespeare and the twenty-seven other British classics . . . In French memorizing the forty-seven irregular verbs. Algebra still insists on seventeen ways of factoring, on quadratics and other mysteries which only the “engineers” ever seem to understand. In history it is the minutiae of battles and legislative enactments, the rise and fall of dynasties, the intrigues of courts and courtiers.

WHAT, THEN, WAS THIS SCHOOL OF OUR FATHERS’ CHILDREN IN 1890?

In no way did the inferiority and uncertainty of the Americans stand out more clearly than in the school they had created by 1890. As in the case of the economic system so in education, they had done the physical job well; confronted by the swift industrializing and urbanizing of a growing population, they had improvised buildings and curriculums and a staff of several hundred thousand teachers from a society of farmers and artisans. But when they came to the tasks of creative design, of visualizing the educational needs of a society, they showed that they were not strong, superior men of creative power. They were inferior, unsure men, still in the grip of Britain and Europe and the classical past, for, as we have seen, the best they could do was to copy the trivium and the quadrivium of academic Europe’s seven liberal arts.

What, then, had our fathers accomplished in the building of schools, in the fifty noisy years prior to 1890?

THE EDUCATIONAL FRONTIER: 1890's-1940's

It was a system. They had created a national system of schools and colleges. Like its counterpart, the economic system, it was standardized in every particular — a “Procrustean bed of grades” the school reformers of the 1880's were fond of calling it. To see one Day Street Grammar School was to see most of them, all cut on a standard pattern. A boy or a girl could move from one building to another, from one community to another, even from one state to another, without missing a cog in the intellectual machine — not a boundary or a trade route, a date or a personage, a partial product or irregular verb . . . neither the Merchant of Venice nor any one of the King Henrys. It was a system.

It was “mass production.” Its structure resembled the assembly line of industrial mass production — ridiculously large classes taught by a single teacher — a factor which, as much as any other, stymied good education for the next fifty years. Flora Cooke, one of the great schoolmistresses of our time, tells me that in the early 1880's she actually taught one hundred children in the first grade in Youngstown, Pennsylvania. It seems incredible, but knowing her for thirty years as an artist-teacher, I am sure she really taught them, although it took all the ingenuity and energy which a creative personality could command. In how many places in America such “mass enterprise” in education could be duplicated I do not know; but certainly forty, even fifty, children to a class was the order of the day in the towns and cities. In the past hundred years there should have been at least twice as many teachers as there were; *a really good education cannot be given under the conditions of mass production — that we know.*

No time for thoughtful design. Nevertheless, considering the speed with which it was all done and the adolescent nature of the new national life that was doing it, this assembling of the structure of a national school system was an astonishing achievement. Almost overnight our fathers built their schools under the familiar drive of hustle-and-get-it-done. There was neither time for design, nor a mood of meditation. And there were no precedents; man had never built schools for all the people before.

But all honor to them, for they were implementing for the first time in history the idea of government-by-the-consent-of-the-governed on the premise of universal education at public expense. It was, in fact, a great achievement with immense positive gains. The specter of the old Rate Bill was dead. Even higher education at public expense was regarded as an American principle, although less than 3 per cent of the youth of the land actually went to the new colleges

and technical schools. Much remained to be done, for though education was theoretically free to all, neither freedom nor equality as guaranteed in the Bill of Rights was actually carried out in the life of all the people. But the social gains in the acceptance of the principle were important.

Literacy schools: the people began to read and write. In spite of the shortness of time, the builders of the infant American educational system had actually taught 90 per cent of the people to read and write and reckon. The creation of literacy in the past hundred years is a world-wide phenomenon, one of the conspicuous social changes of modern times. It is, perhaps, comparable to the building of the Indo-European languages, the scientific method of thought and inquiry, and the technological revolution. But our admiration for the achievement of making one third of the human race literate should not lead us to overlook two important deficiencies. The first was that while the people generally could read, they could not read very well. Second, their semiliteracy must not be confused with understanding; it did not guarantee that they had adequate knowledge about the world in which they lived or had been practiced in thinking about the problems and issues of their own time.

FOUR CONCEPTIONS OF EDUCATION IN 1890

Granting the achievement of a universal system of education and the development of literacy, what must an incisive appraisal today say of the system and the product of 1890? They were pretty bad. It is little wonder that our people fought the First World War, and lived through the Great Depression of the 1930's in utter ignorance and bewilderment as to what they were all about. Their education had left them unprepared to face such crises. Their psychology was false, and their practice contradicted the shibboleths of their philosophy. As for a sociology and an esthetics, they had nothing of either.

Four basic misconceptions gripped the educationists of 1890:

1. "Education" and "Going to School"

Were Synonymous

Education was conceived as what takes place in a schoolhouse, five hours a day, aloof from the community and national life which created it. Those children of 1890 practically never left their classroom, let alone their school, between nine and twelve in the morning

and one and three in the afternoon. Practically all of the educative process went on either in the seats or beside the seat in the aisle. In 1890 neither the legs of the child nor his larynx had been freed. The idea of using the whole schoolhouse was not understood. The life of the school as a great variety of activities using the whole community and the region about it had not been dreamed of.

2. Education Is Something You Do before You Enter Your Lifework

Pervading the work of the schools in 1890 was the conviction that education is preparation for life. For some children this preparation would last only six or eight years, for others twelve, for the select few, sixteen or more. But for all it was a getting-ready, not a doing-now. Almost nobody conceived the schools as an enterprise in living. It was not what went on in the family, the neighborhood, the occupational life, or the government of the community. It was not the practical doing of family chores or the social activities of churches, clubs, and the like. It was merely the learning of subjects during the periods of the school day. It was something abstracted from the real, active life of young people, something set aside from the ongoing stream of experience.

3. Education Is Something You Do with Words and Other Symbols, Arranged in Subjects and Presented in Textbooks

These schools of 1890 were indeed schools of literacy — teaching the people to read and write and reckon — and nothing else. The curriculum had become a mosaic of “subjects.” In the elementary school nature study, elementary science, sewing and cooking, manual training, drawing and music and physical education had been grudgingly accorded places in the program beside the “fundamentals” — reading, writing, arithmetic, spelling and language, geography, history, and grammar. The high school curriculum likewise — geology, botany, physics, chemistry, and zoology, and later the “practical” subjects, occupying places beside the “liberal arts” — Latin and the languages, English, algebra, and geometry. But the “fads and frills” were not there.

The school day was divided into periods, in each period was studied a “subject,” and the content of the subject was determined by the reading matter “set-out-to-be-learned” in compact books called

“textbooks.” These books were well named, for they were literally books of “texts,” compendiums of knowledge, made by the professors of the liberal arts colleges. These were the “subject matter” of education. As the nineteenth century wore on, the array of subjects of study became so bewildering that administrators had grouped them in parallel courses to bring some order out of the confusion. By 1890 there were more than a dozen widely offered formulations and combinations called “curriculums” — the Classical, the General-English, Latin-Scientific, Engineering-Technological, Modern-Classical, Manual-Training, College-Preparatory, and others. Thus the curriculum was cast into a rigid mold. By 1890 the standardization process was complete. The State Boards controlled the curriculum of their “common schools” by issuing state-wide courses of study, and the College Entrance Examination Board, desiring uniformity and continuity above all else, developed the rigid standard of fifteen “academic units” for entrance to college.

4. *The Subject Matter Was the “Liberal Arts,” the “Great Books” of the Past — Paraphrased*

Our first common schools were created by men and women who were themselves the product of a literate classical education. For a century the trustees and Boards of Education as well of faculties of colleges and schools lived in the aura of Europe and the rich literary heritage of the past. Naturally these — the “seven liberal arts” of the classical education — were the chief sources from which the professors who made the books and courses of study got their subject matter. For two thousand years the curriculum had consisted of these seven liberal arts, divided according to the tradition of Latin Europe into two parts: the trivium, consisting of grammar, rhetoric, and logic, and the quadrivium — arithmetic, music, geometry, and astronomy. Cultivated Europe has admired it and practiced it down to the present moment: witness Thomas Huxley’s eulogy of it: “I doubt if the curriculum of any modern university shows so clear and generous a comprehension of what is meant by culture as this old trivium and quadrivium does.” Naturally, therefore, when our fathers’ professors were confronted with the task of building a wholly or completely new national system of schools, they took the only way they knew and built the curriculum primarily out of these classical studies.

I say “primarily,” not entirely, for the substructure of the system had barely been hammered into place when both citizens and profes-

sional educators began to tinker with its reconstruction. On all sides there was denunciation of the medieval trivium and quadrivium. Just before 1890, under the drive of the world's most sensate culture, the middle classes demanded and got the introduction into the curriculum of a vast array of new and practical "subjects" — home economics, drawing, the industrial arts and engineering, bookkeeping, typewriting, stenography, economy, and other business and commercial arts.

But the grip of the liberal arts was too strong to be broken. The curriculum was not only literary and mathematical, it was also predominantly "ancient" and "medieval," and European. The bulk of our historical instruction was devoted to the centuries prior to the nineteenth; even the study of Western European and United States history gave only a limited time to the revolutionary changes in the past century. There was no discussion of the critical problems of either our own national life or the dynamic social changes that were taking place throughout the Western world. No reference was even made to the technological revolution. There was, indeed, what amounted to a contempt for the contemporary. "The present" — or even "recent" history was no fit subject matter for education. "The local" was trivial! Since only the past and the remote could be documented, only those should be used as the subject matter of education for young minds.

✓ ✓ ✓

So much for what the school of 1890 was. Now let us see what it was not. How did it measure on our yardstick of the four foundations?

THE FOUR GREAT FOUNDATIONS WERE LACKING

1. *The School Had No Sociology*

The school of our fathers' children had no consciously designed theory of the social institutions of the day. As a consequence the curriculum of the schools did not bring young Americans to grip with the actual social scene in which they lived — the problems of their industrializing society, their economic system, changing government, family life, press, the schools themselves, nor any other institution of the day. Not even a chapter could be found in the American histories

of the determining role of the Westward-moving frontier nor of the gigantic waves of recurring immigration which were playing such a vast role in the formation of the new national society.

2. *A False Mechanistic Psychology*

The school of 1890 seems to us today to have denied every psychological principle that we know. Perhaps that was to be expected, because not one of the "schools" of psychology which has molded our thought during the past fifty years was in existence — unless the publication of William James's *Psychology* (1890) is to be regarded as an exception. "Psychology" itself was taught even in the best universities as a curious fusion of animistic theology and mechanistic science. And in the schools practically every one of the concepts of an active purposive psychology was denied, or at least ignored. Take a more careful look at it.

A passive school. The school of 1890 was a listening, not a working, school. The teacher talked, the principal, the superintendent, the parents talked, but not the children. They listened — were seen but not heard. Learning was conceived of as a passive acquiring of facts, skills, ideas, principles.

Human nature regarded as an aggregation of mechanical bits. Everything about the structure and operation of the school illustrated the atomistic psychology: the short intervals of the daily program . . . the child conceived of as an assembly of parts . . . schoolwork as the forming of habits via verbatim repetition . . . the division of the curriculum into subjects and the paragraphic organization of the textbooks. Learning was considered an additive, not an integrative, process; little emphasis on reflective thought and on organization of material, ideas, and people.

"Thinking" an unclear mixture of "deduction" and "induction." The teachers, the textbooks, and the courses of study all gave lip service to "thinking" as the great end of education. But being ignorant of the integrative nature of the organism and of behavior, the process of thinking was conceived of as the building up of specific learnings acquired "inductively." Our fathers saw the process of generalizing as that of mastering "generalizations" which had been set out to be learned; they did not grasp the fact that skill in generalizing can be acquired only by generalizing. Thus their psychology was a confused muddling of deduction and induction, about neither of which were they clear.

Purpose, planning, and initiative were the teacher's, not the child's. The teacher's intention to teach rather than the pupil's intention to learn governed the entire enterprise. By "teacher" we mean the entire system — the Board, the superintendent, and the principals as well as the teachers. The planning of the curriculum and its course of study was done by the administration; within this framework the work of each grade group was planned by its teacher. Hence the very mainspring of action — the child's own purposes — was missing.

Discipline was imposed by the teacher. This school of the 1890's gave lip service to democracy, although the word itself was rarely used. But in practice the concept of "let me be the one to do what is done" was ignored. The "balancing responsibility" . . . "self-actuated in the pupils," to which Francis Parker was giving life in his Practice School, was missing. The vague sense of the need for order led the school to insist upon quiet, but it was imposed by command, not created by the children themselves. Thus the very essence of the philosophy of democracy was denied in the same breath in which it was proclaimed. The product was a competitive, disciplinary school for a competitive, disciplinary society.

3. *The School Utterly Lacked an "Esthetics"*

The dearth of creative expression and sensitive appreciation was the most distressing inadequacy of the school. Art in the schools could not be free and creative because art outside the schools was not. In fact, it played such a limited role in the everyday life of our people that it was practically impossible to interest any board of education in including art in the schools on any basis at all. Art was "special" and hence, like music, appeared as a "special subject." It is doubtful if there was any public or private school in America, with the exception of Colonel Parker's Practice School in Cook County, in which the graphic or theater arts were accepted *as coördinate with* "English composition." Even when drawing had become incorporated in the curriculum it amounted to little more than giving a pupil a pencil and a copybook — no paints, no sculpture materials. To be natural — to speak or write simply out of their own imagination, experience, memory of events and ideas — was taboo. In "public speaking" young people learned the formal gestures of the debater. Dramatics consisted of "putting on" some standard play. In the manual-training shop the boys made the inevitable book ends, doorstops, and ironing boards, ending for the skilled chosen few with the writing desk.

4. *Lacking a Philosophy of Moral-Ethical Behavior, the Americans Preached Democracy but Built an Authoritarian School*

It is credible to believe that if the first schools for all the children of all the people had been made by garden-variety, run-of-the-mine Americans, *who had neither been subjected to a scholastic education, nor knew of the existence of one,*¹ the schools of our times would have been very different from these formal schools of literacy. They would probably have resembled much more closely the realistic life of young people before the days of machines and great cities. Education, no doubt, would have been centered in the work of the family and "community" because the life of the people centered there. Children and youth would have taken part in proportion to their age, abilities, and experience. Learning would have gone on under the drive of social necessity — the boys, working with their elders in the fields, shops, stores, offices, the girls helping their mothers as self-sustaining producers in the homes and the neighborhood activities. Motives would have been personal and social, and the content of education would have been as broad as the daily life of the people themselves. Skills would have been learned as the product of natural and direct education, ranging from the simple chores of the household to the more specialized trade skills of shop, market, office, and governing bodies. *And if America had not industrialized its economic system in an incredibly short space of time, if there had been time for the American people to think and plan the education of their youth,* it is possible that they would have built a realistic education out of the actual needs of youth and a truly democratic school system.

But this did not happen. *The schools of America were built for all the children of all the people by scholars who were themselves the product of a scholastic, literary education designed for an elite.* While they sincerely insisted on the unique brand of freedom and equality in American life, while they aimed at a democratic school system, *the one that they had brought into existence by 1890 was a thoroughly authoritarian one.*

The structure of the system, its climate of opinion and its methods of operation, show this clearly. Look at it — an organized hierarchy of levels. At the top the Board of Education, representing only the

¹ Had they ever heard of the education of the liberal arts given to the Gentlemen, they would have craved it for their children.

professional and business sectors of the population, gave, made, and implemented the general policies and orders to the superintendent of schools and other officers of the central administration. The central officers on the second level of the system passed on orders to the third level of the principals of the schools and their assistants; they in turn passed them on to the teachers on the fourth level, and finally to the pupil at the bottom. The school system was the same hierarchy of authority that had come to be characteristic of every modern organization — the business corporation, the government, the church, and the great social organizations of the nation. By 1890 the teachers had not had a share in such policy-making issues as those concerning the content of the curriculum, the hiring and firing of teachers, or the inclusion or elimination in the teaching of controversial matters of community and national life.

Looking back, we must conclude, then, that while the leaders had sincerely, even if vaguely, aimed at a democratic school system, they achieved one that, to use Europe's new name, was Fascist. This was really the Fuehrer principle in action. The only difference between it and the Fascism of the 1940's lies in the brutality with which the more recent orders were enforced and in the brazen consistency of the theory. In our schools of 1890 *we accepted democracy in principle but rejected it in practice.*

II. A VERY DIFFERENT SCHOOL OF 1890: THE FIRST CHILD-CENTERED ONE

Come, leave this Grammar School reciting its *Grammar of Life*, and visit for a moment another school of 1890. It is right next door to the grammar schools of Chicago — Colonel Francis Parker's Practice School of the Cook County Normal. Seven years ago the Colonel came here after his five spectacular years at Quincy, Massachusetts,¹ and took over the dilapidated school plant with little apparatus and almost no laboratories or shops. But what a school he has built in

¹For my account of Colonel Parker's work at the Chicago Normal School I have relied largely on the files of original records, preserved and organized by Miss Flora Cooke, and on her graphic conversations over the years of friendship since 1915. Miss Cooke, one of the great school directors of our times, was for years one of Colonel Parker's teachers in the Practice School and was Director of the Francis W. Parker School from 1901-1937. I have also been helped by Miss Ida Heffron's *Francis Wayland Parker.*

spite of being dogged on every side by a hostile community, press, and City Board of Education.

"The Child Is the Center"

No subject-centered school is this! Not history, not geography, not science, as our Herbartian friends the McMurrays insist, but *The Child* is the center. The Colonel talks it and graphs it in great concentric circle charts of the materials and activities of the school. Everything radiates out from and points to—the child. The child grows through natural activities as Board Chairman Adams had said at Quincy, learning to read and write as he learned to swim and skate. "Every school in the land should be a home and haven for children," Parker tells us as we go about. He sees America as a free democracy: "Freedom is the goal of human progress . . . democracy the one hope of the world . . . [but] democracy without efficient Common Schools is impossible."¹

The School Is a True Community

But this school is more than child-centered. It is a community in our fourfold sense—the parents with their children, the teachers, and the administration. One teacher says of its communal spirit:

"It is a wonderful school . . . some six hundred of us from a child of six to the white-haired student of sixty gathered from all parts of the Union and from foreign lands, all drinking at the same fountain. All joined in the same family, which had no law save the family law, 'each for all.' Each striving to do his best, driven by no goad or lash save enthusiasm and the glimpse of a great idea."

And Miss Heffron, the art teacher, tells us:

"The picturing of school as a community was a revelation to many . . . to see the school as a unit made up of groups, each group thoroughly interested in different lines of work, unified by the one aim—the good of the whole."²

The Colonel himself put it:

"The social factor in the school is the greatest factor of all; standing higher than subjects of learning, than methods of

¹ F. W. Parker: *Talks on Pedagogics*, page 451.

² Heffron: *Francis Wayland Parker*, pages 49–50.

teaching, than the teacher himself . . . the mingling and fusing and blending of each with all, give personal power, and make the public school a tremendous force for the upbuilding of democracy."¹

The Morning Assembly

We go with the children to what Colonel Parker and the teachers call the Morning Assembly. Every day in the large assembly hall the children meet with the teachers and many parents; this is the common meeting ground. This is the family altar of the school to which each brings his offering — the fruits of his observations and studies, or the music, literature, and art that delight him. It is a place where all cooperate for the pleasure and well-being of the whole; where all contribute to, and share, the intellectual and spiritual life of the whole; where all bring their best and choicest experiences in the most attractive form at their command.²

Self-consciousness is avoided, for the children recognize that they are here to learn what children in other grades are doing, and to tell for the information of all what they, individually or as a grade, have discovered or learned. They rise from their seats and speak. If the little ones cannot be heard by all present, they simply step up in their chairs. No applause is permitted because of its influence in arousing self-consciousness. Some have something to show the school; so they go to the platform and speak simply, purposefully. A boy of nine finds difficulty in describing something that he has discovered. With an emphatic nod of the head he says, "I can't tell it, but I can draw it," and eagerly mounting the platform, explains as he draws on the ever present blackboard.

Some of the exercises are carefully prepared, others are spontaneous, meeting some need of the community. But it is such spontaneous expressions, free from self-consciousness, that delight the heart of the Colonel.³

¹ *Op. cit.*, Parker, page 421.

² *Studies in Education*, Vol. II, "The Morning Exercise as a Socializing Influence," page 4. I am using without quotation marks the teacher's words as given later in Miss Heffron's monograph.

³ The Francis W. Parker School of Chicago has continued the Morning Assembly to the present day. For twenty-five years and more I have seen its solidifying and expressive power. To my mind this is one of the lessons Colonel Parker tried to teach us that we have *not* learned; altogether too few schools practice it today.

Firsthand Directed Observation

We go to see the science work. Nothing is learned from book reading alone which the ingenuity of the school can find a way to preface by practical observation and activity. Science, nature study, geography, industrial and fine arts, and physical education — the first step was taken through practical activities. One of the Colonel's dreams is that the School shall have a farm. The first step has been taken — in the development of nature study through the surrounding environment when Dr. Wilber S. Jackman joined the staff. One of the teachers tells us about it.

“Under his guidance on the twenty acres of land, more trees were planted, a pond constructed, garden plots laid out, gymnasium apparatus erected; beehives stocked; all kinds of pets — turtles, rabbits, doves, squirrels — were given suitable habitations, which made them available for observation and study, and gave ample opportunity for expression through many art media. . . . To develop the scientific method of approach in the elementary school [the teacher] immediately correlated this subject with art. . . . In nature study the children were taken almost daily into the school park, and upon more distant excursions into the country environment under the guidance of their classroom teachers and the heads of these two departments. . . . It was in this spirit, and in spite of oppositions and discouragement which few can understand, that Colonel Parker gave school excursions practical preference over every exercise in the program.”¹

In geography, field work is the indispensable means of study — a great heresy as Miss Zonia Baber tells us about it:

“Classes are taken to observe richer valleys in the making, the characteristics of dunes, of glaciated regions and of all typical areas which the vicinity affords. A concept of the earth's relative forms, and the action of nature's sculpturing forces, is thus obtained better than is possible simply through books and oral descriptions. Untenable beliefs held by students are corrected by observations in the field. . . . An opportunity for testing hypotheses formed as to the genesis of land-forms observed on field trips, is provided in an out-of-door laboratory.”²

¹ *Op. cit.*, Heffron, page 78.

² *Op. cit.*, Heffron, pages 83–84.

The Difficult Problem of Subject Matter

Parker, the evangelist of child life, also made an important contribution to the reorganization of subject matter. The faculty, one of the very first to develop a modern "Course of Study," has chosen as one of its central themes: "*What knowledge does this class need for its present life?*" *Effective living is the goal, and the growth of the child the center of attention.* The content is to be drawn from the known fields of knowledge. But the "subjects" of study were not to be left in isolation from one another. They were to be correlated around the central studies of nature study, history, and geography. Neither one is sufficient alone; each needs the others, geology also and literature which throws light on the history of human emotions. A teacher in the School, Miss Mary Burt, shows us the idea graphically in one of the first "historical charts" of world literature. Miss Rice, the history teacher, studies Greek history through the reading of the great Greek books, the *Iliad*, the *Odyssey*, the dramas; and all of these are closely related to art throughout the ages by many days of directed study in the Art Institute of Chicago. Visual education is also anticipated by Mrs. Parker's "collection of more than twenty thousand clippings and pictures."

Moreover, Parker says history "must grow out of a study of contemporary institutions"; "such a study prepares children for a history of the great industrial developments." Sociology was the study of the environment and the home of man. As for geography, instead of being what it had long been, the "memorization of a conglomeration of unrelated statements," Parker puts into practice the theories of Ritter and Guyot and makes it the humanizing of the understanding of man in the physical world. Practical studies in mathematics are carried on through "garden work" and the making of apparatus, and industrial arts, science, and art are correlated with hand-work in manual training, the making of working drawings, and construction of apparatus.

Thus Parker aligns himself with the doctrine of the correlation and concentration of studies which the Herbartians were making popular in that day. Here is one of the beginnings of a long trend of constructing the program of the school directly from the culture of the people and organizing it in broad central strands of study.¹

¹See especially *First and Second Yearbooks* of the National Herbart Society (1895-1896).

*Creative Expression in the School
Even More Than in the Culture*

We are amazed to see the creative work of the children. Colonel Parker is making primary use of the expressive powers of the child, although the expressive movement has made little headway in the culture itself. He is, with James, ahead of his time in his emphasis on the growth of the whole body through the many-sided expression of the Self. Art is "a release into form of Self-energy-spirit." It pervades the activities of the entire school, correlated with every "subject" and engaged in directly by all the children. Surrounded by the copybook regime in art throughout the nation's schools, Parker's teachers leave the child free to express himself — "free from dictation as to the particular idea, the material to be used, or the form of output." Ten years before Isadora Duncan is to find it impossible to secure an audience for the expressive dance in America, the music, art, dramatics, and health-education departments of Colonel Parker's school understand many of the vital concepts and are revolutionizing the rhythmic and musical work of the program. He sees "tense nerves and muscles relaxed" through music and rhythm and the children "respond in joyous and graceful movements." The teachers insist that only children are naturally graceful and know how to dance: "Grace is the product of unity which has its source in the soul and springs from that center." Again and again Parker insists that "rhythm, fundamental in all growth, is the economy of growth"; again, "rhythm of the soul is deeper than physical rhythm." A program of rhythmic movement has been developed in the school; in the second grade, we see a boy spontaneously rise and move rhythmically in the "sword dance" dramatization.¹

A fundamental principle of education is the "body responsive to the will." Let the school build an intelligent foundation of health in the practice of hygiene. The Parker program abounds in pageants, plays and dances, marches and athletics in which rhythmic movements are the basis. It is called "calisthenics" because "public opinion

¹ The plan was later extended under Flora Cooke's direction at the Francis W. Parker School. After the pioneer experiments of Jacques Dalcroze were developed into graded educational plans, the Dalcroze method was early introduced into that school. Although in its later forms it became much too regimented, nevertheless here were pioneer beginnings of the modern dance in the school and a definite attempt to build a developed system of body education through it.

... prevents the teaching of dancing." True theater develops out of this — not "speaking pieces," or declaiming, or merely acting a memorized part. Here dramatics consists of "a vital impersonation of character naturally expressed through speech and action."

Competence in the Skills

But with all this interest in expression and free activity, Colonel Parker has not lost his understanding of the importance of technical competence in the life of the well-educated man. Periodically he surveys the achievement of the children in "the three R's," to discover how to increase economy and efficiency. A child should learn to read as naturally as he learned to talk, namely to find out something he wants to tell, or that someone wants to hear, or something that he wants to understand. Reading is to be a means of development in thought and not mere "word getting." So the Practice School has discarded the Primers and First Readers and Spellers and the teachers have written and printed "Reading Leaflets" in which the children's own experiences have been recorded. The Colonel tells us of many psychological discoveries made by teachers in the school; one in particular aroused his enthusiasm, namely "the ability of little children to write, rapidly, words and sentences upon the blackboard, under the immediate impulse of thought."¹

FRANCIS W. PARKER — THE FATHER OF THE PROGRESSIVE SCHOOLS

But enough of description. We have before us two schools of fifty years ago — the typical formal school seen squarely against the first child-centered school in America. For Colonel Parker had really built the kind of education we have described at Quincy, Massachusetts, fifteen years before he went to Chicago. John Dewey, who is quite generally credited with the original pioneering, said himself, in *The New Republic* for July 9, 1930: "Colonel Parker more nearly than any other one person was the father of the progressive educational movement."

A quarter century before, in a paper written in 1902, he had said:

"Perhaps you remember there was a celebration at Quincy, Massachusetts, a short time ago, on the occasion of the twenty-

¹ *Op. cit.*, Parker, page iv.

fifth anniversary of Colonel Parker's work there. Did you ever hear of a man who, starting as Superintendent of country schools, had reached a point in his career twenty-five years later, where the anniversary of that beginning was an event to be marked by the educators of a nation?"¹

The celebration was in recognition of Colonel Parker's quarter-century of work in building two types of new schools: first, as Superintendent of the Quincy, Massachusetts, schools from 1875 to 1880; second, from 1883 to 1901, as the builder of the Chicago Normal School and especially of its great Practice School. To understand the progressive movement we must understand Parker, "the evangelist of life," lover of children, and devotee of democracy who grasped intuitively several of the great principles of growth and education and in Quincy built the first true schools of living in America.²

Although he stayed in Quincy only five years, the spirit and curriculum of the school were so made over that his work attracted attention throughout America and Europe. There was less emphasis upon the memorization of the facts of textbooks and more upon the study of real things. Lessons in science and geography were based upon firsthand observation out of doors. Reading became an exercise in the acquiring of meanings, rather than in the learning of the techniques of oral pronunciation. The schoolroom became a pleasant place of activity. Teachers were brought into the reorganization of the materials and methods of instruction. A central place in the whole curriculum was given to geography and nature study "and the sand table in the schoolroom and the sand piles in the school yards

¹ *Little Chronicle*, March 15, 1902.

² Parker could not and did not do it alone. One of my theses is exemplified both in Quincy and in Chicago — namely, that the progressive laymen who want better schools for their children and who do something about it make it possible for progressive educators to create the schools. That has happened across the United States in scores of communities in the last half century. It happened in the little home town of the Adamases in 1875, where Charles Francis Adams, Jr., and John Quincy Adams were members of the Board of Education. It was they who recognized the greatness in Francis Wayland Parker and invited him to become Superintendent of Schools in their town. He had been a district school teacher, about four years in the Civil War — enlisting as a private and leaving in command of his regiment — and studied philosophy, psychology, and education at Berlin from 1872 to 1875. It was Charles Francis Adams who convinced his School Board associates that the Quincy curriculum should be radically modified to emphasize contemporary life instead of "the philological and archaeological study of the dead days."

were extensively used in the development of concepts of structure." The skills were taught in connection with other subjects, and the use of language took the place of grammatical analysis. Summer schools and institute classes developed for the education of teachers. Within a short time Parker and the Quincy schools became a national institution and educational leaders came from Europe to visit him.

Nation-wide Influence of Parker's Work

In 1899 Mrs. Emmons Blaine gave Colonel Parker a million dollars to endow a private training school for teachers, to be called the Chicago Institute.¹ She wanted him to have an opportunity to build his work free from political turmoil and unhampered by the conventional and financial limitations of a public normal school. But before the erection of the new building could be started the forehanded president of the University of Chicago, William Rainey Harper, suggested that the Institute be made a part of the university. Under Colonel Parker's directorship it and three other institutions were fused into a new School of Education.² The new School of Education opened in 1901 and was barely launched on its first year of work when Colonel Parker died. John Dewey, head of the combined departments of philosophy, psychology, and education since 1894, was made the new director.

In the meantime Mrs. Blaine had made a second gift of a million dollars and progressive citizens stepped in again to help establish an elementary school on the north side of Chicago to perpetuate the Colonel's work. In the fall of 1901 the Francis W. Parker School was opened with Flora J. Cooke as principal. The first faculty consisted of sixteen members, eleven women and five men, made up largely of teachers who had had their training in the Cook County and Chicago Normal School under Colonel Parker. For more than three decades the school continued under Miss Cooke's wise leadership and with many Parker-trained teachers on the faculty.



¹The facts concerning the Chicago Institute and the development of the School of Education at the University of Chicago were supplied in part by Miss Katherine Stillwell, a teacher there from its beginning. I am rewriting in this chapter scattered pieces that I first used in making the *Twenty-sixth Yearbook of the National Society for the Study of Education*, "Foundations of Curriculum Making."

²Described more fully in connection with the account of the Dewey School, Chapter XVII.

Colonel Parker's work lived on in the young teachers who had been trained either by him in the Normal School or by Miss Cooke at the Parker School. As a consequence a second generation of young educational leaders, who had been children in one of the original Parker schools, took over the direction of new schools about the time of World War I. To name only three: Carleton W. Washburne, superintendent of schools in Winnetka, Illinois, for a quarter of a century and the deviser of the Winnetka Plan for individualizing the school . . . Katharine Taylor, founder and director of the Shady Hill School, Cambridge, Massachusetts . . . Perry Dunlap Smith, director of the North Shore Country Day School. Other Francis W. Parker Schools were established — one, for example, in San Diego, California — and hundreds of teachers have grown up in Parker-influenced institutions and gone out into public and private schools to spread the new ideas.

The nation-wide extension of Colonel Parker's ideas through an influential graduate and undergraduate School of Education was cut short by his death in 1902. As a consequence the *Yearbooks* and other publications of the Francis W. Parker School of Chicago have become one of the most important sources from which an understanding of his work can be obtained. The first one, published in 1912, included one of the finest statements of the progressive philosophy we have ever had. I quote its compact summary:

... "self-actuated work causes the greatest gain in the pupil; that training in initiative is the child's great need, that in his own interests they often find the educative spirit; that freedom, with a balancing responsibility, is the best condition of moral and intellectual growth; that real experience with actual material is an essential of learning; that opportunity for varied expression is necessary for right education; that for purposes of development children must be treated as individuals and not as a group; that one of the most effective and wholesome motives of work is the social motive."¹

¹ Francis W. Parker Yearbook, *The Social Motive in School Work*, Volume I, 1912. The titles of other published Yearbooks: *The Morning Exercise as a Socializing Influence*, Volume II, 1913; *Expression as a Means of Training Motive*, Volume III, 1914; *Education through Concrete Experience: A Series of Illustrations*, Volume IV, 1915; *The Course in Science*, Volume V, 1918. (No yearbooks were issued in 1916, 1917, 1918, 1919, 1921, and 1922.) *The Individual and the Curriculum: An Experiment in Adaptation*, Volume VI, 1920. (With this volume the title of the *Francis Parker Yearbook* was changed to *Studies in Education*.) *The Social Science Series: A Course in History*, Volume VII, 1923.

CHAPTER XVII

The Progressive Movement in Education: Child-Centered

The progressive movement in education, fathered by Francis Parker, is the product of the work of many people. The preceding chapters show that we should really speak of the progressive movement in American life, for the building of better schools was only a single phase of the advancing spirit and work that pervaded the whole culture. In fact, we owe the better schools of the 1940's to thousands of young progressive parents as much as we do to the similar thousands of teachers. But in every movement there is always a spearhead, and in this case the creative force was two men. The contribution of one of the men, Francis Parker, we have already appraised. The other man was John Dewey.¹

WHAT THEY HAD LEARNED FROM EUROPE

The American pioneers in child-centered education did not start from scratch. In Europe the philosophy of experience was already on the way toward formulation in a scientific psychology, a new study of society, and a vast expressional movement in the arts. The intellectual awakening of the eighteenth century, led by Rousseau, Diderot, Montesquieu, and Condorcet, had expressed itself in a vigorous demand for a freer education. Three pioneers had actually laid the foundations: Heinrich Pestalozzi (1746-1826), Johann Friedrich Her-

¹ If pioneer institutions are cited, priority must be given to Teachers College, Columbia University, and its three demonstration and laboratory schools — Horace Mann, Speyer, and Lincoln.

THE PROGRESSIVE MOVEMENT

bart (1776–1841), and Friedrich Wilhelm Froebel (1782–1852).¹ While we shall not attempt a history of these European developments, it is necessary to put them into the background of our American story because Parker, Dewey, and the psychologists and sociologists were directly influenced by them; several, including Parker, studied at their university centers of creative thought.

By that time the initial foundations of the new education of experience had been laid. Pestalozzi's principle, "Education is . . . individual development—a drawing out and not a pouring in"—had been developed in his two famous books,² at the time of the formation of our own national government. Not long afterward Herbart developed his naturalistic concept of experience as the basis of knowledge, of education through the individual's growth, and of the apperceptive process, and his system of concentration or "correlation of studies" around history and literature which was a clear anticipation of the "broad-fields" and "core-curriculums" of today. As a consequence, at the moment that Parker and Dewey were developing their schools in the 1890's, the American "Herbartians"—Charles de Garmo and Charles and Frank McMurry in the lead—had systematized Herbart's ideas into their "five formal steps"—preparation . . . presentation . . . association . . . system . . . and application. These were sloganized and described in a whole library of new educational books which, after 1900, were tried out in normal school demonstration classrooms and reproduced in the work of thousands of teachers throughout the United States. Parker and Dewey took a minor part in this Herbartian movement, Dewey acting essentially as a critic of their ideas.

The third European influence already widespread in the United States by the 1890's was "Froebelianism"—and its "kindergartens" for little children. Froebel centered his educational philosophy around the interests and experiences of the young child. Because he had grown up in the revolutionary climate of Lamarck and Erasmus

¹ Even in their childhood and youth progressive changes had come about in the educational scene. Julius Hecker had established the first Seminary for Teachers in Prussia in 1738 and a private Teaching Seminary in Berlin in 1748, which Frederick the Great adopted as the Royal Teachers Seminary in 1753. The first normal school was opened in Denmark in 1789, and the Superior Normal School of France was established by the action of the revolutionary National Convention in 1794.

² In his novel, *Leonard and Gertrude* (1781), and in his book on education, *How Gertrude Teaches Her Children* (1801).

Darwin, his "first law of instruction" was that of self-activity springing out of one's own interests and motivated by one's own desires. Influenced by Pestalozzi and Rousseau and by Fellenberg's practical manual system, Froebel stressed handwork; the child would develop power through the wise use of manual activities. And on the social side he saw the school as a miniature society — another anticipation of Parker, Dewey, and our own moderns. Froebel was an intensely religious man and his program of education emphasized the concept of unity in nature, in the development of the individual and of the race, in the mental life of the child and the curriculum. Hence Froebel, like Herbart, urged the correlation of studies.

We see, therefore, that when Parker went to Berlin in 1872, and the McMurrays to Halle in 1886, the influence of the three Europeans had already begun to affect educational practice in the United States. Elizabeth Peabody had established the first kindergarten in Boston (1860), and Superintendent William T. Harris and Miss Susan Blow had made the kindergarten a part of the public schools in St. Louis (1873). By 1860 three hundred kindergartens were in operation in thirty cities and there existed ten private kindergarten training schools; by 1890 most of the larger cities had them. By 1920 there were nine thousand public and fifteen hundred private kindergartens in America. Meanwhile the manual training idea had spread rapidly, especially after the European exhibits at the Centennial Exhibition of 1876. In 1880 the Ethical Culture Society and the Workingman's School included woodworking in their programs. By 1886 woodworking classes were established throughout the Boston schools; by 1889 they had Swedish sloyd. Baltimore had a manual training high school in 1894, Philadelphia in 1885, Omaha in 1886.

On the theoretical side the Herbartians were most active and influential. De Garmo's *Essentials of Method* appeared in 1889, Charles McMurry's "special method" books appeared in the late '90's, and the two McMurrays' *The Method in the Recitation* in 1903. In 1892 these men and their associates established the National Herbart Society, which after the turn of the century became the National Society for the Scientific Study of Education.¹

¹ For fifty years its *Yearbooks* were an important publishing influence in public education.

THE DEWEY SCHOOL, 1896-1904

The Dewey School¹ was created by John Dewey, his wife Alice Chipman Dewey, and several neighbors in the second year after the opening of the new University of Chicago. Mr. Dewey had come there in the summer of 1894 as head of the combined departments of philosophy, psychology, and pedagogy. The School existed for seven years and a half, closing in the spring of 1904 when Mr. Dewey was convinced that its creative independence was being endangered by the dictation of the University president, Mr. Harper. The facts have not been sufficiently known, and I sum them up briefly from the Mayhew-Edwards-Dewey account.

In the sixth year of the School Mr. Harper, wishing to make another of his grandiose extensions of the University, proposed to merge the Dewey School and Colonel Parker's Practice School with the new Chicago Institute and two other institutions to form the School of Education of the University of Chicago, under the direction of Colonel Parker. Although they deeply loved and admired Colonel Parker, the teachers of the Dewey School felt that this grand organization would swallow up their School and destroy their work. Raising an independent endowment, they secured the permission of the University to continue the School separately. The arrangement lasted for only one year, for Colonel Parker died in 1902, and within a short time the schools were merged under Mr. Dewey as Director of the enlarged School of Education. Mayhew and Edwards (two sisters, Anna and Katherine Camp) who were there at the time say that it was done "*with his understanding that the regular teaching and administrative staff of the Laboratory School was to be taken over by the School of Education and was to continue in office indefinitely.*" The new enterprise continued during 1903 and into 1904, with high hopes that the Chicago Experiment, "bringing together all the factors of the educa-

¹ For many years it was officially called The Laboratory School. I shall, however, follow the common practice today of calling it The Dewey School. It opened in January, 1896, with 16 pupils and 2 teachers in a private dwelling on the South Side of Chicago. Six years later it had 140 children with 23 regular instructors and 10 assistants who were graduate students of the University. Mr. Dewey was Director and Mrs. Ella Flagg Young was Principal during several years; Mrs. Dewey was Principal and Director of Language Instruction from 1901 to 1903. Mrs. Young was first a professor in the University Department of Education and later Superintendent of the Chicago Public Schools.

tional problem, would advance to new achievements."¹ I quote the authors of *The Dewey School* on the final chapter in the School's story:

"Those who had piloted this ship on its seven-year voyage of discovery thought at last they had found fair sailing. It proved, however, only a brief season of good passage, for Mr. Dewey's resignation followed in the spring of 1904. This action was quite as unpremeditated on his part as it was unexpected to his associates. Early in the spring he was told that at the time of the merging of the four schools assurances had been given to the Trustees of the Chicago Institute that certain members of the administrative staff of the elementary school would be eliminated at the close of the first year after the merger. Mr. Dewey had been entirely ignorant of these assurances, found himself unable to accept them, and resigned, first as Director of the School of Education and shortly after as Head of the Departments of Philosophy, Psychology, and Pedagogy.

"Only the passing of time has made it possible to state the reasons for this unhappy ending to so many relationships and undertakings. With the resignation of Mr. Dewey and the subsequent dispersal of all save three or four of the faculty of the Laboratory School, this experiment in education ended. The brief year of union with the School of Education at Chicago marked the close of the career of the Laboratory School, as the present School of Education can in no sense be regarded as the heir of either its purposes or its methods."² [My italics throughout.]

I was a member of the faculty of the School of Education from 1915 to 1920, an observer of the University Elementary School during these years, and can confirm that latter judgment.³ Dr. Charles Hubbard Judd, who was Director of the School of Education from 1909 to 1937, was interested in the quantitative study of education and its psychological bases, and had made the School of Education a small national center for what he always called "the scientific study of educa-

¹ See Mr. Dewey's statement, "Significance of the School of Education," in *The Elementary School Teacher*, issued as late as March, 1904.

² Mayhew and Edwards: *The Dewey School*, pages 17, 18.

³ On Mr. Dewey's resignation he was appointed Professor of Philosophy at Columbia University, the position which he held until he retired in 1929, at the age of seventy. As I write, he is now eighty-six, having been Emeritus Professor for sixteen years.

tion." But theory and practice in the Elementary School under his administration bore little resemblance to that of the Dewey School from 1896 to 1904.

The First Laboratory School in America

The School was unique in the 1890's as the only true laboratory school in the country, and that, as Mr. Dewey said, was "the key to the work of the School." From the schools of the past fifty years we could count the other laboratory experiments on the fingers of one hand.¹ The purpose of a laboratory is to conduct *designed experiments*. Mr. Dewey said himself that its aim was

"to test certain ideas which were used as working hypotheses. These ideas were derived from philosophy and psychology, some perhaps would prefer to say a philosophical interpretation of psychology. The underlying theory of knowledge emphasized the part of problems, which originated in active situations, in the development of thought and also the necessity of testing thought by action if thought was to pass over into knowledge. The only place in which a comprehensive theory of knowledge can receive an active test is in the processes of education."²

Colonel Parker, listening to Mr. Dewey present an outline of his theory before the Normal School faculty in the 1890's, enthusiastically acclaimed it, saying:

"This educational theory I have never been able to state satisfactorily, but this is what I have been struggling all my life to put into action."

Dewey had grasped the fact that *if a school is to be designed it must rest upon a sound theory of man and society*. Dewey built his school

¹ Certainly most of the so-called private progressive schools were not true laboratory schools, and the schools of the Colleges of Education and Teachers Colleges were demonstration or practice schools. I am inclined to appraise the Lincoln School of Teachers College, for its work in the initial years and also in certain departments, as a true laboratory school. It would not be easy to find another.

² Mr. Dewey worked out and outlined the philosophic theory in a document called "Plan of Organization," and printed it privately in the autumn of 1895. I quote from the summary he himself made of the leading points of that document, printed in Appendix II of *The Dewey School* by Mayhew and Edwards.

on a strong *psychological theory*; it was not implemented in a *basic sociology*, and it lacked an *esthetics* for more than forty years.¹ But its *psychology*, while incomplete, was so sound that it is now just coming into its own. In fifty years of progressive schools the Dewey School was the only one to be so designed; even Parker's, according to his own appraisal, was not. I have studied the best of these schools since 1915, including nine years of Lincoln from the inside, and can find no others. Certainly the Lincoln School, although it was endowed as an "experimental" school and actually carried on many fine experiments, was not designed on a theory of psychology and philosophy. To point out this uniqueness of the Dewey School is, I think, to point to the outstanding weakness of progressive education.

THE PSYCHOLOGY OF THE ACT
PUT TO THE EDUCATIONAL TEST

The essence of the theory tested in the School was *the psychology of the act* which we have now analyzed in great detail. Dewey's own summary of the theory of the Chicago Experiment² shows that it was the *operational psychology* that was being tested: [My italics.]

¹ Mr. Dewey's systematic esthetic theory was not published until 1934, in his *Art as Experience*, although a few articles had appeared in the *Journal of the Barnes Foundation* in the years just preceding it.

² *The Dewey School*, Appendix II, by Mr. Dewey, page 477. Compare Chapters VII and XII.

OFFICIAL DOCUMENTS ON THE DEWEY SCHOOL

For this reason it is of the greatest importance that all students of education in America should be thoroughly informed with respect to the Dewey theory and practice and the results obtained. I pause, therefore, to interject a selected list of sources. In the *University Record* (of the University of Chicago) (1897-1899), the *Elementary School Record* (1900 and 1901), and the *Elementary School Teacher* (from 1902 to 1904) Mr. Dewey and his staff published a score of articles that, with the following items, constitute the basic documents:

- "The Results of Child Study Applied to Education," *Transactions of the Illinois Society for Child Study*, January, 1895
- "Interest as Related to Will," in National Herbart Society, *Second Supplement to the Herbart Yearbook for 1895*
- "The Reflex-Arc Concept in Psychology," *Psychological Review*, July, 1896
- "Ethical Principles Underlying Education," in National Herbart Society, *Third Yearbook* (Chicago, 1897)
- "Principles of Mental Development as Illustrated in Early Infancy," *Transactions of the Illinois Society for Child Study*, October, 1899

THE PROGRESSIVE MOVEMENT

"A child or an adult . . . learns not alone by doing but by *perceiving the consequences of what he has done in their relationship to what he may or may not do in the future; he experiments, he takes the consequences, he considers them . . . Through the consequences of his acts are revealed both the significance, the character, of his purposes, previously blind and impulsive, and the related facts and objects of the world in which he lives.* In this experience knowledge extends both to the self and the world; it becomes serviceable and an object of desire. In seeing how his acts change the world about him, he learns the meaning of his own powers and the ways in which his purposes must take account of things. Without such learning purposes remain impulses or become mere dreams. With experience of this kind, there is that growth within experience which is all one with education."

There is the essence of the operational theory in action in a school; *a school at last based on the matured philosophy of experience, and a sound psychology of the act.* "All learning is from experience," he said. It is an old formula, but it takes on new meaning because it is derived from

"The connection of the act as the unit of experience, and the act in its full development as a connection between doing and undergoing, which when the connection is perceived supplies meaning to that." And — "the measure of the value of an experience lies

OFFICIAL DOCUMENTS — *Continued*

— *School and Society*, 1899

— *Child and Curriculum*, 1902

The most complete single volume is *The Dewey School: The Laboratory School of the University of Chicago, 1896-1903*. Published in 1936, by Katherine Camp Mayhew and Anna Camp Edwards, this is the volume edited by his daughter Evelyn Dewey Smith and officially authorized by Mr. Dewey. It is based on the complete assembly of documents gathered by Mrs. Dewey, who was a guiding spirit in the founding and development of the School and was principal and director of language instruction from 1901 to 1903. She had long planned to write the story of the School in collaboration with Mrs. Mayhew. After her death in 1927 Mr. Dewey asked Mrs. Mayhew and her sister, Mrs. Edwards, both of whom had been in the school from its beginning, to prepare the book. He personally helped in planning and editing the book, and wrote some fifty pages of new material for it, including his systematic "The Theory of the Chicago Experiment," Appendix II. This is official and I have checked all my earlier material against it.

THE EDUCATIONAL FRONTIER: 1890's-1940's

in the perception of the relationships or continuities to which it leads."

Recall from Chapter III that Mr. Dewey's psychology is a *social psychology of the individual human act*. He sees the process of mental development as "essentially a social process." From the very beginning he created a psychology and an educational practice that were based upon a recognition of "the harmonizing of individual traits with social ends and values."

THE GUIDING PRINCIPLE OF THE SCHOOL'S THEORY: GROWTH

From Mr. Dewey's psychology of the act is derived the central principle of design — the principle of growth.¹ Mental growth results only from intelligent action. Intelligent action is an activity or a series of acts in which

"there is a continuing transformation of the present in the light of the consequences and meaning of the past action. As a result, recasting of purpose follows: a new plan is set up; and decision to act again is made. This is intelligent action. From such action mental growth results."

As Mr. Dewey himself put it:

... "a meaningful activity is the definition of an idea which continues to direct that activity in new expressions. . . . The whole hypothesis about ideas, as definitely intellectual experiences, is that they arise, are clarified, and defined (developed) in the course of the activity they first guide and later provide the meaning of. Then this development of meaning or idea leads on to new expressions and constructions, and so on. This process constitutes human growth as far as that is something more than merely a physiological development."²

Three stages of growth were recognized:

"The first extends from the age of four to eight or eight and a half years (the School Groups I, II, III, IV, and V) . . . the con-

¹ Here I paraphrase and sum up Mrs. Edwards's Chapter XIV, "Principles of Growth Guiding Selection of Activities," and Chapter XX, "Evaluation of Principles and Practices."

² *Op. cit.*, Mayhew and Edwards, pages 414-415.

nection . . . with . . . the home and neighborhood is . . . especially intimate. The children are largely occupied with direct social and outgoing modes of action, with doing and telling."

"In the second period, from eight to ten (School Groups V, VI, VII), emphasis is put upon securing ability to read, write, handle, number, etc. . . . as necessary helps and adjuncts in relation to the more direct modes of experience . . . various forms of handwork and of science . . . This is the special period for securing knowledge of the rules and technique of work."

"In the third period (School Groups VIII, IX, X, and XI), lasting until the thirteenth year, the skill . . . is utilized in . . . problems of investigation and reflection, leading on to recognition of the significance and necessity of generalizations. When this latter point is reached, the period of distinctly secondary education may be said to have begun. This third period is also that of the distinctive differentiation of the . . . various forms of science, etc. from one another."¹

Conditions for Growth

From this principle is derived the design of the educational conditions necessary for growth:

First: Freedom for the child to investigate and experiment.

Second: Choice of school experiences definitely to fit the changing interests, attitudes, and capacities of the three stages of growth through which he passes from infancy to adolescence.²

Third: The nub of the process is the meeting and solving of problems. Both children and adults solve their problems by —

- (1) selecting relevant materials and choosing their methods,
- (2) adapting these materials and applying these methods,
- (3) all the experimenting and testing that accompanies this effort.³

But this involves a "growing consciousness of means to ends," and that is the principle by which activities, materials, and methods are chosen to fit levels of growth. Early childhood is impulsive, but as the child

¹ *Ibid.*, pages 53–54.

² The Dewey School closed just as the stage of adolescence was being reached by its children; hence no theory was then advanced for growth beyond the thirteenth year.

³ *Op. cit.*, Mayhew and Edwards, page 419.

grows, he learns to slow down his responses "to think about what he is going to do and how he is going to do it." He grows to the extent that he sees the relation between means and ends. The Dewey School wanted a child to learn "to think for the purpose of guiding his own action . . . to use that which was of repeated value in restrictive situations to clarify and direct his action in larger ones." This was applied in *group-thinking* as well as in the individual's problems. For example, the day's work in each class began with a group discussion of the problems of the day; this is *the precursor of the pupil-teacher planning technique of today*. In all Mr. Dewey's fifty years of writing, the central concept used in designing the work of the school was "the act of thought" — namely, problem-solving.

Fourth: The foregoing defined the attitude of the School with respect to science — and also with respect to the so-called "scientific approach" which the Judd group carried to such a technical point in their School of Education a few years later. In the Dewey School children made frequent use of science by providing the conditions through which their own significant experiences would discover principles and practical uses of formulas, symbols, and the like. The very nub of Mr. Dewey's writing for fifty years has been to clarify the psychology of the scientific method of inquiry. But this must be discriminated carefully from the technical concepts which, after 1910, came to be called "the scientific approach to education." The latter they denounced, saying that it "implies a mechanized, unsocial individualistic point of view."

Fifth: There is the important problem of the "drives" of education; these are found in the supplemental functions — "interest" and "effort." The educativeness of an experience is determined by the fact that interest and effort move hand in hand. In the little child at play, for example, "there is no gap in the mind between means and end." Impulse and idea go immediately into action; the existing experience gives satisfaction, it has no end beyond itself.

Mayhew and Edwards say that the School's experience

*"proves that classroom results were best when activities were in accord with the child's changing interest, his growing consciousness of the relation of means and ends, and his increasing willingness to perfect means and to postpone satisfactions in order to arrive at better ends."*¹ [My italics.]

¹ *Ibid.*, page 421.

THE PROGRESSIVE MOVEMENT

Sixth: The proper design of the school necessitates a clear theory of the relation between the individual and society.¹ This Mr. Dewey provided. "Growth," he said, "depends upon reciprocal relations in a suitable environment." Hence the School must operate as a child-life-centered community. There were two basic principles: the psychological principle — "the organic-circuit idea," and the educational principle — "constructive coöperative activity." From these emerged the practice of the school: the school seen as a miniature society . . . its organization as a functioning community . . . flexibility and informality in the construction and use of schoolrooms, furniture, equipment . . . pupil-teacher planning of all activities. The Dewey School chose the principle of coöperation; the mass school has continued the principle of competition.

THE CRUX OF THE DESIGN: THE PROBLEM OF "SUBJECT MATTER"

In designing the School Mr. Dewey cut straight through to the most difficult problem in education — the choice and organization of subject matter. Avoiding the easy but futile ways of doing this, he recognized that the central problem of the staff was

"to find those things in the direct present experience of the young which were the roots out of which would grow more elaborate technical and organized knowledge in later years."

The real problem of subject matter is

"the discovery of those things which are genuinely personal experiences, but which lead out into the future and into a wider and more controlled range of interests and purposes."

Note the twofold nature of this statement: *first*, the emphasis upon "genuinely personal experience"; all *study must be organic functions* of present needs and aims. *Second*, things "which lead out." They must lead out into the entire world of the learners and into their future lives. They must "have continuities" . . . lead into "a wider range of interests and purposes." Hence one of the great functions of subject matter will be the cultivation of interests.

¹ He frequently mentions the help of his university colleague and adviser, Professor George H. Mead, in developing the social side of this theory. See Mead's *Mind, Self and Society*.

The School — a Community and a Home

The first factor in providing the right "subject matter" of education to "harmonize individual traits and social values" is to set up the school as a form of community life. He insists that *in intent* at least the Dewey School was "community-centered," as well as child-centered. He does not mean that the School was centered in the life of Chicago, or in its South Side neighborhood directly. He means that the School itself was conceived as a "community." It was a "social institution" . . . "modeled after the organization of an ideal home," which brought administrators, teachers, and pupils together in "managing and executing the teacher-learning process." It was, as Mrs. Edwards implies, both child-centered and society-centered.

The ideal structure of the School was that of a "miniature home."

"A common center was found for the Laboratory School in the idea of *the school-house as a home in which the activities of social or community life were carried on*. The ideal was so to use and guide the child's interest in his home, his natural environment, and in himself that he should gain social and scientifically sound notions of the functions of persons in the home; of plant and animal, including human life, and their interdependence; of the sun as the source of all energy; of heat as a special form of energy used in the home (as in cooking); and of food as stored energy. . . . These ideas were chosen for study not alone because . . . they started the child in his present, interested him to relive the past, and in due time carried him on to future possibilities and achievements in an ever developing experience. In brief, they furnished a thread of continuity because they were concerned with the fundamental requisites of living."¹ [My italics.]

The social curriculum was constructed through the utilization of "four native impulses," the child's "natural springs for action"² and the basis of his growth:

- *The social impulse*, shown in his desire to share his experiences with others.
- The child's impulse to do, to make — *the constructive impulse*.
- *The impulse to investigate and experiment*.
- *The expressive impulse*.

¹ *Ibid.*, page 43.

² See Mr. Dewey's article, "The University Elementary School, General Outline of Scheme of Work," in the *University Record*, December 30, 1898.

THE PROGRESSIVE MOVEMENT

THE "AXIS" OF THE COURSE: THE SOCIAL OCCUPATIONS AND THE STUDY OF CIVILIZATION

The chief organizing concept of the curriculum outline was the study of the development of civilization; witness Mr. Dewey:

"from the standpoint of those taught, it was a movement of life and thought dramatically and imaginatively reenacted by themselves. . . . Since some forms of social life have made permanent contributions to an enduring culture, such typical modes were selected, beginning with the simple and going to the complex."¹

To determine which "typical modes" of social life to take, the teachers applied the operational principle by asking: *Which factors "have made a permanent difference in the conduct of human life"?*² The "typical modes" which have made permanent contributions to an enduring culture are the "social occupations" — the basic human activities in the search for food, shelter, and clothing. If taken in their historical framework they provide the psychological opportunity for the child's impulses of active making and doing. Mr. Dewey's reason for choosing these activities:

"Occupations as engaged in by the pupils themselves were means of securing the transformation of crude and sporadic impulses into activities having a sufficiently long time span as to demand foresight, planning, retrospective reviews, the need for further information and insight into principles of connection. On the moral side this same continuity demanded patience, perseverance and thoroughness — all the elements that make for genuine as distinct from artificially imposed discipline."³

The teachers began with the present experiences of the child, his needs, interests, and aptitudes. They then selected a phase of the development of civilization which, in a generalized and idealized form, would supply material to give the child a greater understanding of

¹ *Op. cit.*, Mayhew and Edwards, page 470.

² It may be of scientific interest to those developing the curriculum today that, a quarter of a century later, and not knowing the Dewey use of this principle, my Social Science Research Group used precisely the same concept in gathering the curriculum materials in the Lincoln School Experiment. We put the question in the form: Which cultures in human history and within them which factors, trends, creative personalities, and concepts have had such permanence and continuity that they have brought human society to its present conditions and problems?

³ *Op. cit.*, Mayhew and Edwards, page 474.

and increased power over his own present life. They resorted to activities dealing with "primitive life, Hebrew life, early American settlements," and the like, not as mere tags, but used educatively, calling into play the imagination of the children. The historical material was always subordinated to the children's community life in the school. It was set in the framework of actual community life today, built by the children and the teachers, using tools, implements, construction, dramatization, storytelling, and physical material as resources. "Present family life was studied before primitive life; the settling of Chicago before the earlier colonial settlements of Virginia and Massachusetts." This is quite different from the old school curriculum which merely had the student learn from the chronological facts of past history. Thus they attempted "to secure a rhythm of movement, beginning with conditions already familiar to the child, passing through something more remote in time and space, and then returning to a more complex form of existing social surroundings."

This resulted in a greatly enlarged emphasis on the use of history of civilization; witness this statistical summary of Mayhew and Edwards:

"The children who had followed the regular work of the school had spent one year on social occupations, one on primitive life, one on explorations and discoveries, one on Chicago and the Virginia and Massachusetts Bay colonies, one on the union of the colonies and the Revolution, one half-year on American history from the European point of view, one half-year on the formation of the American Constitution, the acquisition of new territory in the westward expansion, and the industrial development up to 1830, and one year on history review in preparation for college board examinations or on Roman history. The average time the younger groups spent on history was two and one half hours a week; that of the older groups was one and one half hours a week."¹

Mr. Dewey's Withdrawal from Educational Reconstruction

Mr. Dewey left Chicago in the summer of 1904 to become Professor of Philosophy at Columbia University. During the next decade his influence was at a low ebb. I am told by those who knew him well at that time that he regarded his work in educational reconstruc-

¹ *Ibid.*, page 322.

THE PROGRESSIVE MOVEMENT

tion of little avail, and for over forty years he has refrained from practical experimentation in schools. This does not mean that he thought he had been wrong; he has always been sure that he was right, and *in most theoretical matters history has thus far borne him out.*¹ He published almost nothing about education for twelve years. His big systematic book, *Democracy and Education* (1916), was written at the vigorous urging of his friends at Teachers College, Professors Paul Monroe, in whose educational series the book was edited and published, and William Heard Kilpatrick, who became one of his greatest interpreters. His principal psychological book, *How We Think*, did not come until 1909. The little essay, *Interest and Effort in Education*, was published in 1913 at the very moment when citizens and teachers were beginning to establish "child-centered schools" all over the country. The profound "social psychology," *Human Nature and Conduct*, did not appear until 1922 — eighteen years after he left Chicago. He wrote almost nothing about the Dewey School, and Mrs. Dewey died twenty-three years after they had left without having prepared its history. The book finally came, exactly forty years after the opening of the School.

These negative facts of Mr. Dewey's virtual and, I think, discouraged, withdrawal from the active building of soundly designed schools are in my judgment very important. If he had continued actively in *educational reconstruction*, instead of turning to "reconstruction in philosophy" as he did, I am confident that many of the worst mistakes made by the so-called "progressive" schools would not have been made. But he did withdraw, never to return throughout forty years of vigorous and creative work.²

/ / /

I am convinced that the Dewey School was a great seven-year experiment. I can find no greater one in the fifty schools that have

¹ I am confident that he was unwise (1) to ignore the whole feeling-through-body-response approach of James . . . (2) not to explore the psychological process of the "flashes of insight" stage of the act of human response, which Mayhew and Edwards say the School explicitly recognized . . . (3) in postponing for forty years the development of a theory of esthetics.

² The only appraisals that he permitted himself to make were: (1) The collaboration with his daughter, Evelyn Dewey, in *Schools of Tomorrow* . . . two little essays — *Experience and Education* (1938) and *The Sources of a Science of Education* (1939) . . . and, in 1936, *The Dewey School*, in collaboration with Mayhew and Edwards.

grown up since its demise. It is to be regretted that no systematic and critical appraisal of its results has been made. Mayhew and Edwards assemble scattered comments on the success of the School made by visiting educators, parents, and former pupils — “thirty years after.” But these are all pro-Dewey and so far as I can see contribute nothing to the needed critical appraisal of the educational product. Students of educational reconstruction will regret, I am sure, that the Dewey group did not conduct a *systematic and objective inquiry* into the traceable effects of the school's work in the later lives of its graduates.¹ But I shall return to this problem in Chapter XXV.

WHAT DID WE LEARN FROM
“THE CHICAGO EXPERIMENT”?

Aside from Parker and a few intimates who saw much of Dewey and the School, the experiment really was not understood until years later. There were thousands of visitors, but few of them stayed long enough or studied its theory and program carefully enough to grasp its basic significance. Looked at superficially, its “activity” seemed license to persons brought up on the formal “quiet” school. I have heard the elder Dean Russell tell (in the 1920's) of his thorough disapproval of the noisy activity and apparent lack of order in organization, administration, curriculum, and teaching.

First and foremost the impact of the Dewey School and that of Parker's Practice School came as *a shock* to most schoolmen. It was so different, so seemingly *outwardly wrong*, and also so subtle in theory that few formal school people could grasp it or accept it. Moreover, the psychological theory *was* difficult (imagine most school people in 1896 understanding Dewey's “reflex-arc” article!) and Dewey's style of writing did not make it easier. It needed interpreters in the Schools of Education and experimenters in new schools. Both came — but not for more than ten years after Mr. Dewey left Chicago. By 1918 William Heard Kilpatrick was writing and lecturing to the first of his 40,000 students in Teachers College on “the project method.” And soon afterward Boyd Bode began his clarification of the experimentalist-progressive psychology and philosophy at Ohio State. Students of the progressive theory and practice multiplied and taught it in hundreds of new teachers college classrooms. After 1910, Dewey's books began to come out and to be widely used in the study

¹ Comparable, at least, to the work of the Eight-Year Study of the Progressive Education Association discussed in Chapter XVIII.

THE PROGRESSIVE MOVEMENT

of education. And in the next quarter century there were started some fifty new schools that in some way or another were influenced by his theories. Through it all the Dewey School dropped into the background; if Dewey had never written his educational library, I doubt whether his influence would have been very great. Perhaps as a shocker — yes — confirming Colonel Parker.

And yet on most points he was essentially right — and from the cumulation of his writings the educational profession came to agree on them; I sum up the high spots:

- For those who take the time to build a theory and design their school life and program Dewey led the way with the first conscious implementation of the operational psychology of meaning.
- Parker's theory of the school as a community was confirmed but founded on a much more developed theory.
- The principle of growth, and the optimal conditions for growth, first theoretically grounded and experimentally developed by Dewey and the school staff, is now generally accepted as the basis of curriculum design.
- The principle of the school as a miniature home and the reproduction of man's social occupations as the basis of selecting subject matter is still regarded as our most stimulating hypothetical suggestion for the elementary school. It has been repeated hundreds of times in so-called progressive schools but with as yet no definitely objective appraisal. The trend has followed Dewey, but fairly uncritically.
- The use of the permanent factors in the development of civilization as the guiding principle of organizing the central strand of the curriculum has been very generally adopted by progressives in education. Many have confirmed Dewey without knowing his earlier work.
- Both the theory and the practice have been developed only in the elementary school; no extension was made by Mr. Dewey through the adolescent and post-adolescent years.¹
- The centering of his psychology on "problem-solving thinking" has stood up well under considerable critical analysis for forty years; certain inadequacies are discussed in Chapter XXI.

Quiet on the Educational Front

After Mr. Dewey left Chicago not much happened on the progressive educational scene for nearly a decade. Miss Cooke and the F. W. Parker staff were quietly building a fine school in Chicago. But there were only two vigorous attempts to establish new schools. The first (1904) was the elementary school of Professor Junius L. Meriam at the University of Missouri. Professor Meriam, one of the

¹ In Chapter XIX I discuss its extension by others since 1930.

first of the new doctors in "education" at Teachers College, experimented with new elementary school curricula for some twenty years. At first he abolished school subjects altogether, developing a program of study without academic compartments and time schedules. The life of the school was a continuing series of child activities in which excursions, field trips, observation, discussion, and much constructive activity occupied central roles. The practical problems of administration finally led him to create a fourfold organization of curriculum activities and materials: observation, play, stories, and handwork.¹ This innovation provided for flexibility in the school program and represented at that early date an interesting and novel contribution to the creation of a more leisurely and thoughtful atmosphere in elementary classrooms.

In 1907 Mrs. Marietta Johnson, always a fighting social liberal and an advocate of the single-tax theories of Henry George, opened her School for Organic Education in the George community at Fairhope, Alabama. For more than thirty years she continued the enterprise. In the meantime she built the Edgewood School at Greenwich, Connecticut (1913), where for some years she also conducted summer schools for teachers; in the following years other smaller branch schools were established.

THEN, A MOOD OF REVOLT AND IMPROVISATION
THROUGHOUT AMERICAN LIFE CREATED A SCORE
OF CHILD-CENTERED SCHOOLS

Then, about 1912, came the first signs of the impatience of thoughtful Americans with their medieval schools. In ten years a wave of new protest schools swept across the eastern section of the United States. From the Mississippi to New England the social trend registered its educational rebellion. Between 1912 and 1915, during the years in which Wilson began to lead the political building of the New Freedom from the White House, progressive parents and teachers joined hands to set up the various "Park" Schools — in Baltimore, in Cleveland, in Buffalo, and in Dayton. In New York City, Caroline Pratt opened her little Play School in 1913 (now the City and Country School) and with the collaboration and support of Mrs. Lucy Sprague Mitchell organized the Bureau of Educational Experiments. In the

¹J. L. Meriam: *Child Life and the Curriculum*. World Book Company, Yonkers, New York (1920).

THE PROGRESSIVE MOVEMENT

same year (1913), with an endowment from Mrs. Phoebe Anna Thorne, Bryn Mawr established an elementary school. In 1915 three more were added to the list: Walden, established by Margaret Naumburg, in New York City, with a heavy Freudian psychoanalytic emphasis; the Shady Hill School, Cambridge, Massachusetts, founded by the collaboration of Professor and Mrs. W. E. Hocking and their neighbors and soon under the direction of Katherine Taylor; in Iowa City the Elementary School of the University of Iowa, a new type of training school, was opened under the directorship of Ernest Horn.¹

The following year (1916) the Oak Lane Country Day School of Philadelphia was organized under the directorship of Francis M. Froelicher.

The year 1916 also saw the publication of two educational essays that led directly to the setting up of more progressive schools. The first was the publication and widespread distribution by the General Education Board of two stimulating pamphlets. The first was Abraham Flexner's *Modern School*. The other was ex-President Charles W. Eliot's *Changes Needed in America's Secondary Education*. The nation-wide discussion of these two critiques led the General Education Board (1917), under the leadership of Mr. and Mrs. John D. Rockefeller, Jr., Mrs. Willard Straight, Dr. Flexner, and others to establish The Lincoln School of Teachers College. Somewhat resembling the Dewey School in purpose, it was created first as a "modern school" for the parents' children, second as a laboratory for public school experimentation. Lincoln is, indeed, the only school to be established in the past forty years with a heavy endowment for public school experimentation.

THE FREE-LANCE SCHOOLS FORMED THE PROGRESSIVE EDUCATION ASSOCIATION, 1918

This brief catalogue of the pioneer schools established before World War I illustrates the nation-wide rebellion against the old mechanical regime. By the close of the war a dozen new schools were in existence and were finding a great need for the exchange of ideas. Throughout the winter of 1918-1919 a small group of progressive

¹ Mr. Horn has often told me of his introduction to education as Professor Meriam's assistant in the experimental school at Missouri, and how its extreme freedom — "license," I think he called it — made a lifelong conservative out of him; whatever the cause, Horn has always been an Essentialist rather than a Progressive.

leaders met in Washington, D. C., to discuss problems of common interest. Led by Stanwood Cobb, they organized themselves as The Progressive Education Association.¹ Their purpose was to unite the scattered progressives, and provide them with a national forum of discussion, enlist the interest of citizens, and build an informed educational opinion throughout the United States. The first two public meetings were held in Washington in 1919 and 1920. Every year from that time until 1941 an annual meeting of the Association was held in one of the Eastern cities. For some years the Association was financed coöperatively by its members, through the efforts of Mr. Cobb and Miss Morse and other zealous idealists who contributed services without pay, aided especially by large grants from Mrs. Avery Coonley.

For five years informal news letters and bulletins, distributed irregularly, constituted their only published organ. In 1924 a grant from Mrs. Coonley, renewed each year for some years, made it possible to publish a magazine, *Progressive Education*, which soon established a national reputation. Gertrude Hartman was its first paid editor, followed by Ann Shumaker and Frances Foster, Elsie Clapp, Frederick Redefar, and James L. Hymes. In 1926 the Association's work had increased so rapidly that a full-time paid executive secretary was established: Mr. Morton Snyder served first, followed by Mr. J. M. Dorey. With the coming to a close of the first era of progressivism about 1930 and the ushering in of a new regime Mr. Frederick Redefar took over and carried the leadership until 1943. In January, 1926, the Association had 1674 members . . . in 1932, 7617 . . . in 1936, 8600. Its peak membership was slightly under 10,000. Under the leadership of Director Redefar and President Beatty and a vigorous Board of Directors the influence of the Association held a single annual conference and contacted 8500 teachers and parents during the year; in 1934-1935, fourteen conferences with 23,000 individuals.

¹ Among those most active in the early years of the Association were Mr. Stanwood Cobb, Mrs. Laura C. Williams, Mr. Arthur E. Morgan, Mrs. Avery Coonley, Miss Lucia Morse, Miss Gertrude Hartman, Mrs. Milan V. Ayres, Mrs. Marietta Johnson, Mr. Eugene R. Smith, Miss Anne E. George, Mr. Morton Snyder, and Mr. J. M. Dorey. Both Charles W. Eliot and John Dewey gave the new organization their blessing and successively accepted the title of Honorary President. See Stanwood Cobb's "Romance of Beginnings," in the January-March, 1929, issue of *Progressive Education*.

THE FIRST QUARTER CENTURY:
WHAT HAD WE LEARNED?

Initial Pioneering Was Over

The first stage of the progressive movement in education — the stage of initial pioneering — came to a close in these latter years of the 1920's — fifty years after Parker at Quincy, a quarter century after Dewey at Chicago. The leadership of the Progressive Education Association itself changed about that time. In the years 1926–1929 several persons competent in psychology, sociology, and scientific methods took places on the Board of Directors — Dr. W. Carson Ryan, Dr. Carleton W. Washburne, Dr. W. W. Beatty, and the present writer. Mr. Frederick L. Redefers became Executive Secretary — later was given larger powers and called “Director” of the Association. On the programs of the Association and on the personnel of the committees and commissions scientific students began to appear. The editorship of the magazine, *Progressive Education*, was taken over by Ann Shumaker, trained in the graduate study of psychology and education. In the years of the Great Depression the climate of opinion in thousands of American communities was greatly altered and some impetus was lent to the reorientation of progressive educational leaders around “the social theme.” The center of interest shifted from the elementary to the high school, psychological study from childhood to adolescence. The late '20's are, therefore, a period of stocktaking of what we had learned in the twenty-five years after Dewey withdrew.

At that moment the PEA included fifty-five schools on its list of recognized “progressive” schools, but it had nearly five thousand members, a large proportion in public schools. I have presented on an adjoining page an honor roll of forty of these schools. All but four are private, “fee” schools; six others are adjuncts of universities or teachers colleges, used as demonstration or practice schools. All but five are still in existence.

As the Progressive Education Association's officers said in 1938,

“The first decade (1919–1929) . . . was one of pioneering. It was a pioneering task to experiment in the face of long-established traditional practices . . . to try to convert parents and the public to the new educational point of view.” [The attention of the schools] “was centered primarily on developing the methods and techniques that would promote the growth of children through

guidance of their natural activities. The scientific study of child development was then in its infancy." [Workers] "based their efforts . . . on their knowledge and understanding of children gained from personal experience with them."

Concentration on the Lower Schools

Throughout most of these first years the articles in *Progressive Education* and the pamphlets and brochures of the separate schools dealt with the life and program of the elementary school. Attention was centered almost exclusively upon the education of young children — from the ages of four or five to the oncoming of adolescence. One reason was that the new schools were established primarily by comparatively young parents whose children were young; this I think was one of the leavening factors which disposed the mood of the clientele toward educational innovation. Many of the schools did carry their work through the high school level — notably Francis W. Parker, Lincoln, Dalton, Horace Mann, Ethical Culture, Scarborough, Tower Hill, Oak Lane, the various Friends' Schools and Park Schools. But few changes were made in the curriculum. This was brought about through entrance requirements and through the intellectual climate that it had created in its graduates, who by this time dominated the boards as well as the parent councils of the progressive schools. During this period, therefore, we learned little or nothing about the reconstruction of the high schools.

Hence the "Child-Centered" Emphasis

In 1928 Ann Shumaker and I, in publishing our appraisal of the first quarter century of new education, deliberately chose the title *The Child-Centered School*. It best described the predominant emphasis upon the individual child, teaching methods, and school organization. The literature of those years abounds in discussions of *freedom*, of ways of creating *active schools*, of supplanting teacher initiative with *child* initiative, of building the life and program of the school around *the interests of children*. Witness De Croly's *Active School* built around "centers of interest" . . . the recurring discussion of motivation . . . reality from child interests . . . the units of work and the "real life situations" of Lincoln and others. For twenty years Mr. Kilpatrick, the chief interpreter of the new movement, constantly proclaimed from the nation's educational platforms that the primary

THE PROGRESSIVE MOVEMENT

task of education is to "build enduring interests." Well into the 1930's *Progressive Education* carried on its cover these seven purposes of the schools banded together in the movement:

- I. Freedom to Develop Naturally
- II. Interest, the Motive of All Work
- III. The Teacher a Guide, Not a Taskmaster
- IV. Scientific Study of Pupil Development
- V. Greater Attention to All That Affects the Child's Physical Development
- VI. Coöperation between School and Home to Meet the Needs of Child Life
- VII. The Progressive School a Leader in Educational Movements

Mark them well, for *every listed purpose refers to child life; none refers to the culture, to society, to man's crucial social conditions and problems.*

Revolt and Innovation, Not Experiment

These schools were "protest" schools, expressions of the parents' rebellion against the regimentation of their childhood. As such they did a magnificent job. They were formed in the years of the nationwide shift from the conventional practices and allegiances of the nineteenth century to the new ones of the twentieth. The parents were themselves caught in a period of rebellion against the old ways of living and of hectic attempts to improvise new ones. It was natural that this same spirit of revolt and improvisation should mark the work of the schools in these first years. It was in the spirit of "Try anything once and see if it works"; I recall dozens of times when that phrase was bandied about in the early days of the Lincoln School. It was *educational innovation — not thought-out, designed experiment.* Using the most liberal interpretation of the concept "laboratory experiment," and measured by the standards set by either the Dewey School or by Lincoln between 1920 and 1926, there were not then more than two or three true "laboratory" schools in America. At the present moment there is none. As we move into the educational reconstruction of the post-war years, so far as total school experiments are concerned we start from scratch — all over again.

*No Time or Inclination for Theory:
Confusion in Psychology*

I am unable to point with assurance to a single *new psychological concept* that the child-centered schools, with the exception of Lincoln, either theoretically formulated or scientifically documented in this period. Although they read and underlined Mr. Dewey's *School and Society*, *Child and Curriculum*, and *Interest and Effort in Education*, not one group designed its school as an experiment to confirm or refute Dewey's hypotheses advanced between 1896 and 1904 and tried out in his own school. Nevertheless, in the light of forty years' experience since he closed his school, that was the one thing that needed to be done. The reasons are, I think, clear, and it is important to bring them out here if only to orient us for the future.

Dewey's influence has persisted, and that of most other pioneers has declined, because he worked at the problem of ideas and succeeded in developing a fundamental psychology and philosophy. But most of these schools and their staffs were free lances, intelligent and zealous reformers, hard-working and sincere evangelists of a better childhood. Many of them were brilliant, but there was hardly a psychologist or a philosopher among them all. They were men and women of action, not primarily persons of theory either in interest or in training. I worked in one of these schools for nine years and was in and out of several of them constantly from 1915 to 1930. I know the maelstrom of administrative detail in which the leaders were caught—the minutiae of money raising and budget planning, trying to run a new private school on a shoestring, conciliating irate parents, meeting and planning with others for the development of their children, trying to know intimately several hundred boys and girls and their parents, holding faculty meetings, making reports about the children, and attending educational conferences. Even if the staffs had been interested, I don't see how they could have found the energy or the time to devote themselves to building a thorough psychology and philosophy. Some staffs included "psychologists," but they too were men and women of action, not of theory; their energy and time also were devoted to testing, diagnosing difficulties, planning remedial help, meeting the parents. Some of the schools brought philosophic interpreters of Dewey—such as Messrs. Bode and Kilpatrick—into periodic conference with their staffs and parents, but at best it was for an evening or a week of lecture and discussion. So, in moments snatched

for hurried reading, administrators and teachers read Dewey — or more frequently Bode and Kilpatrick — and talked enthusiastically about child interests and initiative, freeing the child, the whole child, growth, personality adjustment.

As for the Progressive Education Association itself, during the first twenty years of its life its directors consciously avoided the drawing up of a statement of philosophy — at least beyond that given in its seven paragraphs of principles. Not until the report submitted to the Annual Conference in February, 1938, did the Association appoint a Committee to formulate its philosophy. That was published¹ as "Progressive Education: Its Philosophy and Challenge."

The psychologists of the country were equally responsible for the psychological inadequacy of the schools. The clear formulation of the functional and organic psychology had not been made, and the needed synthesis did not percolate even to the doctoral candidates in the Schools of Education until well into the 1930's. I can report evidence from twenty-five years' participation in doctoral examinations in Teachers College that the ignorance of candidates in this field was, and even today is, abysmal; general shibboleths, the slogans of an "organismic" psychology, the "laws" of learning and behavior are recited but there is no real grip on the basic concepts. Indeed, most of the clinching and interpretive work of Coghill, Lashley, Cannon, *et al.*, was not published until the late 1920's and is just now in synthesis form² beginning to reach the hands of our graduate students. But almost no one reads the original studies or the researchers' own interpretations. Professors of education were still teaching S-R Bonds throughout the 1920's. The result was that the foundations of func-

¹ In May, 1941, *Progressive Education*. The Committee was heavily weighted on the side of Dewey-Bode operational psychology: Harold Alberty, *Chairman* ... H. Gordon Hullfish ... Alice V. Keliher ... Daniel Prescott ... Louis Rath ... Paul B. Sears ... Paul Witty ... Laura Zirbes ... Ruth Streitz. All of these could fairly be called disciples of John Dewey. Four were members of the Ohio staff or were influenced by Professor Bode and three were directly trained by Professor Kilpatrick. Bode and Kilpatrick were the chief interpreters of Mr. Dewey's philosophy.

² Such as the Wheeler and Perkins' *Principles of Mental Development*, published in 1932. C. M. Child's *Physiological Foundations of Behavior* was not published until 1924. Robert Woodworth's *Contemporary Schools of Psychology*, 1931, and Heidbreder's synthesis, *Seven Psychologies*, widely read by graduate students in education, issued in 1933.

tional and organic psychology were almost a total blind spot in the equipment of teachers and administrators in progressive schools.

*Sporadic Contributions to
the Study of Civilization*

What did we learn prior to the Great Depression about educating a generation of youth who would become informed and disposed to do something about the actual conditions and problems of industrial society? In the elementary school a marked trend was discernible to make "the social studies," correlated with science or literature, a major central strand of the new curriculum.¹ In this respect we find a definite confirmation of Dewey's hypothesis — although not built on a psychological logic. Careful scrutiny of the publications of these schools fails to reveal that the practice was either built as a definite sociology or a conscious repeating of Dewey's experiment.

As for the secondary divisions of the public schools and the liberal arts private schools, in a quarter of a century we learned from them about progressive education — almost nothing. From most of the secondary progressive schools we learned very little; from two or three of them — a great deal. But it must be recorded that the deep perennial conflict over "I" and "We" did not reveal itself in most of the schools that had secondary divisions, and in the few in which it did, conflict with trustees and *laissez-faire* parents arose.² By and large the parents³ were of the upper-middle economic class, sufficiently well-to-do to send their children to a private school, or to create similar "public" schools in rich suburban communities such as Bronxville, New York. They were "radical" in educational method (that is, before the era of the New Deal) but not in social philosophy. As America was plunged into the Great Depression, most of the parents and many of the teachers were either not aware of, or were loath to accept, the facts of social change, and feared to have them discussed in the schools; many branded such discussions as radical, even subversive and un-American. Although little was said about it

¹ In the Appendix I reproduce from *The Child-Centered School*, the year programs of work in four of these schools — the Lincoln School at Teachers College, the Francis W. Parker School, the City and Country School, and the Ojai Valley School for the years 1925, 1926; also a similar outline of the year programs of each grade in the Dewey School as described in the Mayhew-Edwards book.

² See Chapter XIX for examples.

³ The exceptions were schools such as Manumit and Mrs. Johnson's Fairhope School.

directly, the general orientation was conveyed more subtly. *The historical fact is that in most of the progressive secondary schools the curriculum shunned the controversial economic and social issues of our people.*

The Schools Still Lacked a Sociology

Because of this added factor of silent parental disapproval it is not astonishing to find that forty years after Veblen, Turner, Robinson, *et al.*, had begun the formulation of the new study of society, the progressive schools — with two or three notable exceptions — had not succeeded in developing a sociology. The materials were available and in clear synthesis form. I myself used them at Lincoln in preparing the experimental editions of the new curriculum materials, *Man and His Changing Society*, as early as 1920 to 1924.¹ Mr. Dewey's staff had used some of them, with the aid of the experts on the Chicago faculty, twenty years before. And liberal committees of the American Historical Association were being formed to bring the findings into the school curriculum.

An Intuitive Esthetics in the Making

In one area of the new school the progressive schools made a new and important contribution in this period; namely, in the discovery of the educational conditions which would further the creative act and the building of a high order of appreciation. Although Colonel Parker and his teachers had intuitively sensed the presence of the creative capacities and provided a fine environment for it, little real success had come until just after World War I. Then Otis Caldwell, as Director of the Lincoln School, took the first step. *He brought to our faculty several practicing artists* and turned the children over to them with the simple instructions — “get them to write, paint, make theater, make music.” Most important of all, he brought Hughes Mearns, poet and novelist, student and teacher of “English.” Mearns was above all “artist-teacher” — I have never known one who satisfied the two criteria better: (1) *creative master of expression in at least one medium . . .* (2) *sensitive to the presence of creative capacity in others and skilled in the technique of drawing it out and developing it.* In five years Mearns changed the school, and produced a body of published examples that led a creative revolution across the nation's

¹ I discuss these developments in Chapter XIX.

THE EDUCATIONAL FRONTIER: 1890's-1940's

schools.¹ Satis Coleman paralleled his work in music.² In other progressive schools painters, sculptors, poets, novelists, theater workers, and musicians became teachers of the arts and students of the creative and appreciative acts.

Out of it by 1930 had emerged an impressive body of hypothesis, buttressed by a considerable educational experience:

- The teacher must himself be an "artist" — a master of expression in some medium and sensitive to its development in others.
- All children have some creative and appreciative capacity.
- The creative process consists of "Saying what I see (feel, intend) my way — but with Form."
- It is imperative, therefore, that all misconceptions concerning "copying" nature or other works, representing things, and making "likenesses" be broken down and the mood built in its place of expressing what the child sees, feels, thinks. In the esthetic act the Self is focal.
- The mood of freedom to speak my own thoughts and feelings — and the obligation to do so. The first stages of expression are really stages of release from hampering fears and tensions. These fears must be released.
- Technical skills and devices are to be learned only when the child has personally discovered a need for them; then they are to be "taught," only at the level of the child's own technical growth.

¹ See his *Creative Youth* (1925) ... *Creative Power* (1929) ... and *Creative Adult* (1940).

² See her *Children's Symphony*; *Creative Music for Children*; *Creative Music in the Home*. For a synthesis of articles in the arts and expression published in *Progressive Education* see Hartman and Shumaker: *Creative Expression*.

THE PROGRESSIVE MOVEMENT

PIONEER PROGRESSIVE SCHOOLS FOUNDED BETWEEN
1875 AND 1930

- 1845 Germantown Friends School, Germantown; Overbrook
(Burton Fowler), Philadelphia, Pennsylvania
Friends Central School, New York City
George School (George Walton), Philadelphia, Pennsylvania
- 1875-1880 Quincy, Massachusetts, Public Schools (Francis W. Parker)
- 1883-1901 Practice School of (a) Cook County Normal School,
(b) Chicago Normal School (1896-1901) (F. W.
Parker)
- 188- Ethical Culture School, New York City
- 1887 Horace Mann School, Teachers College, New York City
- 1896 Dewey School (John Dewey, Director). Closed 1904
- 1904 Elementary School, University of Missouri (J. L. Meriam)
- 1907 School of Organic Education (Marietta Johnson), Fair-
hope, Alabama
- 1912 Park School (Eugene R. Smith), Baltimore, Maryland
- 1913 Edgewood School (Marietta Johnson), Greenwich, Con-
necticut
- 1913 City and Country School (Caroline Pratt), New York City
- 1915 Walden School (Margaret Naumburg), New York City
- 1915 University of Iowa Elementary School (Ernest Horn),
Iowa City, Iowa
- 1915 Shady Hill School, Hocking (Katharine Taylor), Cam-
bridge, Massachusetts
- 1917 Lincoln School of Teachers College (Abraham Flexner),
New York City
- 1917 Moraine Park School (A. E. Morgan, J. H. Patterson),
Dayton, Ohio
- 1917 Institute for Creative Education (Cora L. Williams),
California
- 1919 Cambridge School (John R. French), Kendall Green,
Massachusetts
- 1919 Chevy Chase School (Stanwood Cobb), Washington, D. C.
- 1919 Winnetka Schools (C. W. Washburne), Winnetka, Illinois
Downers Grove School (Avery Coonley School) (L. B.
Morse), River Forest, Illinois
- 1919 Tower Hill School (Burton Fowler), Wilmington, Dela-
ware
- 1920 Dalton School (Helen Parkhurst), New York City
- 1921 Birch-Wathen School, New York City
- 1921 Beaver Country Day School (E. R. Smith), Chestnut Hill,
Massachusetts

(Continued on page 570)

PIONEER PROGRESSIVE SCHOOLS — *Continued*

1921	Little Red Schoolhouse (Elizabeth Irwin), New York City
1923	Scarborough School (Wilford Aikin, Mrs. Frank A. Vanderlip), Scarborough, New York
1923	John Burroughs School, W. Aikin, Clayton, Missouri
1923	Hessian Hills School (Elizabeth Moos), Croton, New York
1923	Ojai Valley School (Edward Yeomans), Ojai Valley, California
1924	Manumit School (labor), Pawling, New York
1929	Roger Clark Ballard School (1929-1934) (Elsie Clapp, Director)
1930's	Such public schools as Bronxville, New York, under W. W. Beatty, Shaker Heights, Ohio, under Arthur K. Loomis University School of Ohio State University and many other Schools of Education and Teachers Colleges
1934	Arthur Dale School (1934-1936) (Elsie Clapp, Director)

CHAPTER XVIII

Society-Centered Foundations, 1930's— 1940's: The Youth Problem and the High School

Men have long known that a proper plan of education has two foci—not a single center. One focus is the child . . . the other the culture and the society in which he lives. A good school, therefore, is child-and-society-centered. But most of the enthusiastic evangelists of the child-centered school could not see that . . . why, we have already shown. It was, in fact, as difficult to get the directors of most of the progressive schools to include the realistic study of society in their programs, even in the years of the Great Depression, as it was to interest the Scholastics in either child-centered education or the social frontier.

Then, in the early depression years, the progressive scene of America changed and with it the progressive forms of education. A new leadership, trained in the study of society and education, took charge of progressive education. New Commissions of the American Council on Education made nation-wide studies of the youth problem. New organizations, such as the John Dewey Society for the Study of Education and the Culture and new organs of discussion were created—for example, *The Social Frontier*. The Board of the Progressive Education Association came to include such members as Robert Leigh, Frank Baker, Caroline Zachry, Laura Zirbes and Elsie Clapp, V. T. Thayer and Carson Ryan. The presidency was filled successively by Willard Beatty, Carleton Washburne, and Carson Ryan; and the socially minded Frederick L. Redefor became Executive Director. This new leadership of the progressive movement was both child-and-

THE EDUCATIONAL FRONTIER: 1890's-1940's

society-centered. As we moved into the social crisis of the '30's with 15,000,000 out of work and a New Deal Government experimenting furiously, this leadership tried to move the new schools in the social direction.

PIONEERING TOWARD SOCIETY-CENTERED EDUCATION IN THE 1920's

In the meantime, all through the 1920's, the combined study of education and the culture had been under way and some stirring examples of truly community-centered schools had appeared. I can find none better than that supplied by the seven years of experience of Elsie Clapp in creating the Roger Clark Ballard Memorial School, Jefferson County, Kentucky, from 1929-1934, and the Arthurdale Community School, Arthurdale, West Virginia, from 1934-1938.¹ "Community Schools in action," Miss Clapp² calls them. "It was in Kentucky," she said, "that we came to an understanding of a mature functioning of a community school. In Arthurdale, West Virginia, we built a community school and used it as an agency in community education."

Ballard was a real community school: farmers, dairy owners, gardeners, mechanics, owners of estates, truckmen and handy men, business and professional men and their farm tenants. The children of all went to school together and the parents learned to use the school and develop it together as a democracy. From being their servants, the teachers became the neighbors and partners of the parents, irrespective of economic and social differences. The parents shared in the work of the school, ran the lunchroom, the movies, the lending library, carried on the women's exchange and the school Country Fair. Through their Men's Club a Fire Committee was organized; under the pressure of community discussion it became the official Fire Department. The Women's Club took over responsibility for school lunches, art exhibitions, movies, and many instances of home decoration and community beautification.

Most important of all, *the living experience of the community became the subject matter of education.* The school raised its own sheep, chickens, cows, planted and cultivated its vegetable gardens,

¹ The Speyer School of Teachers College, Columbia University, 1899-1915, directed for some years by Dr. Frederick Bonser, was perhaps the first.

² Under the sponsorship of the Federal Resettlement Administration and the constant support and encouragement of Mrs. Eleanor Roosevelt. See Elsie R. Clapp: *Community Schools in Action.* The Viking Press, New York (1939).

conducted a labor bureau which helped the local artisans to find jobs, carried on the annual Country Fair, exhibiting its own agricultural products, and a coöperative market in which were sold the chickens, eggs, milk, cream, pumpkins, mincemeat, sausages, cottage cheese, crullers, pies, fruitcake, jams, and preserves produced in the school. Older boys made new tools and utensils, mended doors, shelves, book-cases, and the like. The students renovated the old building, repainted the classrooms and hallways, repaired broken plaster, and reinforced floors.

Thus the community school organized the people, old and young, to meet the urgent needs of the community — its work, its health, its recreation. There was no distinction between school and life outside. *Instead of having the school go out into the community to observe, survey, diagnose, and recommend, the school and community became one.* The whole enterprise became a real School of Living — “a used place where learning and living converged.” The schoolhouse became the geographic center, the recreation center, the intellectual center, and the spiritual center. All of the senses of “community” were present to some degree; the School itself became a true community and the community a School. Here was a great stride *toward the education-centered community.*

/ / /

Nearly ten years before Ballard, Ellsworth Collings had shown school men how a one-room rural school could be tied into the real life — indeed, become the true center — of the community.¹ Starting from such real problems as typhoid illness of children in the school, Collings and the children conducted surveys of health and work conditions in the local region and built the educational program around them. The results were astounding. On academic tests the children stood higher than other neighboring schools, higher also than the national norms for the United States. But very important nonacademic outcomes were achieved. More students and parents were drawn to this particular school than to others, attended better and advanced farther into high school, took a more vigorous part in the community life, revealed better health and higher earnings. Families represented in the school stood out in the community for their enlight-

¹ Ellsworth Collings: *An Experiment with a Project Curriculum*; carried out as a doctoral dissertation while working with Dr. W. H. Kilpatrick at Teachers College, Columbia University, in the early 1920's.

enment, health, good citizenship, farm efficiency. Even today the Collings experiment is pointed to as an example of what can be done in rebuilding the school through participation in the community and rebuilding the community by centering it on education.

In the Colleges

World War I jolted scores of college leaders and many fearsome middle-of-the-roaders out of the academic ruts in which they had been plodding. Its impact raised questions of value and launched some of us on a new quest for understanding of man and society as the intellectual foundation of education. In a few cases the effect was almost immediate. College teachers of philosophy and history (such as John Coss of Columbia, who had been the executive officer of the Army's Committee on Personnel) returned to their college posts to begin setting up new general and integrated courses based directly on the conditions and problems of modern society. A pioneer and typical example was Columbia's "Introduction to Contemporary Civilization" course; the famous CC required of all freshmen, which integrated the essentials of modern history, economics, political science, and philosophy. The emphasis shifted from narrow courses to broad ones, from political minutiae to economic forces, from the distant past to recent trends and to the problems and factors in contemporary life.¹

BEGINNINGS OF THE "SOCIAL STUDIES" IN THE SCHOOLS

Within the elementary and secondary schools the jolting effect of war was felt also. One does not exaggerate in saying that at the close of World War I there was no such thing as the "social studies"; there were only separate and separated academic courses — history, geography, and civics. Even "sociology" was unknown in the schools, economics was seldom offered, and government was studied only in the history courses. The problems of modern industrial society and the factors that created them were ignored. Such themes and problems as property, employment, monopoly, social control, public *vs.* private

¹ It is interesting to note, as a contrast, that in Columbia at the same moment John Erskine was launching his new "honors course," focused on the thorough reading and discussion of fifty of the world's classic books. Here Mortimer J. Adler and Scott Buchanan and Mark Van Doren studied and then taught "The Great Books" and got ready to become the twentieth-century Scholastics who have had so much publicity at Chicago and St. John's. I discuss them in Chapter XIX.

SOCIETY-CENTERED FOUNDATIONS

enterprise — all controversial issues — were banned from the schools.

Against that condition several groups threw themselves in the 1920's. The National Society for the Study of Education published a series of Yearbooks, which reported scores of new investigations that the Essentialists¹ had been making of the facts and skills actually used by human beings in everyday living. These helped to center the attention of public school people on the study of the social usefulness of school materials,² although the "progressive" schools generally ignored them. In 1923 my Committee made the *Twenty-second Yearbook*, entitled "The Social Studies," to bring the problem of rebuilding the social curriculum squarely to the attention of educators; at this time my own thesis — "Problems of American Life as the Basis of the Curriculum — was presented. Four years later, 1927, the Society's Committee³ on Curriculum produced the two-volume "Foundations of Curriculum-Making." This was the first group report to focus curriculum reconstruction on the major trends and problems of the culture.

It was evident to us, however, that a new national organization was needed in which teachers of such related fields as history, geography, government, economics, and sociology could discuss their common problems together. So in 1922 we formed the National Council for the Social Studies.⁴

INTEGRATED MATERIALS IN THE SOCIAL STUDIES

At the close of World War I a generation had passed since the pioneer studies of Veblen, Turner, and Robinson discussed in Chapter VIII. Yet in 1920, aside from the new materials included in the

¹ W. C. Bagley *et al.*; see Chapter XIX.

² See the various Economy of Time Committee reports in the *Yearbooks* from 1915 to 1921.

³ In which I brought together on one national Committee Judd and Kilpatrick, Bagley and Bonser, and Horn and Courtis, and other leading exponents of conflicting views in education.

⁴ The initiation of this important group was done by workers in the teachers colleges — not in the learned disciplines. My brother, Earle Rugg, and I brought the little founding group together in my office, including Dr. J. Montgomery Cambrell of Teachers College and Edgar Dawson of Hunter College. The new society was formed at Atlantic City shortly after World War I, but was soon taken over by the academic professors of history, led by Albert McKinley, owner and publisher of *The Historical Outlook*, which was made the official organ of the new organization. For several years they dominated it.

THE EDUCATIONAL FRONTIER: 1890's-1940's

Robinson-Beard histories, teachers and pupils still lacked adequate integrated materials. There was no *over-all portrait of contemporary industrial society*, which made available in the schools the clear pictures of the conditions and factors in modern society that the new students of society had been documenting. That was the principal job done during the next twenty years by the group that I assembled in the Lincoln School: a new study of society for the schools.¹

ATTEMPTS TO MAKE THE PROGRESSIVE EDUCATION ASSOCIATION SOCIETY-CENTERED

Although nearly four hundred schools and systems were using *The Social-Science Pamphlets* in the late 1920's — and five thousand by the middle 1930's! — the socially minded nucleus of the Directors of the PEA could not get the Board to pay vigorous attention to the problem of building the secondary curriculum around the problems of the swiftly changing society. Constantly at Board meetings we warned of impending dangers to our society, unless a large minority of the people were quickly taught to understand what was happening. Not more than four or five of the score of Directors took seriously what, with amused "tolerance," they called "Harold's annual crisis speech." With the exception of Redefer, Hymes, and Washburne from the central administration, and Ryan, Leigh, Baker, and possibly one or two others, these elected national leaders were just not interested in the ominous signs of economic-social debacle that were advancing on all sides. And it was always rather shocking to find that while several million children in public junior and senior high schools were studying the story of the industrial revolution and the social transformation it was bringing about, in these fine private child-centered schools there was little use of the material. Neither was there much use in the normal schools and teachers colleges of the country, the very centers in which we should expect the leadership to be most vigorous.

But as the devastating social debacle of the 1930's came upon us, the leadership pushed more quickly in the social direction. Mr.

¹ Because of the attacks upon it, 1938-1941, by the officers of the American Legion, the Hearst-McCormick-Patterson press, and other patrioteering groups, it has become known generally. Its influence was nation-wide, its materials being used by thousands of teachers and read by not less than 5,000,000 children. The whole story is documented in my *That Men May Understand*. Doubleday Doran & Co. (1941). See especially Chapters III, V, and IX to XV.

SOCIETY-CENTERED FOUNDATIONS

Redefer brought Dr. Counts to our national rostrum at the Washington meeting in 1932 and he warned the PEA straight out:

“If progressive education is to be genuinely progressive, it must emancipate itself from the influence of this [economic] class, face squarely and courageously every social issue, come to grips with life in all its stark reality, establish an organic relation with the community, develop a realistic and comprehensive theory of welfare, fashion a compelling and challenging vision of human destiny, and become less frightened than it is today at the bogies of *imposition* and *indoctrination*.”¹

A year later Secretary Redefer and the PEA's Committee on Social-Economic Problems issued its *Calls to the Teachers of the Nation*, asking the teachers to

“recognize the corporate and the interdependent character of the contemporary order, and transfer the democratic tradition from individualistic to collectivist economic foundations. [Education] should point toward a productive and distributive system managed in the interests of all who labor, and toward a society marked by comparative equality of material conditions and dominated by the ideal of guaranteeing to every child born into the nation the fullest opportunities for personal growth.”²

As later sections will show, a very few of the progressive leaders did shift their attention from the elementary school to the high school and paid much more attention to the social order, but most of them did not. Nevertheless, certainly throughout the 1930's, most of the progressive schools themselves continued to be emphatically child-centered and two thirds of the PEA Board were concerned primarily with the education of little children.

“THE SOCIAL FRONTIER” GROUP AND THE NEW EDUCATIONAL SOCIOLOGY

But by 1933 the progressive movement in American life got a new impetus from the demands of the economic crisis. The air was full of critiques and plans for social reconstruction. College presidents were writing papers on “a planless world.” Prominent bishops of

¹ George S. Counts: *Dare the School Build a New Social Order?* pages 9-10. John Day Company, New York (1932).

² John Day Company (1933). John Day Pamphlets, No. 30, page 21.

THE EDUCATIONAL FRONTIER: 1890's-1940's

churches and industrial leaders were publicly questioning the soundness of certain phases of capitalism. Journalists were exposing the false advice of business forecasters. More than thirty plans for regulating the social system were published within two years after the crash of Wall Street. No proposals were made to abolish private capitalism, except those of the Communists and they were ignored. On the contrary, ways and means were sought of imposing some kind of control on the social system — either by industry itself, by national government, or both. But all insisted upon the principle that the purchasing power of the worker as well as of the owner and manager must be protected.

A new statecraft emerged in Washington, the product of two forces — technology and welfare. In limited ways it had been in government for two generations — making research contributions to the improvement of agriculture, health, coast and geodetic surveys, the development of a vast range of standards, and the like. But in the decade after 1929 the *social-engineering mind* was given a conspicuous role in government; more creative imagination was applied to social life in this period than in any earlier one of similar length.

THE TEACHERS COLLEGE DISCUSSION GROUP

The new study of society launched by Veblen, Turner, *et al.*, was bearing fruit — in education as well as in government. In the 1930's the new educational organ on the social front was *The Social Frontier* and the new organization was the John Dewey Society for the Study of Education and the Culture. Both of these new instruments were fashioned by a little nucleus of professors of the social foundations of education at Teachers College. One by one after 1926 I had watched the new members of the group join our staff — Counts, Childs, Raup, Watson, Brunner, Newlon, Clark, Johnson, Cottrell, and others. As early as 1927 we formed our little Discussion Group around Dr. Kilpatrick as chairman. It served us on the social-educational frontier as Peirce's Metaphysical Club served the young intelligentsia of Cambridge sixty years before and his similar one, those at Hopkins in the '80's. Regularly from 1927 to 1934, intermittently from 1934 to 1938, and again for several years after war began in September, 1939, we have held our bimonthly dinner-discussion meetings, canvassing informally, without programs planned in advance, the roots of every phase of our culture. In hundreds of hours of friendly argument we dug to the social foundations of education. Even by 1932 we had

SOCIETY-CENTERED FOUNDATIONS

become a cohesive group, taking our stand together for the general conception of a welfare state, agreeing fairly closely on the constituents of the democratic principle. All but two of us avoided membership or participation in political organizations, confining our efforts to studying and critically appraising platforms, creeds, programs, and strategies. This was practicing what we preached — vigorous adult education.

The Group was also the nucleus of the 60 “Fellows” located in a dozen universities and colleges, who, in 1935, established the John Dewey Society for the Study of Education and the Culture. Its primary function has been the preparation of yearbooks on various social aspects of education. To date (through 1946) eight have been published, and all are fresh and direct studies of education in the actual framework of our changing American life. No important problems were dodged; no conditions which could be documented were ignored.¹

But the most important contribution of the T. C. Group and the 60 “Fellows” was the creating of a new social organ for educational workers. In 1934 they launched the magazine *The Social Frontier* under the Chairmanship of Dr. Kilpatrick and the Editorship of George S. Counts; the plan was proposed by Mordecai Grossman and Norman Woelfel and they became “Associate Editors.”² *The Social Frontier* soon brought to its editorial board and to its pages as authors the vanguard of liberal creative scholarship on the nation’s social and philosophical frontiers. John Dewey wrote his regular monthly “Page,”

¹ First Yearbook: *The Teacher and Society* (1937); Second Yearbook: *Educational Freedom and Democracy* (1938); Third Yearbook: *Democracy and the Curriculum* (1939); Fourth Yearbook: *Teachers for Democracy* (1940); Fifth Yearbook: *Workers’ Education* (1941); Sixth Yearbook: *Mobilizing Educational Resources* (1943); Seventh Yearbook: *Public Schools and Spiritual Values* (1945); Eighth Yearbook: *The American High School* (1946). Formerly published by D. Appleton-Century Company, New York, now by Harper & Brothers, New York.

² The original Board of Directors included the following persons, representing twelve universities, schools, or institutions in every section of the country:

William H. Kilpatrick, <i>Chairman</i>	Paul R. Hanna	Jesse H. Newlon
Edmund De S. Brunner	Heber Harper	Harry A. Overstreet
John L. Childs	Sidney Hook	Robert B. Raup
Harold F. Clark	H. Gordon Hullfish	Rollo Reynolds
Donald P. Cottrell	Alvin Johnson	Harold Rugg
George S. Counts	F. Ernest Johnson	Robert K. Speer
John Dewey	E. C. Lindeman	V. T. Thayer
Harrison S. Elliott	Lois H. Meek	Goodwin Watson
Mordecai Grossman	Clyde R. Miller	Norman Woelfel

and a score of descendants of the Veblen-Turner-Robinson tradition were represented: Charles Beard, Lewis Mumford, Broadus Mitchell, Henry P. Fairchild, Harry D. Gideonse, Bruce Bliven, Eduard C. Lindeman, Harry Overstreet, William F. Ogburn, Lewis Corey, Alfred Bingham, Merle Curti — to name only a few.¹

The announced aim was to make *The Social Frontier* the expressive medium of those teachers "who believed that education has an important, even strategic, role to play in the reconstruction of American society." Its basic assumption, as announced in the first issue, was:

"that the age of individualism in economy is closing and that an age marked by close integration of social life and by collective planning and control is opened. For weal or woe it accepts as irrevocable this deliverance of the historical process. It intends to go forward to meet the new age and to proceed as rationally as possible to the realization of all possibilities for the enrichment and refinement of human life."

Mr. Dewey wrote the initial article, answering the question: "Can Education Share in Social Reconstruction?" with a positive "Yes." The journal soon became the fighting spearhead and the only organ of the social liberals in American education.² Its circulation rose

¹ *The Social Frontier* in its ten years of existence was edited as follows:

1934-1937 G. S. Counts, Mordecai Grossman, and Norman Woelfel

1937-1940 George Hartmann

1940-1943 W. H. Kilpatrick and James Hymes (as *Frontiers of Democracy*).

1943- Harold Rugg, October, November, and December issues; the journal was then abolished by the Directors of the Progressive Education Association.

² The titles of a few articles will indicate its social scope and emphasis:

— In 1934 and 1935:

— The Youth of America, Past and Present:

— Youth in a Confused World

— Youth in American History

— Youth *versus* Capitalism

— Youth Faces War and Fascism

— Why There Is No Youth Movement

— What Sort of School Is a CCC Camp?

— Property and Democracy

— A Sociologist Views the New Deal

— Education *Is* the Social Frontier

— Who Are the Friends of Human Rights?

— Educational Ideals and the Profit Motive

— Our Revolutionary Tradition

— The Scientist in a Crumbling Civilization

— College Students React to Social Issues

— W. R. Hearst — Epitome of Capitalist Civilization

— The Hearst Attack on Academic Freedom

SOCIETY-CENTERED FOUNDATIONS

rapidly and for several years stood at approximately five thousand. Even this circulation, however, was insufficient to provide for the expense of paid editors and an editorial office. The deficits accumulated and were met privately by the sponsoring group.

During the years 1937 and 1938 members of the group who were either on the Board of Directors of the PEA or who were close to it constantly endeavored to persuade the Board of Directors to take the magazine over and publish it as the social organ of the Association. Finally, in 1939, after a succession of defeats by a Board predominantly against a social publication, we succeeded in securing a bare majority in favor of adopting the magazine. This was done, however, with the stipulation that the name should be changed from *The Social Frontier* to *Frontiers of Democracy* and that a new board of editors should be constituted under the general chairmanship of William Heard Kilpatrick — thus, it was believed, eliminating the presumed “radical” taint. This was done, and for three years, 1940–1941–1942, to May, 1943, the magazine was carried on as the organ of the Association. I personally took part in the editing of the magazine and can report that it was actually one of the most vigorous examples of coöperative design, writing, and publication that I have ever seen.

The threat that the war would take our young leaders hung over us constantly. In the winter and spring of 1943, one by one, they made the decision to go: Mr. Redefer left the Directorship of the Association, Mr. Hymes the Editorship of *Frontiers of Democracy*, Mr. Washburne the Presidency of the Association, and President Leigh and other members of the Board joined the war effort. By the spring of 1943 it appeared that with the continued lukewarm attitude of a predominant bloc of the Board, *Frontiers of Democracy* would die. In the emergency I proposed to carry it on for the Association if given power to create a new nationally representative Board of Editors. The Board accepted; I gathered the new Board of Editors, dropped all other activities, and published the October issue under the theme, “The Struggle for Power.” This was read and approved at a full meeting of the Board of Directors in October, 1943. Within a week thereafter, at a secret meeting of the small Executive Committee, to which I was not invited, the decision was made, on grounds of economy, to abolish the magazine. I printed my interpretation of the action of the Board in the concluding issue, December, 1943. Its title, “We Accept in Principle but Reject in Practice,” states the chief problem now before “progressive education.” The fundamental point of

THE EDUCATIONAL FRONTIER: 1890's-1940's

view of the leaders of progressive schools has changed very little, even under the menace of the Fascist threat, total war, and the insistent urgings of the *Social Frontier* leadership.

/ / /

This, then, was the national education scene in the depression years; the society caught in a dreadful economic and social impasse, most of the schools still fairly aloof from it, a few pioneers struggling to make them society-centered as well as child-centered.

It was against this background that a few far-seeking citizens and educators threw themselves into the study of *one of the most critical problems of American life*:

THE YOUTH PROBLEM

What is the youth problem? Howard Bell stated it succinctly:¹ What shall 21,000,000 young Americans

“do with themselves during the ever-widening period between the time when the schools are through with them and jobs are ready for them?”

The term “youth problem” had come into widespread circulation in Europe and America in the years after World War I, and an exciting youth movement had begun to take shape on the other side of the Atlantic. America lagged behind. The '20's were known here as the Jazz Age or the age of “wild youth”; Scott Fitzgerald styled the young people themselves “The Lost Generation.” Things were bad enough for youth in that decade, but with the onset of the depression their conditions grew worse. By 1935, of the 21,000,000 youth between sixteen and twenty-four, “over 4,000,000 of those out of school were unemployed.” According to the 1940 census: *only 22 per cent of the employable population were under twenty-five; nevertheless 35 per cent of the unemployed were youth — under twenty-five years.*

Something had to be done about it, and both government and private citizens moved with dispatch. The Federal government organized the CCC and the NYA, and the American Council on Education organized its American Youth Commission. In its announcement of plans, the Council stated the youth problem:

¹ In his *Youth Tell Their Story*. A report of the American Youth Commission (1938). The American Council on Education, Washington, D. C.

SOCIETY-CENTERED FOUNDATIONS

"Recent social and economic changes in the United States have given rise to difficulties in the care and education of young people with which existing institutions are quite unprepared to deal adequately. The changes not only have greatly intensified the problems which confront the schools, but also have created an urgent need of protection and further education for millions of youth whom the schools are not now reaching. Without some provision for basic planning to meet this situation, there is serious danger that present conditions may constitute a fundamental threat to the national welfare."¹

Some Critical Facts about American Youth

The term "youth" is used to denote that very large sector of our population between adolescence and young manhood; more bluntly put — between school and a job, marriage, and home. To mark its years off chronologically is arbitrary, but I shall follow the practice of the American Youth Commission and include the years sixteen to twenty-four.

One of the first contributions of the American Youth Commission was their "Study of the Conditions and Attitudes of (13,528) Young People in Maryland."² Since this was shown to be definitely representative of the national situation, we can build our study of the youth problem on its findings. Succinctly summed up, with a few additional facts from the 1940 census, they are:

In 1940 there were 21,000,000. Of these

- 7,000,000 were in high schools.
- 2,500,000 were in colleges, universities, technical and professional institutions.
- Half of them grow up in "working-class" homes of less than "adequate diet standard of living" ... Nearly one third of these are "broken homes."
- The crux of the youth problem is low income and large-family homes ... Millions of youth are being discriminated against by the social stratification of society. This stratification is increasing dangerously. Youth are not "equal"; equality is a myth. Youth's opportunities are stratified as well as those of adults.

¹ *Youth and the Future*, page x. The *General Report* of the American Youth Commission.

² *Op. cit.*, Howard Bell.

THE EDUCATIONAL FRONTIER: 1890's-1940's

- The economic factors force youth out of school, into a job and marriage and having children - a vicious "circle of economic determinism."
- Two forces can "blast this circle": (1) the state and community can and must equalize the economic opportunities ... (2) they must make clear to the people how large families and continued poverty result from it.
- Youth themselves agree that this is the nub of the "youth problem" - that it is essentially one of economic security - getting a job at a decent wage and being given more education and healthful and satisfying recreation and leisure-time programs that will build their spiritual lives. They think the wages of most employed people are much too low and government should do something about it, even to setting minimum wages and maximum hours and standards of work.
- The American Youth Commission concludes that effective vocational, recreational, and educational programs *must* be created for *all* American youth. These must really (1) equalize economic opportunities ... (2) be definitely fitted to the needs of youth.

SOURCES FOR THE STUDY OF THE YOUTH PROBLEM

By the early 1930's youth had become the most studied age-group in America. In this work three educational organizations led the way, financed by grants of money from the Carnegie Corporation and the (Rockefeller) General Education Board:

- The American Council on Education organized its American Youth Commission in 1935 under the lay leadership of Newton D. Baker, Owen D. Young, and Henry I. Harriman, and the educational directorship, first of Homer P. Rainey (1935-1939) and then of Floyd W. Reeves * (1939-1941). Six important reports were published between 1938 and 1942: Reeves and others: *Youth and the Future*. General Report
Howard M. Bell: *Youth Tell Their Story*
Commission's Staff: *What the High Schools Ought to Teach*
Lewis L. Lorwin: *Youth Work Programs*
Robert L. Sutherland: *Color, Class, and Personality*
M. M. Chambers: *Youth-Serving Organizations*

* And the following personnel: Miriam Van Waters, Will W. Alexander, Clarence A. Dykstra, Dorothy Canfield Fisher, Willard E. Givens, George Johnson, Mordecai W. Johnson, Chester H. Rowell, William F. Russell, John W. Studebaker, Henry C. Taylor, Matthew Woll, George F. Zook.

Bell sums up the basic problem:

There are said to be many things that a democracy must have, or die. One of these things, we suspect, is a social order enriched with enough generosity and foresight to provide all its youth with opportunities to grow, and endowed with enough wisdom and courage to make these opportunities worth the taking.”¹

THE PROBLEM OF WORK FOR YOUTH

All the Commissions agreed that the key problem was economic, namely — work for youth. Of the 9414 youth in the Maryland survey, exactly two thirds said that they regarded “economic security” as their chief personal problem, education and vocational guidance second in importance. I quote some of the comments the Maryland youth made to Howard Bell:

“Youth is in a muddle. Out of school too young; they don’t know what they want to do or why. They are in the midst of a great social and economic change.”

¹ *Ibid.*, page 48.

SOURCES — *Continued*

The Progressive Education Association, through three distinguished Commissions, explored three phases of the youth problem:

I. The Commission on the Relation between School and College conducted — between 1930 and 1941 — its “Eight-Year Study” of the effect of loosening college entrance requirements on the high school curriculum. Its findings were published in 1942 and 1943 (Harpers) in five of the most important contributions to secondary education that have ever been made: General title: ADVENTURE IN AMERICAN EDUCATION.

I: *The Story of the Eight-Year Study*, by Wilford M. Aikin

II: *Exploring the Curriculum*, by H. H. Giles, S. P. McCutchen, and A. N. Zechiel

III: *Appraising and Recording Student Progress*, by Eugene R. Smith, Ralph W. Tyler, *et al.*

IV: *Did They Succeed in College?* by Dean Chamberlin and others

V: *Thirty Schools Tell Their Story*

II. The Commission on the Secondary School Curriculum conducted, between 1932 and 1937, two important investigations: (1) by its Subcommittee on Adolescence, 650 case-studies of individual youth; the report was issued in an important volume by Caroline Zachry, entitled *Emotion and Conduct in Adolescence ...* (2) by the Commission it-

Getting a job so as to get married is the crux of it, some say:

"We can't get a job like other people used to before." Solution: "The government should pass some kind of law."

"Getting jobs is the main problem. Employers want experienced people, and I don't see how you can get experience if they won't give you a job."

"The problem is how to get married on \$15 a week."¹

What the Government Did: CCC and NYA

It is a matter of public record that the Federal government moved quickly to do something about jobs for youth. In 1933 it established the Civilian Conservation Corps (CCC), in 1935 the National Youth Administration (NYA). The CCC gave full-time work to young men, housing them near their work projects. The NYA provided part-time employment for both men and women, who lived at home and maintained their normal community lives. The CCC cost approximately \$1200 per worker per year, the NYA \$225. By 1940 the CCC had given employment to 2,500,000 young men, 84 per cent of whom were under nineteen years of age. In the eight years of the CCC (1933-

¹ *Op. cit.*, Howard Bell, pages 251-253.

SOURCES — *Continued*

self — a study of our changing society and of the contribution of the academic fields of knowledge to the introduction of youth to their personal problems and community relationships. The Commission published its general findings in:

— V. T. Thayer, C. Zachry, and R. Kotinsky: *Reorganizing Secondary Education*

Its findings on other aspects of the problem were publicized in:

— Elbert Lenrow: *Reader's Guide to Prose Fiction: Bibliographies of 1500 Novels*

— Lawrence H. Conrad: *Teaching Creative Writing*

— *The Visual Arts in General Education*

— Peter A. Bloss: *The Adolescent Personality: A Study of Individual Behavior*

— *Language in General Education*

— *Mathematics in General Education*

— *Science in General Education*

— *The Social Studies in General Education*

III. The Commission on Human Relations conducted, between 1935 and 1939, a study of the concepts that lie at the root of youth's personality and behavior problems; they assembled and published five volumes of new materials based on the contributions to education of youth of

1941) 80 per cent worked effectively and remained for one or more 6-month terms; 20 per cent either deserted or were disciplined. In the eight years their labors totaled \$1,500,000,000 of work. The Youth Commission went on record: "For the first time in their history, the major conservation agencies of the Federal government were provided with a labor force approximating the size of their task."¹

The NYA provided part-time employment for 1,750,000 out-of-school youth and a student-work program for 1,800,000 in-school youth. The typical program totaled 60 hours a month at a compensation of about \$16. After 1940, on defense-work programs, youth workers devoted

"160 hours a month to a combination of work on the projects and related instruction provided by educational authorities, with a minimum of 80 hours of work a month."

¹ *Op. cit.*, *Youth and the Future*, page 33.

SOURCES — *Continued*

anthropology, psychology, psychiatry, sociology, child study, and literature: *

- Alice Keliher: *Life and Growth*
- Louise Rosenblatt: *Literature as Exploration*
- Katharine W. Taylor: *Do Adolescents Need Parents?*
- *The Family, Past and Present*
- *Psychology and Human Living*



Two other national organizations also made new syntheses on the problem of youth and education:

- The North Central Association of Schools and Colleges; see its
 - *General Education in the American College* (Alvin Eurich, Editor)
 - *General Education in the American High School* (B. Lamar Johnson, Editor)
- The National Association of Secondary School Principals; see especially its
 - *Planning for American Youth* by J. Paul Leonard; based on *Education for All American Youth* by the Educational Policies Commission of the National Education Association

* The Chairman, Alice Keliher, said that the "initial plan for a series of publications in human relations evolved from the conferences of the 'Hanover Group.' This group, meeting at Dartmouth College, included Lawrence K. Frank, Lura Beam, John Dollard, Earl T. Engle, Mary Fisher, Willis Plant. The outlines and source materials (referred to in footnotes as the Hanover Outline on Personality and Culture) planned by these members of the Hanover Group were given to the Commission to serve as a starting point for its activities." Katharine Whiteside Taylor: *Do Adolescents Need Parents?* Preface by Dr. Keliher.

THE EDUCATIONAL FRONTIER: 1890's-1940's

The work projects were diversified, construction projects providing the largest amount of unemployment. Thousands of small public buildings were built by the men — rural schools, workshops, community center and recreation buildings — together with roads, parks, airports, and riverbanks. The women were employed in clerical and service activities in schools, hospitals, libraries, and social agencies. Both men and women produced clothing, household articles, hospital supplies, school furniture, playground equipment, and other articles.

One consequence of the Federal government's attempt to provide work for youth was the arousing of progressive school administrators to incorporate work-experience in their educational programs. A few pioneers had been doing that for years; witness John French at the Cambridge School. But in the latter years of the 1930's public school leaders were aroused to the importance of the problem and many examples of part-time work and schooling appeared.

THE NEW EMPHASIS ON THE NEEDS OF YOUTH

The first generation of child-centered schools had frequently been built on interests; what the children *wanted* to do played a large part in the new life and program. With the rise of a better-designed education after 1930 the chief criterion became *the needs of the student*. *Each of the Commissions studying the youth problem built its program*

SOURCES ON THE NEEDS OF YOUTH

The key person in these groups was the late Dr. Caroline Zachry. She was the chairman of the subcommittee on "The Study of Adolescents" of the Commission on Secondary Education, a member of the John Dewey Society's Committee on the Curriculum, and wrote a chapter in the report of the Committee on Adolescence of the National Society for the Study of Education. I have, therefore, leaned heavily upon her work as represented in:

- Zachry: *Emotion and Conduct in Adolescence*
- Thayer, Zachry, and Kotinsky: *Reorganizing Secondary Education*
- "Adolescence." *Forty-third Yearbook*, NSSE; Chapter XVII.

In addition, studies of needs are to be found in:

- *Youth and the Future*. American Youth Commission. American Council on Education
- Keliher: *Life and Growth*
- Katharine W. Taylor: *Do Adolescents Need Parents?* (Both of these last two are from the PEA's Commission on Human Relations.)

on a study of the needs of youth. But by far the best were those of the three Commissions of the Progressive Education Association.

The work of Dr. Zachry's groups was based on "four crucial areas of needs."¹

"Studies of adolescents suggest that their needs group themselves roughly into four areas: immediate social relationships, wider social relationships, economic relationships, and — closely related to all of these — personal living. It is on the basis of needs in these aspects of living that the discussion of this volume is phrased . . . Needs are phrased in terms of the individual's functioning relationships with the groups in which he lives primarily because they are conceived as both personal and social in nature. The personality of the individual is formed only through functioning relationships with others, and its needs cannot be met without them."

From the studies of the PEA Commissions we get a new appraisal of the nature of adolescence; *in a sense it constitutes the extension of Dr. Dewey's theory of growth into the high school period.* The new knowledge emphasizes unique transitional characteristics of the period of adolescence. In these years appear the most rapid changes in physical, mental, and emotional growth; hence the period of greatest stress and strain and the need for sympathetic understanding and guidance by home and school. This is the most critical stage in the development of the problem of I and We. Social relationships become crucial in the life of the individual — both the immediate face-to-face ones of the youth and their elders and the wider ones of the changing society around them. For a dozen years the individual has been held dependent within the "circumscribing loyalties" of the family circle. Now adolescence breaks that bondage. The individual is freed from the parents and many new relationships are established with people outside the family group. But a difficult task lies ahead — the achievement of true *personal* independence, integrity of individuality of The Person.² The youth is thrown out into a strange exciting but bewildering world, in which he must find and identify himself with new ideals and standards of conduct. He must now begin to work out what is to be his own unique way of life. He must learn the social significance of work and "grow in adequacy for the complex common life" of a

¹ Thayer, Zachry, and Kotinsky: *Reorganizing Secondary Education*, page 44.

² See the review of the psychology of the person in Chapter VI.

swiftly changing society — and he must fit himself into it, including, on the widest reaches of social relationship, participation in community affairs.

✓ ✓ ✓

On the individual side, the process of becoming a Person is hampered by “adverse social conditions and cultural attitudes” within the school; witness, the Commission says:

- the preoccupation with pecuniary rewards
- the halo of prestige of outmoded ideas of “personal culture”
- the neglect of the esthetic quality of experience
- the natural habit of neglecting health
- the feverish quest for obliviousness, to “lose one’s self in the crowd”
- the lack of a valid philosophy of values

What shall be the guiding criteria of value in this strange maze? The Commission finds the principles of worthy personal living identical with those of group life. These principles “lie precisely in the basic ideals of democracy itself.” The first is our “sense of the dignity and worth of ourselves as Persons” . . .

“Any pursuit, conception, or preoccupation that robs the individual of worth in his own eyes or in those of his fellows is unworthy of the personal life as it is of social, civic, or economic relationships.”

The second principle:

“those activities are worthy which further mutually responsible and enriching relationships between the individual and the group — relationships which encourage the valuable uniqueness of the individual and enhance the esthetic quality of group life.”

The third principle is the free play of intelligence.

The school can contribute to the building of the Individual into the Person, therefore, if it

- values *the personal life* of the student.
- divests itself of its pecuniary and academic emphasis.
- eliminates its trait of standardization.
- builds appreciation of the esthetic side of life.
- consciously builds the health of the students.
- cuts down the present overstimulating emphasis on “problem-solving.”

SOCIETY-CENTERED FOUNDATIONS

- fosters a democracy of interests.
- helps the student to build a personal philosophy of life.

/ / /

These were the principles and criteria adopted by the PEA's Commissions in studying the youth problem.

THE PERSONAL PSYCHOLOGICAL PROBLEMS OF YOUTH

Two major studies of the actual conditions, needs, and wants of high school youth were made. The first was by Dr. Zachry's Committee, which carried on an elaborate investigation of 650 adolescents by the personal case-study method. These youth constituted a typical cross section of classroom populations in American schools, including whole class groups in both private and public schools and ranging from the junior high school to the senior class of college.

In 1935 the second study was made by the Commission on Human Relations, led by Dr. Alice Kelihier and, aided by "The Hanover Group" of distinguished students of the social and psychological sciences, paralleled and supported much of Dr. Zachry's work. They set out to build a new view of human nature and society which would recognize and counteract "the unspoken tensions and psychological distortions which are today leading so directly into intolerance, hatred, vindictiveness and eagerness to judge and condemn others." Seeking to discover in anthropology, psychology, psychiatry, sociology, biology, child study and literature, material of direct value to answer the insistent questions of young people, they prepared an Outline of Personality and Culture. Basic to it was a statement of what youth want most. They want:

"understanding friendship" . . . [to know] "how to attract friends of their own age, their own sex and of the opposite sex." [They are] "concerned about the applications of standards of behavior to their social lives. They want help in clarifying confusions which come about inevitably because their parents live with a set of ideals and ideas different from their own age groups . . . [They] are also looking forward to the place marriage would play in their life design."¹

¹ Progressive Education Association: *Progressive Education Advances*, pages 50-51.

These concerns of young people spring from the conditions of domination and frustration in an adult world in which the grownups themselves have lost their mooring masts and are unsure and bewildered. These young people "speak of excessive authority and domination in their homes . . . ask in bewildered terms about their prolonged economic dependence upon their families." They find themselves "forcing an emotional break with their families and afterwards feeling guilty about their behavior." Part of the major problem of youth is the frustration of "their natural need to have a recognized place in society." "Most . . . baffling to youth is the vastness and complexity of our social and economic organization." Youth speak about the "shrouded future" in their adolescent poems, expressing a "vague and infinite unrest" which comes from the baffling conflicts of values which society imposes upon them. Around them, in their parents and neighbors, they see bewilderment and lack of sureness. They are blocked from building a life of integrity by the race for economic security and by the increase of crime and delinquency around them. On all sides illustrations accumulate of the lack of integrity in American life. Moreover, millions of these youths are second-generation immigrants, facing "the problem of deriving . . . values from two distinct cultures in which he must live, the culture of his parents and the culture of his community."

The Commission recognized the basic importance of problems of sex; the necessity of substituting a frank, normal attitude for the notorious secretive attitude about physiological processes. They would abolish "feelings of shame coupled with ignorance" which "lead to peculiar tensions during adolescence." They insist that "realistic education must deal not only with the facts demanded by questioning youth, but must give them in addition an interpretation of the flow of ideas, prejudices, and superstitions which envelop them in their culture."

But these are the conditions and problems the conventional school and most parents of the neo-Victorian era marked as taboo. After 1930 the educational progressives confronted them squarely, bringing to bear upon them the contributions of a hundred years of psychiatry, social psychology, new education, and an advancing knowledge of sex hygiene. Their work brought Charcot, Janet, Freud, Adler, Jung, and Rank into direct relationships with James, Dewey, Mead, and the functional psychologists, with Gestalt, with Thomas, Boas, and the sociologists and the anthropologists.

SOCIETY-CENTERED FOUNDATIONS

These were the central themes and problems which, out of its voluminous researches, the Commission stated in the series of important volumes to which we have referred.

The Commission on Human Relations also made a study of the manner in which the resources of the departments of the school can introduce young people to the life of the community and the changing society. It accepted the general academic framework of the school, asking: What can each of the learned disciplines — science, the arts, language, the social studies, mathematics, literature — contribute to youth's understanding of himself as an organism, as an emerging personality, as a participating member of a society, and as a prospective worker and citizen? The results were published in the fine library of new materials referred to earlier.

LOOSENING THE STRANGLEHOLD OF THE COLLEGE ON THE HIGH SCHOOL

The PEA's "Eight-Year Study"

The Commission on the Relation between School and College was appointed in 1930, essentially the brain child of Dr. Wilford M. Aikin, who was its Director throughout the thirteen years which passed before the fifth volume of this report was in print.¹ The Commission stated the plan succinctly:

"The plan provided that a small group of secondary schools (thirty in number eventually) *be set free by the colleges* (300 in number) to engage in experimental study of the work of the secondary schools, and that the colleges agree to accept students from these schools for a period of five years, beginning in 1936, without regard to the requirements generally in force and without the usual entrance examinations. The selection of candidates from these schools was to be based, instead, upon the statement of the principal of the school and a carefully recorded history of the student's school life and activities and other evidences of the quality of his work as well as the ground covered. Scores on scholastic aptitude, achievement and other diagnostic tests given

¹ I was a member of the Commission throughout its work; in fact, I was present, I think, at the birth of the idea (1929-1930) when Burton Fowler and I made an inside survey of Wilford Aikin's John Burroughs School. Fowler was President of the Progressive Education Association, Aikin was Chairman of the Commission, and I was a member of the Board of Directors.

by the schools during the secondary-school course were also to be taken 'into consideration."¹

All the essentials of the plan were carried out. After three years of careful planning the high schools began their work in September, 1933, and the first group under the plan, approximately 1100 students, were admitted to 170 colleges in 1936. The second group, approximately 1200, entered college in September, 1937; three more groups entered in the three succeeding years, the last one in the fall of 1940. The work closed officially in 1941, the five reports being published in 1942 and 1943.²

The Governing Principles

After reciting a long list of the inadequacies of present secondary education, many of which have been caused by the stranglehold of the college on the high school, the Commission stated the principles which governed its work; I pick out a few of the most important ones:

"the curriculum ... should *deal with the present concerns of young people* as well as with ... our cultural heritage."

"the spirit and practice of experimentation and exploration should characterize" the schools.

¹ *Progressive Education Advances*, page 17. A progress report on the work of the Progressive Education Association's Commissions. [My italics.]

² The Thirty Schools were a good cross section of the nation's secondary schools. About half were private, half public; some were from small towns, some from large cities. The public high schools were from Altoona, Pennsylvania; Bronxville, New York; Denver, Colorado; Des Moines, Iowa; Tulsa, Oklahoma; and Los Angeles, California. Private schools included day and boarding schools and university "laboratory" and private progressive schools. There were schools like Baldwin at Bryn Mawr and Milton Academy and Winsor in Massachusetts. The oldest progressive schools — Francis W. Parker, Horace Mann, and the Fieldston of the Ethical Culture Society — were included, and three of the Friends Schools — Friends Central, George, and Germantown Friends. There were two small well-to-do community high schools — Bronxville, New York, and Shaker Heights, Ohio, and six university laboratory schools — Lincoln and Horace Mann School of Teachers College, University of Chicago, University School of Ohio State University, Wisconsin High School of the University of Wisconsin, and University High School, Oakland, California. City and town high schools were included — New Trier in Winnetka, Illinois, Eagle Rock in Los Angeles; the high schools of Denver, Des Moines, Tulsa; Cheltenham Township High School, Elkins Park, Pennsylvania; Radnor High School, Wayne, Pennsylvania. There were two country day schools, Beaver near Boston and North Shore near Chicago. And two other private progressive schools, Dalton in New York and Tower Hill in Wilmington, Delaware.

SOCIETY-CENTERED FOUNDATIONS

“the general life of the school and methods of teaching should conform to what is now known about the ways in which human beings learn and grow.”

“the high school in the United States should rediscover its chief reason for existence.”

“fundamental revision should be undertaken only after thoughtful, co-operative reconsideration of the high school’s function in the community it serves.”

success in college “does not depend upon the study of certain subjects . . . there are many different kinds of experience by which students may prepare themselves for successful work in college.”¹

WHAT DID THE SCHOOLS DO WITH THEIR FREEDOM?

Each school was on its own so far as making changes in the curriculum were concerned. Some of the older private schools made few changes, merely altering emphasis, bringing more of contemporary life in relation to the classic past in literature, history, civics, and science. Others made extensive changes in their programs, rebuilding them either around a “core curriculum” or a series of “broad fields,” both of which emphasized the study of civilization, present and past. Some of the old progressive schools continued to use the analogy of “culture epochs,” centering the pupils’ study on the government, ways of living, developing technology, arts and crafts, mathematics and science of such earlier historic civilizations as those of Greece, medieval European culture, and colonial America. And some schools selected a typical region or people and studied the total culture.

“General Education” and the “Core Curriculum” Built around the Problems of Youth

In a Denver high school, pupils and teachers built a “core curriculum” and carried it on two hours a day, for two or three years, the teacher moving with the class. The problems used by the five senior high schools in planning for the core program include such activities as:

- studying the personal living of the youths
- understanding themselves and their neighbors

¹ W. M. Aikin: *The Story of the Eight-Year Study*, pages 17–23.

- developing interests and appreciation in reading, gardening, the arts, and the sciences
- exploring problems of living in the family, and in many social-civic relationships
- discovering the characteristics of American democracy and comparing them with the traits of other cultures
- studying the actual working of our economic system

In these "general-education-centered" schools what do the young people do with the other four hours of their day?

"That depends upon the individual. All students share in the units of study which comprise the core or general education course. For the rest of his work each student's program is his own. From the whole range of studies offered by the school, choice is made of what is best for him. . . . the student does not select his courses haphazardly or on his own responsibility. There have been frequent conferences involving student, parents, and adviser. Their combined wisdom is brought to bear upon the planning of the student's program."¹

Youth and the Community

There were other important curriculum changes. One was the greater tying in of the work with the actual life of the community. One of the schools states that

"the value of the community as a vast reservoir of social, cultural, vocational, economic, industrial, and recreational resources is steadily gaining the attention of secondary education in California."²

"Visits to newspaper plants, factories, farms, libraries, museums, social-service and governmental institutions are common practice in schools generally. To be of greatest value, the Thirty Schools have found that such firsthand investigations should be part of a well-planned study with definite purposes clearly understood. In one school, located in Boston, the work of the ninth grade centers upon the study of history and present life and problems of that community."³

¹ *Ibid.*, pages 61-62.

² Report from Eagle Rock High School, Los Angeles, California. *Ibid.*, page 63

³ *Ibid.*, page 63.

The Thirty Schools and Work for Youth

In most of the private schools of the Study the young people were going to college, so the problem of preparing for immediate entrance *into vocation* was not urgent; these schools did not understand that that was a vital separate problem of "work-experience." *But in the public high schools work-experience was in the center of attention.* In one¹ which sends less than 20 per cent of its graduates to college, and most of the high school graduates marry within three years after leaving school, the teachers declared that the school must prepare the youths for

"the two great steps just ahead: making a living and establishing a home."

"The result was that the study of these two topics became the core curriculum of the senior year. . . . The units of the course were stated in the form of student questions, such as: How do men and women earn their living in this city and region? For what general field of work am I best fitted by ability, aptitude, and interests? How does one go about getting a job? How can I hold one when I get it? What causes failure? Other questions relative to marriage and home are considered and the concluding unit is 'Finding Meaning in Life.'"

Given freedom from the bondage of college entrance requirements, some of the private schools so loved the "mental chains" of the "seven liberal arts" which their years of servitude to the college had bred in them that they did little beyond "vitalizing the curriculum" in Latin, mathematics, and the like. In others, boundaries between subjects were broken down and new "broad fields" of subject matter were substituted for narrow old-time subjects.

THE EVALUATION OF
EDUCATIONAL RESULTS

The Eight-Year Study was a unique educational experiment, probably the most distinctive large-scale one in the past half-century. Moreover, it was a *controlled* experiment, in which results were elaborately measured with quantitative instruments. Early in the work, therefore, two important subcommittees were formed: (1) The "Com-

¹ Report from the High Schools, Oakland, California.

mittee on Records and Reports," (Dr. Eugene Randolph Smith, Chairman¹) . . . (2) The Committee on Evaluation and Recording, and its Evaluation Staff (Dr. Ralph W. Tyler, Chairman). Their achieved results constitute, in my judgment, the most important single group contribution to educational appraisal in our times. I speak first of the work of Dr. Tyler's group in evaluation.

I. *Evaluating Student Progress*

In building the evaluation program Tyler and Smith assumed, first, that education is "a process which seeks to change *the behavior patterns of human beings*," that these *are* the educational objectives of the school and hence should be measured; second, that human behavior is so complex that "it cannot be adequately described or measured by a single term or a single dimension"; hence "any device which provides valid evidence regarding the progress of students toward educational objectives is appropriate."²

The Thirty Schools formulated their own objectives, these were classified, *each was defined in terms of types of behavior*, situations were identified which would display these types of behavior, preliminary trials of test materials were made, permanent tests and other new measuring instruments were constructed and validated, and an elaborate method of using and interpreting them was developed. The Evaluation Staff sought to find out what changes were produced in students by their school experiences. . . . Always evaluation was related to purposes which teachers considered important. In seven years the staff devised some two hundred tests, used them experimentally, and tried them out again and again. Some were finally discarded; others proved to be satisfactory and have been used with thousands of students.

Eighty-seven new tests and other appraisal instruments were constructed, one or more of which were used by approximately five hundred teachers in nearly three hundred schools outside the Thirty Schools. Testing agencies outside the Progressive Education Association made use of the tests. Scores of educational conferences were held in which the new tests and the results were discussed. Close attention was devoted to building attitudes of teachers, parents, and

¹ Who, with Dr. Ralph W. Tyler and the Evaluation Staff, published the results of years of investigations in Volume III, *Appraising and Recording Student Progress*.

² *Ibid.*, pages 7-14.

administrators toward the evaluation of their work. Teachers from various schools were brought together frequently for study and discussion of common programs. The Evaluation Staff visited the schools constantly. Inter-school evaluation committees were developed. Special groups of teachers were brought together in the Headquarters Laboratory and in six Summer Workshops. Thus, in still another way, *the Eight-Year Study became a teacher education study.*

II. Recording Student Progress

Finally, the Eight-Year Study gave a new answer to the question: What goes into the student's record? This is important to the student and to all others who deal with him:

“to provide a sound basis for his counseling and to build intelligent coöperation between the home and the school.”¹

Sound records must be based on the school's objectives, describe behavior clearly, be simple and economical, have clear and significant trait names arranged on flexible “forms.”

Abolishing school “marks,” four new types of forms for records and reports were developed after prolonged experimentation:

- “Behavior Description”
- “Reports to Parents”
- “Transfer from School to College”
- “Development of Pupils in Subject Fields”²

The Behavior Description form illustrates again the manner in which the PEA Commission made an important contribution to the effectiveness of education. It provides for a detailed but easily used description of the student

“under these headings: Responsibility-Dependability, Creativeness and Imagination, Influence, Inquiring Mind, Open-mindedness, Power and Habit of Analysis, Social Concern, Emotional Responsiveness, Serious Purpose, Social Adjustability, Work Habits. Because words have varying meanings, the form indicates the meaning of each heading and provides for a report upon the degree or extent to which the term is descriptive of the student.”³

¹ *Op. cit.*, Aikin, pages 96-97.

² *Ibid.*, pages 96-97.

³ *Ibid.*, pages 98-99.

DID THE "PROGRESSIVES"
SUCCEED IN COLLEGE?

They did, and better than their mates from the conventional schools. This was proved by an elaborate measured follow-up that the Evaluation Staff made of their work through the four years of college. Each of 1475 graduates of the experimental schools who went to twenty-five selected colleges¹ was matched with a student of the same "sex, age, race, scholastic aptitude, home and community background, interest and probable future" from regular conventional high-school courses. These 1475 pairs of students were studied through the four years of their college course; their marks were tabulated and compared, their standings on tests, their literary themes, prizes or other honors won, other aspects of their personal records. All students in experimental and control groups filled out elaborate questionnaires giving data on their reading, health and personal problems, and "extra-curricular" activities.

What did they find out? Let a committee of presidents and deans of six of the colleges sum it up, in the words of Dr. H. E. Hawkes, Dean of Columbia College, the Chairman:

"There were [in the study] 361 students from the *least conventional* six schools, and 417 from the *most conventional* [six] schools. It turns out that the students from the least conventional schools excelled their controls by a score that may roughly be expressed as 27 to 7, while the students from the most conventional schools of the Thirty were excelled by their control group by a score that may roughly be expressed as 14 to 16. That is, so far as these data are significant, the students from the schools whose pattern of program differed most from the conventional were very distinctly superior to those from the more conventional type of school.

"I should add, that in extra-curricular interests non-athletic in character, the graduates of the thirty schools were markedly more alert than their comparison group . . .

"It looks as if the stimulus and the initiative which the less conventional approach to secondary school education affords sends on to college better human material than we have obtained in the past."

¹ There were five state universities, six coeducational endowed institutions, nine men's and five women's Eastern colleges.

SOCIETY-CENTERED FOUNDATIONS

This is the positive appraisal of distinguished college leaders¹ who began the study with a deep skepticism as to its results. *Did They Succeed in College?* (Volume IV) gives the results from the objective record, built up over eleven years, of the coöperation between hundreds of teachers and administrators of schools and colleges. *Matched person for person, the graduates of the progressive schools were more competent, more creative, more alert and intelligent after four years of the new type of high school education than their mates in the conventional schools. They won more academic honors, they had more intellectual skill and information, they were more systematic and objective in their thinking, knew more about the meaning of life and education, and had a deeper and more active intellectual curiosity. They were markedly more concerned about the life of their own community and of the crucial affairs of the world outside. They had more resourcefulness. They won more honors in student organizations, athletic teams, music, the theater and the dance and the other creative arts. When left to their own resources they initiated more important and stimulating nonacademic activities.*

While Mr. Aikin, the Director of the Study, leaned over backward in the modesty of his conclusions, he stated their implications more bluntly:²

"The assumption that preparation for the liberal arts college depends upon the study of certain prescribed subjects in the secondary school is no longer tenable" . . . "secondary schools can be trusted with a greater measure of freedom than college requirements now permit." . . .

"The Eight-Year Study has demonstrated beyond question, [that the colleges] can secure all the information they need for selection of candidates for admission without restricting the secondary school by prescribing the curriculum."

They can use "standardized tests and other types of tests . . . such as those prepared by the Evaluation Staff . . . Scholastic aptitude tests that measure characteristics essential to college work and are

¹ Having been present at the conferences of the Commission, I can testify personally to the steady change in attitude by the college officers from skepticism to marked approval.

² *Op. cit.*, Aiken, page 118.

independent of particular patterns of school preparation" ... and "records of achievement in examinations that do not presuppose a particular pattern of content. An example is the Comprehensive English examination of the College Examination Board." "An admission plan such as this would not fix the content or organization of the high school curriculum."¹

✓ ✓ ✓

The agreement between the Thirty Schools and the colleges expired in 1943. Long before that the schools were asking: "What will happen then?" "Would it be necessary to give up the new work, which the schools [were] eager to carry on, and return to prescribed courses and a static curriculum?"

The Commission said, in its final report, that three steps should be taken:

"First, until the purposes of general education in the liberal arts colleges are clearly defined and plainly stated, subject and unit prescriptions and entrance examinations that prescribe the content or organization of the secondary school curriculum should be discontinued.

Second, the knowledge, skills, habits, and qualities of mind and character essential as preparation for college work should be ascertained by colleges and schools cooperatively.

Third, a plan of admission should be adopted which provides the college with needed information concerning candidates, but which does not prescribe the content or organization of the secondary school curriculum.

Should these three steps be taken great progress would surely come in both secondary and higher education throughout the country."

✓ ✓ ✓

I regret to report that these steps have not yet been taken.

Summing Up

This is the splendid record of three Commissions of the Progressive Education Association during the depression. From its formation in the winter of 1919 to the outbreak of World War II the Associa-

¹ *Ibid.*, pages 122-124.

SOCIETY-CENTERED FOUNDATIONS

tion guided the trend of thought and interest of the progressive movement. During the first decade attention was centered by the freelance leaders on the elementary school, and the chief new outcome was the improvising of "units of work" around child interests; it was child-centered. In the second decade, the years of the Great Depression (I do not report here the work of the Association during World War II years), the central leadership came more largely from university students of education and psychology. Trained and skilled experimenters in education made frank and bold studies of adolescent and adult society, embarked upon a tremendous research and publication program, financed by several million dollars of Foundation money. Although the great majority of the PEA leaders continued to confine their experimenting to little children, the Commissions concentrated on the problems of youth and the reconstruction of the secondary school and the college. From their work in the past fifteen years we have learned three things:

First: We have enormously clarified the *needs* of youth — what they themselves want and the psychological factors involved. A vastly clearer biopsychological picture of youth is beginning to emerge.

Second: We have shown that the traditional college requirements hamper the building of an education appropriate to the needs and wants of youth; when the grip of the college is loosened the schools tend to create a school that produces a better quality of young manhood and womanhood.

Third: We have learned techniques of freeing the high school from the traditional academic college and have gathered some of the concepts of the new program of studies. (I shall state those in the final appraisal of what we have learned from five decades of curriculum-development in Chapter XX.)

These are important achievements.

✓ ✓ ✓

On the negative side, great inadequacies of design stand out. The progressive schools and their leaders have made little progress in putting the sociological, esthetic, and ethical foundations to work. There is still little interest in the study of foundational concepts and far too little concern with the problem of the basic design of the school and of a community program of education.

LOOKING BACK AT
THE PROGRESSIVE MOVEMENT

As the years of the quarter century since World War I have passed, the Progressive Movement has come to embrace far more than the work of the schools associated together in the PEA. It has been profoundly affected by the educational sociologists of the country. Public schools have been widely influenced. Groups of lay citizens have come to embrace many of the progressives' basic concepts. The evidence is now before us in the work of such Community Schools as Ballard and Arthurdale . . . of the American Youth Commission . . . of the Educational Policies Commission of the NEA . . . of the North Central Association of Schools and Colleges . . . of the Department of Supervision and Curriculum Development of the NEA . . . of the National Association of Secondary School Principals, and of the leaders of the *Social Frontier* and the John Dewey Society.

These hitherto separated efforts are being fused into a real nucleus for a great Progressive Movement in education. Out of these strands are emerging a great faith in the people and in self-government, a deep concern for the self-actuated growth of the child and his life in the community, a devotion to the study of the industrial culture, a conviction that the abundant life can be ushered in and that education will play a crucial role in it.



But there are honest and scholarly doubters, especially concerning the central tenets of the Progressives. Sincere critics — the Essentialists of education and the defenders of the classical tradition — insist that the consuming absorption in contemporary life, in present needs and interests, and in expression will destroy the educational gains of two thousand years. They are deeply concerned with the preservation of the great cultural heritage of the past. During the past ten years another dramatic episode in the perennial revival of interest in the "liberal arts" has captured the public's attention. It is important for us, therefore, to make a record of it here and appraise it in the background of the progressive movement.

To that task we turn in Chapter XIX.

CHAPTER XIX

The Last Stand of Authority in Education: The Subject-Centered Curriculum

The students of the course of human culture are not astonished that educational history has seemed to repeat itself. They know that social trends reflect the cyclic principle: for every action . . . there is reaction; for every tension . . . release . . . then back to tension. The periodic push and pull of social forces, of human desires competing for security and the power and the glory, produce imbalance . . . balance . . . imbalance. For every "revolution" there is "counterrevolution," for every action . . . reaction.

So the historians of culture knew and forewarned that the believers in authority would not tolerate the destruction of their classic tradition by the forces of the philosophy of experience that they saw at work around them. And they were right. During the very half century in which the progressive movement altered every aspect of American life and progressive education built a new kind of school, orthodox groups were equally active, trying to preserve and rationalize the status quo. In religion there were the Fundamentalists, in government the defenders of private enterprise, and in education the Essentialists and the modern Scholastics and the defenders of the liberal arts tradition. Throughout every decade of the past half century these forces led a counterrevolution.

THE ACADEMICIANS FOUGHT EVERY PROPOSAL TO MODERNIZE THE LIBERAL ARTS

These defenders of the classical faith *had* to fight the progressives because the latter were attacking *their* preserves. The classicists had built our first schools. It was their content, their objects of

allegiance, their philosophy of authority that were being overthrown. By the early 1930's the progressive movement in American life and the philosophy of experience in the schools had come to be regarded as a powerful menace to the preservation of the "order" and the "enduring values" of the old regime.

It was against this danger that the professors of the liberal arts and of subject-centered education reacted. For five decades they organized and kept themselves entrenched in control of the college and high school program of studies. They did it chiefly, from 1893 to 1920,¹ through the prestige of reports on the curriculum by a succession of their Committees in the learned societies. In the early 1920's the defenders of authority, vaguely feeling the encroachment of the progressive forces on their liberal arts, secured nearly a half million dollars from the various Rockefeller and Carnegie foundations to buttress Latin, mathematics, and modern languages in the schools in three much-discussed committee reports.² As a consequence of their defensive campaign the impact of progressivism on the school curriculum did not appear to be a serious threat to the liberal arts throughout the 1920's.

THREE SUBJECT-CENTERED GROUPS FOUGHT THE PROGRESSIVES

The Parker-Dewey influence had hardly begun to reveal itself in the establishment of the free-lance progressive schools after 1910 when conservative educational workers stood out against them for what seemed to be a weak educational philosophy and a tendency to sacrifice the social heritage. In the course of fifty years there have been three spearhead groups:

- the Essentialists of the subject-centered schools and departments of education

¹ Recall, for example, the tremendous influence on the high school program of the famous Committee of Ten (1893) . . . on elementary education of the NEA's Committee of Fifteen (1895) . . . the report of its two committees on Economy of Time in the elementary school (1908 and 1914-1919) . . . the report of its Commission on the Reorganization of Secondary Education (1920).

² — The National Committee on Mathematical Requirements (1920-1923)

— The Classical Investigation (1921-1925)

— The Modern Language Study (1924-1925)

Ten years later the Joint Commission on Social Studies in the Schools, American Historical Association (reported 1930-1934)

LAST STAND OF AUTHORITY IN EDUCATION

- the Scholastics, or Great Book perennialists, of certain private colleges — equally subject-centered
- the liberal arts leaders of Harvard, Columbia, and the other private colleges — also subject-centered

I. THE ESSENTIALISTS, 1910's-1940's

The first of these have called themselves, and so we shall here, *The Essentialists*. For over thirty years their conspicuous leader was William Chandler Bagley.¹ His associates included such Professors of Education as Isaac L. Kandel, our colleague in Teachers College, such psychologists as Guy Montrose Whipple, such educational philosophers of classical theory as Herman H. Horne, such leaders of job analysis as W. W. Charters and Ernest Horn. I think, indeed, one could properly put Charles H. Judd with them because of the general congeniality of his psychological ideas with theirs.

Bagley and the Essentialists are not to be confused with either the Adler Scholastics, or with the liberal arts educationists of the private colleges, although they all emphasize the preservation of the eternal verities. The Essentialists are a variegated group of Professors of Education and public and private school administrators — who, even after forty years of advancing prestige, are scorned by most of their liberal arts university colleagues. The Essentialists took their name from their passion for finding, preserving, and passing on to the younger generation “the essentials” in the experience of the race, past and present — and especially those essentials which are of practical use to the people today. On the positive side the Professors of Education among them have, for two decades, doggedly put to work the principle of social use. They have insisted that the techniques of life that shall take the time of the school shall be determined by the factual analysis of what use the people generally will make of them.

¹ I was with him almost continuously for thirty-five years . . . was his first Ph.D. in the University of Illinois . . . saw him deliberately choose for himself the role of brake on what he always thought was the too rapidly turning wheel of educational innovation . . . saw him question critically the junior high school reorganization of the grades, the intelligence tests in the 1910's, the hereditarians in the nature vs. nurture controversy in the 1920's . . . and for two decades the “broad fields” reorganization of the subject matter of the curriculum and the programs of the progressive schools. We came together again when I joined the Teachers College faculty in 1920. My hat is off to a loyal friend, an untiring fighter for what he believed in, a staunch defender of the community of culture, one who practiced democracy as he preached it, and — a rarity in American education during his lifetime — a master of the English paragraph.

The Concept of Social Use

Three phases of the concept of social use have been employed:

- Universality of use: that is, use by what proportion of the people
- Frequency of use
- Cruciality of use

On this principle a thousand quantitative studies were made in our time by the Essentialists and their colleagues in the schools of education. They tabulated the words used in reading and spelled in spelling (Horn, Thorndike, Gray, *et al.*) and the arithmetical operations used by the rank and file of the people (Thorndike, Curtis, Knight, Buswell, *et al.*), the forms of grammar (Charters and others), the facts of map location, the problems of American life and Western civilization and the concepts and generalizations basic to thinking about social problems with which my own name was associated for many years. From this quarter century of research we have today a body of well-documented materials that the Essentialists insist are *the essentials* so far as the single criterion of social utility in present-day life can determine them. This is the positive contribution of the Essentialists, and in making it they stand closer to the Progressives than to the Scholastics, who vociferously denounce the emphasis on present life activities and the doctrine of social use.

But on the negative side they are sharply set against the Progressives. Their manifesto, "An Essentialist's Platform for the Advancement of Education," written by Professor Bagley,¹ is typical of their pronouncements. It insists that "public education in the United States is . . . appallingly weak and ineffective" . . . that standards of achievement in our elementary and secondary schools fall far behind those of other modern countries. "Both the bright and the slow pupils are handicapped by weaknesses in the fundamentals." Tests have long revealed glaring disabilities in reading, arithmetic, and grammar. Worse yet, the Essentialists ascribe the vast delinquency in juvenile life to the inadequacies of our newer elementary education.

They find two causes for this alleged deterioration of the national stamina. The first lies in the general economic and social factors of our civilization: the swift growth in population, wealth, and immigration, the widespread racial differences among the people, the pro-

¹ *Educational Administration and Supervision*, April, 1938.

LAST STAND OF AUTHORITY IN EDUCATION

found social-economic changes, the growth of cities and the accelerating mobility of population, the enormous increase in crime, the new occupational opportunities, and the enormous expansion of mass education into the high school and college.

But, second, they insist that the chief cause of our weakness is the enfeebling theory of education which, they say, has gripped thousands of teachers and is to be laid at the door of progressive education. The progressive educational philosophy has "rationalized the loosening of standards and the relaxation of rigor." Already it has resulted in the abandonment in many school systems of rigorous standards of scholastic achievement, the passing of all pupils "on schedule," the disparagement of system and sequence in learning, the dogmatic denial of any value in, even of any possibility of learning through, the logical chronological and causal relationships of learning materials; the wide vogue of the so-called "activity movement," the discrediting of "the exact and exacting studies," an increasing emphasis upon the "social studies," and the frank indoctrination of the lower schools for a new social order. Finally, they claim, it has inculcated even the more careful public school administrators who have been pushed into irresponsible "curriculum-revision" movements in city and state school systems. For all these developments they say "the Progressives" — a blanket name to embrace a variegated body of "child-centered-school" people, "social frontiersmen," and "community-school" leaders — are responsible.

The Progressives, however, may well thank the Essentialists for their careful and honest statement of the educational problem as they see it. Hammering away at the need for iron in education, Bagley reminds us of the social-economic crisis which our people face. Democracy is now distinctly on trial. In a complex society like ours, social security, like responsible freedom, "is a conquest, not a gift."

"Hence in a period of drastic social change organized education must meet the social problems presented to our people by creating a new educational theory that is 'strong, virile, and positive, not feeble, effeminate, and vague.'"

The psychological foundation of this theory will lie

"in the necessary dependence of the immature upon the mature for guidance, instruction and discipline. 'Authoritarianism' is an ugly word. But when those who detest it carry their laudable rebellion against certain of its implications so far as to reject the

THE EDUCATIONAL FRONTIER: 1890's-1940's

authority of plain facts, their arguments, while well adapted perhaps to the generation of heat, become lamentably lacking in light."

That makes sense to me and I agree, and in every particular.

Although I am convinced that they grossly misinterpret phases of the Progressive philosophy and practice, nevertheless we shall be well advised to scrutinize the Essentialists' appraisal of them. Witness: the charge that we enthrone

"the right even of the immature learner to choose what he shall learn. They [the Progressives] condemn as 'authoritarian' all learning tasks that are imposed by the teacher. They deny any value in the systematic and sequential mastery of the lessons that the race has learned at so great a cost. They condone and rationalize the refusal of the learner to attack a task that does not interest him. In effect, they open wide the lines of least resistance and least effort. Obedience they stigmatize as a sign of weakness. All this they advocate in the magic names of democracy and freedom."

Bagley says the price of true freedom

"is systematic and sustained effort often devoted to the mastery of materials the significance of which must at the time be taken on faith."¹

In a democratic society "a literate electorate" and "the informed intelligence of every individual citizen" are "absolutely indispensable."

At the heart of the Essentialists' positive program is the principle of a community of culture. In each generation the school must teach all "a common core of ideas, meanings, understandings, and ideals representing the most precious elements of the human heritage." What are these essentials? The arts of recording, computing, and measuring and the basic social arts . . . a knowledge of the world that lies beyond one's immediate experience . . . a speaking acquaintance with man's past, especially with the story of one's own country. Without these, civilization will collapse. And there is a contemporary emphasis in the Essentialists' program that aligns them closer to the Progressives than to the Scholastics: a stress upon man's new scientific and esthetic knowledge and upon his emerging creative ability. Essentials are of both the present and the past. The heart of a democratic

¹ All Bagley quotes are from "An Essentialist's Platform," in *Educational Administration and Supervision* (1938).

LAST STAND OF AUTHORITY IN EDUCATION

program of education will be a definite body of studies built around these essentials.

As for psychological organization and methods of teaching, these essentials will be

“taught *as such*, through a systematic program of studies and activities for the carrying out of which the teachers shall be responsible.”

Granted that there will be

“informal learning through experience initiated by the learner” . . . “beyond the primary grades, however, where we have said it may well predominate, informal learning should be regarded as supplementary rather than central.”

Thus on the side of method the Essentialists find themselves to be severe critics of the Progressives and closer to the devotees of the liberal arts.

/ / /

So much for the perpetuation of the faith in the orthodox and the social heritage by the first group — the Essentialists. To understand the astonishing attention that the second group received — the Adler-Hutchins-St. John's defenders of Scholasticism — we must set the stage once more as it was at the end of the 1920's.

EVERY PHASE OF THE PROGRESSIVE MOVEMENT WAS ATTACKED IN THE DEPRESSION

First, bear in mind that in the Great Depression itself the progressive movement was sharply accentuated in every phase of American life. Although the politicians and the leaders of big business had been watching the progressive developments and had begun to oppose them, they did not really become alarmed until they saw what Mr. Roosevelt's "New Deal" government was doing. Caught by the staggering proportions of the national crisis and the inability of their own leaders to understand it or to cope with it, they temporarily accepted Mr. Roosevelt and his startling proposals in the spring of 1933. The attempts to prime the economic pump through the next few years brought back a bit of their pseudo-security, but it also frightened and angered the business and political leaders. As they perceived its marked trend toward social control, they launched a vigorous cam-

paign against every progressive trend in the culture. The New Deal and its works in government bore the brunt of the attack; the defeating of all social gains was the objective.

In this counterattack against progressivism in American life some of the reactionaries perceived that the progressive education movement consisted of much more than a few sporadic and inconsequential experiments; it was becoming a major creative force in our national life. Hence, the die-hards fought the progressive educational leaders as well as the TVA, the FCC, the National Resources Planning Board, and other constructive works in government. They haled educators before Congressional investigating committees. In the Washington schools and on the floor of Congress they attacked the authors of progressive textbooks and the leaders of the Progressive Education Association.¹ Their mouthpieces in the reactionary newspaper and magazine press led the attack through syndicated columns and editorials upon modernized textbooks, reports of national committees, addresses made at educational conventions, and the like.²

CULTURAL CONFUSION AND PROGRESSIVE RETREAT

As the earlier chapters of this book have shown, these attacks came at the moment of greatest cultural uncertainty of modern times. All the swiftly changing trends of the culture had converged by the 1930's to confuse our people. The attacks upon the progressives, coming in the midst of frightening tensions and conflicts, not only gave aid and comfort to the culturally orthodox; in addition they did tragic things to some of the progressives. A few of the strong and self-sufficient ones were confirmed in their determination to fight the battle for a new world through to a successful finish. But many half-hearted ones were driven to seek safety in old established institutions and safer ways of life. Such forthright publicists as Heywood Broun retired to the security of the orthodox church. On the educational front appeasement comparable to "Munich" took place just before the outbreak of war in 1939. Many became silent, took sides by doing nothing, appeased by acquiescence. Men who had been aligned with

¹ Witness, to name only two instances, the speeches of Representatives Thomas Blanton and Martin Dies of Texas and the work of the Dies Committee.

² Witness the attacks of such columnists as George Sokolsky, Westbrook Pegler, "Bill" Cunningham the "sports" writer (!), and Paul Mallon upon the textbooks of Harold Rugg, Charles Beard, and Carl Becker, by the Americanization Committee of the American Legion and the editors of the *American Legion Magazine*.

LAST STAND OF AUTHORITY IN EDUCATION

progressive education joined hands with reactionary business interests to make compromise programs of education that would be acceptable to all conflicting sides. Still others, who had led out in advance in social reconstruction at the beginning of the depression, pulled their punches and gave years of their lives to such causes as putting the Communists out of educational organizations. As for the Progressive Education Association, by 1943, due to the drawing off of the socially-minded leadership into war activities and to the growing indifference and fears of the rank and file, provincial and fearsome appeasers got control, with the results that we have already seen.

II. ENTER THE SCHOLASTICS IN MODERN DRESS: THE CURRENT EPISODE OF THE PERENNIAL CONFLICT

The American scene could not have been more propitious for another episode in the liberal arts counterrevolution than it was at the onset of the depression. At that moment Mortimer J. Adler met Robert Maynard Hutchins and converted him to educational Neo-Thomism. A compact little group of young inhibitionless college teachers of classic books were given one of the nation's widest-ranging educational sounding boards — namely, the Presidency of the University of Chicago. The central characters in the scene are:

- Tall, handsome, athletic Robert Maynard Hutchins, boy-prodigy-Dean of Yale Law School at twenty-nine, President of the University of Chicago at thirty, persuasive talker before uncritical lay audiences, spectacular organizer of big new enterprises, smart publicist, ingratiating and successful money getter — bringing to the group the powerful microphone of the University Presidency.
- Mortimer J. Adler, University of Chicago Professor of the Philosophy of Law, brilliant theorist of the group, student and teacher of the Great Books in John Erskine's "honors" course at Columbia in the 1920's, brilliant in academic higher criticism, unorthodox Jew turned into a self-acknowledged near-Catholic-and-Thomist.¹ He was the philosophizing brains of the current Scholastics . . . author of best-selling *How to Read a Book*, of *How to Think about War and Peace*, and of the more profound *What Man Has Made of Man*, and a score of arrogant and undocumented speeches and articles such as his "God and the Professors."

¹ His *Who's Who* statement lists him as a member of the American Catholic Philosophic Association and of the Thomistic Institute of America, author of *St. Thomas and the Gentiles* and *Problems of Thomists*, and a contributor to *The Thomist* and *The Commonweal*.

THE EDUCATIONAL FRONTIER: 1890's-1940's

- Richard McKeon and Scott Buchanan — two of Mr. Everett Dean Martin's brilliant young "four horsemen" of the liberal arts tradition of which Adler and Houston Peterson,¹ who succeeded Mr. Martin as Director of the Peoples Institute, are the others. McKeon is now one of Hutchins's Deans, and Buchanan, formerly Oxford Rhodes Scholar, is Dean of St. John's College.
- Stringfellow Barr, another Rhodes Scholar, a director of "Education for Freedom, Inc.," and President of St. John's College at Annapolis, Maryland — the self-conscious experiment station of the Hutchins-Adler group.
- Mark Van Doren, professor of literature at Columbia . . . poet of distinction . . . author of the current *Liberal Education*, the writing of which was requested by the Association of American Colleges and the expense of which was carried by the Carnegie Corporation of New York and Columbia University. This book may be accepted as the literary expression of the educational aims and program of the Great Books Scholastics.

This is the nucleus of the group. They were all born just about 1900. Their childhood and youth were lived in the social and intellectual confusion of the twentieth century. Their education was in private conservative schools and colleges; two were Oxford Rhodes Scholars. Contacts with devotees of the liberal arts molded them into Defenders of the Faith of the classics and the learned disciplines. The popular press, for which they have written prolifically, has been calling them the Great Book Boys. Mr. Adler, whom some regard as the scholastic Thomas Aquinas of the twentieth century, asks to have them referred to as the "Perennialists."² Oxford and Webster suggest to me that "Perpetualists" would be a more appropriate title. But they are, as Adler says, merely another manifestation of the perennial reassertion of Scholasticism. Their success in attracting national attention after 1930 is one of the sensational fortuitous circumstances of modern educational history.

/ / /

Three of them — Adler, Buchanan, and McKeon — I knew twenty years ago in New York when Everett Dean Martin, conservative head of the Peoples Institute, was bringing them up in the Scholastic faith. In the late 1920's Adler and Van Doren were young teachers in John

¹ I hasten to dissociate Peterson from the Scholastics; he has given no evidence of defending their faith.

² In a communication to Dr. Theodore Brameld, who is writing an appraisal of them in his forthcoming *Philosophy of Education*, to be published by World Book Company when completed.

Erskine's "honors" course at Columbia; this consisted of small picked groups of students and instructors reading and discussing together some fifty classic books. That in itself was an important minor episode in the higher educational history of our times. Adler and Buchanan got the Great Books idea there and passed it on to Hutchins. Buchanan took it down to the University of Virginia, where he and Barr worked over and extended the list of fifty classic books.

Hutchins tells how he met Adler and was converted by him,¹ while he, Hutchins, was Dean of Yale Law School and Adler "psychologist, logician, and philosopher at Columbia," was actually examining the bible of teachers of law, the seven volumes of Wigmore on Evidence, "an astonishing thing" to a young Dean of Law. Four years later he, Hutchins, was President of the University of Chicago and Adler, McKeon, and Buchanan had been brought to the university faculty.

/ / /

An account of the stormy years of academic struggle that followed at Chicago is beyond the scope of my book. Suffice it to say that in spite of the continued protests of a majority of the university faculty, and many resignations of distinguished men, Hutchins inaugurated a whole series of new plans, including the teaching of

"the Great Books in various parts of the University; in University High School, in the College, in the Humanities Division, in the Law School, in the Department of Education in University College, the extension division, four hours a week three quarters of the year."²

Unable to put over his entire scheme, however, he had raised money for an "independent committee on the liberal arts" and brought Barr and Buchanan to Chicago to work on the Great Books as the curriculum of the general college. In 1937 he seized an opportunity to try it, full-fledged, at St. John's College, Annapolis, Maryland. In the summer of 1937 the three men moved in and established St. John's as an experiment station for the rejuvenation of the seven liberal arts; Barr became President, Buchanan Dean, and Hutchins a member of the Board of Trustees. For the next four years some of the students

¹ See Hutchins's lecture, *Education and Freedom: The Autobiography of an Uneducated Man*; this, with Adler's "God and the Professors," will sufficiently illustrate their chaotic thinking and writing and bombastic tone.

² R. M. Hutchins: *Education and Freedom*, pages 12-13.

were on the Great Books plan and others on the old conventional plan. Since 1942 they have all been on the new plan.

Since this is regarded as the official application of the Scholastics' theory, I shall refer to it briefly. I have not been to St. John's, so I am depending on published material for my brief references to it; since these are almost all written by partisans of it, I cannot vouch for the accuracy of the reports. Certain aspects of the plan seem to be established, however:

- The elective system has been abolished; everything in the program is required of everybody.
- The boys all study the same books and problems.
- A list of 120-odd "classics" constitute the reading curriculum.
- Instructors move with the students, from year to year, through the curriculum - from Homer to Freud, each one making himself familiar with all the books and prepared to take over any seminar.
- Lecture has largely given way to small round-table seminar discussion.
- The general scope of the curriculum seems to be:
 - 5 hours a week of language.
 - 5 hours a week of mathematics.
 - 2 hour seminars a week for the discussion, "tearing apart, and kicking around" of a great masterpiece under discussion; "this is done with the enthusiasm of a dormitory bull-session and with great thoroughness."
 - 3-hour laboratory session once a week.
 - 1 or 2 lectures a week on special topics in liberal arts.
 - Seminars are in the late afternoon or evening, continue informally until the Coffee Shop closes at midnight.
- Four years of laboratory science are compulsory, beginning with simple construction of straightedge and a ruler ... going on to the manufacture of scales and thermometers ... reproducing Archimedes' work on the lever, gravity, and hydrostatics ... construction of the world system as shown by Ptolemy, which is revised, added to, corrected according to the knowledge of Copernicus, Kepler, Newton, etc. In the second and third years the boys are said to "perform the classical experiments of modern science from Galileo's to Millikan's discoveries." In the fourth year they combine

their findings to investigate the concrete problems of central importance today. From physics and chemistry they proceed to biological and medical sciences.

- The boys are invited to form volunteer clubs on contemporary affairs, politics, international relations, music, theater, labor problems. These are guided by well-informed persons brought in for the purpose.

/ / /

This, in outline form, is what I take to be the essentials of the St. John's Plan. It has now been in operation ten years. I can find no objective measure of the results. In practice the plan looks much more sensible to me than the theory as announced by Hutchins and Adler. But it is not new; its effective elements have been tried by schoolmen for a full generation. The minimizing of lectures, the maximizing of small discussion groups, are now a major trend in general college education in America; the studio-club idea, likewise, has been pioneered especially by the progressive schools and colleges. The abolition of the elective system is a reflection of another marked conservative trend in the colleges.¹ The movement of the instructors with the class is an idea that has been tried intermittently and frequently in progressive schools for thirty years.

But the systematic use of the 120 Great Books as the curriculum is their idea, crediting Erskine with the original suggestion.² And it is in the analysis of what is taught in and through the Great Books that *our crucial problem of subject matter* emerges again. I shall come back to this critical issue a bit later.

A Note of Caution about Their Writings

So much for the experiment of the Scholastics. I turn to their published pronouncements and the problems of theory and subject matter. First, a word about sources. Of the ten books and the hundred articles that they have written, how many should the student unacquainted with this educational episode read? Not many. One of Hutchins's and one of Adler's books at most, the monograph by Gideonse, the reviews by Whitehead, Smith, Dewey, and Hook, an

¹ Witness the new reports from Harvard, Columbia, Yale, Princeton, Hopkins, etc., referred to in Chapter I.

² I should add that the instructors are constantly criticizing and rebuilding their list in the light of actual group use with it.

article or two by and on St. John's — of those that I have starred — and you'll have the essentials. I confess that to do even that might honor this tangent from the main line of human advance more than it deserves. Certainly it would divert important energy from the needed study of that main line. The insistent question that is left from the reading of this stuff is Mr. Dewey's "Are they really serious?" It is difficult to believe that these men do not have their tongues in their cheeks (my personal acquaintance in earlier years with Adler's incredible practical jokes suggests that as a serious possibility). Is this a hoax? Are these men serious? I don't know. But the reactionary church press approves them, the businessmen approve them, the Brahmins of education approve them, and the popular press dotes on them. And note carefully the nature of most of the sources in which they publish; not one article in ten is in a journal of scholarship.

With that cautionary note, let us see briefly what the point of the bombast is.

SOURCES RE THEORIES OF THE SCHOLASTICS

There are ten books and a hundred articles in my bibliography of sources of the controversy over the present episode in perennial scholasticism. Most of the articles duplicate both the positions of the Scholastics and their critics. I give here a selection of the key sources which will give the essence of the whole thing.

Books by Hutchins:

No Friendly Voice (March 1936) (Chicago Lectures).

The Higher Learning in America (October, 1936) Yale Lectures.
(The others are reiterations of this one.)

Education for Freedom (1943).

Thirty-four articles by Hutchins, 1932 to 1942, in *Vital Speeches*, *Harper's*, *Saturday Evening Post*, *Nation's Business*, *Commonweal*, *School and Society*, *Atlantic*, *Yale Review*, *Newsweek*, *Time*, *Christian Century*, said essentially the same thing as can be found in any one of the books.

Monograph on Hutchins:

Harry D. Gideonse: *The Higher Learning in a Democracy*. (Read it; the best analysis to date.)

Articles on Hutchins and Replies by him:

A. N. Whitehead: *Review of Higher Learning in America*, in 1936.
John Dewey: "Remaking Higher Education," *Social Frontier*, January, 1937.

Hutchins (Reply): "Grammar Rhetoric and Mr. Dewey," *Social Frontier*, February, 1937.

Dewey (Counter-reply): "Was President Hutchins Serious?" *Social Frontier*, March, 1937. See also *Fortune*.

WHAT HAVE THE SCHOLASTICS CONTRIBUTED
TO OUR THEORETICAL KNOWLEDGE OF THE
GREAT FOUNDATIONS?

While I am convinced that in the future we may learn something new from the educational experiment at St. John's, it is my considered judgment that the published statements of Hutchins and Adler¹ have added nothing of importance to our critical educational theory. Their theory, if such it can be called, is full of inconsistencies and lack of clarity. Their writing is utterly disorderly and undocumented, and grossly repetitious. It abounds in name-calling. Seeking an easy way out, they call names against every progressive, constructive at-

¹A study of the sources shows that these two men should be definitely discriminated from Barr and Buchanan, who are much more critical and less prolific; also from Van Doren, who is a master of attractive literary expression. But Hutchins's and Adler's pronouncements can be properly taken as presenting the general theoretical background.

SOURCES — *Continued*

T. V. Smith: "The Chicago School," *Journal of Ethics*, April, 1936.

Adler: "The Chicago School," *Harper's*, September, 1941.

C. E. Clark: "The Higher Learning in a Democracy," *International Journal of Ethics*, April, 1937.

Sidney Hook: "The New Medievalism," *The New Republic*, October 28, 1940.

Books by Adler:

What Man Has Made of Man (1938).

How to Read a Book.

How to Think about War and Peace.

Articles by Adler:

A dozen articles between 1938 and 1942 in *Commonweal*, *Vital Speeches*, *Good Housekeeping*, *Christian Century*, *Rotarian*.

The essence can be got from these:

— "God and the Professors," *Vital Speeches*, December 1, 1940.

— "Chicago School," *Harper's*, September, 1941.

— "Shall We Have More Progressive Education?" *Rotarian*, September, 1941.

— A dozen articles on St. John's College by Stringfellow Barr and Scott Buchanan in the *Atlantic* (July, 1941), *New Republic* (August 31, 1942), *Virginia Quarterly Review* (January, 1937), *Survey Graphic* (October, 1939, and June, 1938), *School and Society* (July 8, 1939), *Life* (February 5, 1940), *School and Society* (July 26, 1941), and *Newsweek* (September 20, 1937).

tempt to face the chaos that is indigenous to our generation and to produce from it a firm and functioning order. Hutchins gibes at five centuries of dogged research and profound scientific thought as "The Cult of Science-ism!" (a "cult" being "particular ritual or system of worship" . . . "extravagant homage or adoration"). Seventy-five years of intellectual struggle to build the philosophy of experience is jeered at by such appellations as: the Cult of Immediacy . . . the Cult of Presentism . . . the Cult of Skepticism . . . the Cult of Anti-Intellectualism . . . the Cult of Experience . . . the Cult of Activity. At one point Mr. Hutchins says that his primary idea of a university is that it should be a "center of creative thought." Very well. Let us engage in creative thinking, then, not in derisive name-calling. In his scoffing at progressive education as the "cult of immediacy or what may be called presentism," he grossly misinterprets fifty years of thoughtful effort to find out *how to use history as subject matter*;¹ witness such exaggerations as "everything is in the present, there is no past" . . . "Any reference to antiquity and the Middle Ages shows that you are not interested in social problems." Skepticism and presentism, he says, "are related to . . . *the cult of science-ism.*" He has never met documented criticism with documented rebuttal, not even Mr. Dewey's.

As clearly and briefly as I can digest hundreds of pages of their writings, the spokesmen of the Scholastics have made these points:

*The Cultural Confusion Denounced and
the Philosophy of Experience Blamed*

With some of their description of the intellectual and moral confusion and uncertainty, the student of American culture in our times can agree.² Their criticism of education is laid in the background of their view of American culture today. Hutchins insists that our problems

"are moral, intellectual and spiritual. At the root of the present troubles of the world we find a pervasive materialism, a devastating desire for material goods which sweeps everything before it to, and perhaps over, the verge of the abyss."

I paraphrase the argument that recurs through all his writings: Technical progress is not identical with civilization. Technology will

¹ See Chapter XVIII.

² See Hutchins's *No Friendly Voice, The Higher Learning in America*, and several of Adler's speeches.

never take the place of justice. Materialism has captured our culture, the state, education, and morals, and has retained the names of the Christian virtues but changed their meaning to suit its own purpose. The effect of the nationwide love of money and things has led to commercialism and vocationalism in education. Dependence on student fees molds a weak educational policy. We keep our ears to the ground to find out what the people, including the students, want and give them that instead of what they should have. Schools of journalism and business are in the saddle, public service administration, aeronautics, housing, forestry, child labor, socialized medicine, the corruption of lawyers — all become insistent problems of the higher learning.

*The Demand for First Principles
to Bring Order Out of Chaos*

This is Hutchins's description of our materialism and its effects on the higher learning; they are fairly obvious repetitions of what many men have said for decades. But he and Adler find the deeper and more subtle factors in our cultural confusion in what they call "anti-intellectualism." Our colleges are not centers of creative thought. The educational system's first duty is to "cultivate the intellect." This cannot be done by the present methods of progressive education. How can it be done?

Either metaphysics or theology "must be called upon to order the thought of modern times." Hutchins, echoing Adler, points to the success of the medieval university in finding a principle of unity for its curriculum: that was theology . . . "relating man to God, man to man, and man to nature. It was an orderly progression from truth to truth." He grants that "these are other times and we are trying to discover a rational practical order for the higher learning of today." He says we cannot use theology because it has been banned by law and because

"we are a faithless generation and don't believe in revelation. I repeat: We haven't the orthodoxy that theology implies . . . so of course we can't use theology to unify the modern university."

But we are in the same situation as the Greeks, who had no theology and yet unified their thought. They did it by the study of First Principles. We must do likewise. First and foremost, therefore, our youth shall study "metaphysics." They must be nurtured in wisdom.

Wisdom is knowledge of principles. Metaphysics is the science of First Principles; therefore, metaphysics is the highest wisdom. This is the essence of the Hutchins demand for a new theory.

Very good. Above all we must discover and build understanding of a sound body of First Principles to bring order to our confused world. *But this "metaphysics" is about experience and verifiable in experience*, and I am not sure that Mr. Hutchins means that; he certainly does not say so. In Waldo Frank's words, we shall have in our day: *"no adequate politics, no adequate esthetics, without an adequate metaphysic and social religion."*

*The Men of Our Consensus
Are Men of First Principles*

It was to be expected that onto this clamorous stage of "the tumult and the shouting" would appear men in our day who above all else would try to find the bases of intellectual order. Messrs. Adler, Hutchins, and the modern Scholastics will find themselves, if they will look up from their Great Books, swallowed up in a galaxy of profound students of modern culture who for generations have been making this very search for the instruments of order. The Peirces, Jameses, Deweys, Whiteheads, Veblens, Sullivans, Wrights, to name but a few of the productive Americans of our story, are all "orderers." The creative modern man, like his ancestors of antiquity, is essentially an "orderer." He works his will upon a chaotic watershed and organizes it into a cultivated valley of productive farms and towns. He transforms a wild mountainside into a garden of beauty. In the recurring crises of Western history his leaders have transformed political anarchy into order, rebuilt broken-down economic systems, and stated the mind and mood of the people in poems, songs, plays, paintings, and dances. At long-spaced intervals, confronted by deep tragedy, his prophets have held the harassed people together with great religious culture-myths that they built out of their driving emotions, tenacious beliefs, obsessive desires.

The demand of the Scholastics, therefore, for First Principles, or great concepts, around which to rebuild our anarchic society into a unified spiritual culture comes to the student of creative history with no shock of novelty. We agree that we must think our way to the foundational concepts which will transform our warring society into an organized functioning whole. And we agree that no educational task of our times is more insistent than that of educating our people in a

profound understanding of these principles. Even let them be named, if the Scholastics insist, a "New Metaphysics."

But the critical question is: What are the proper sources from which to build the new metaphysics, and what is the nature of the principles? *The answer of the philosophy of experience is definite and clear. I have tried to state it in the foregoing chapters, and I shall not repeat any of the statement here.* The Scholastics' way out of the morass of the modern world is a Grand Plan, conceived by a modern Plato-Aristotle-St. Thomas philosopher on some Olympus and handed out through an intellectual elite by way of the higher learning. It is incredible to me — and I think to all progressives — but Dr. Adler, having accepted Thomist Catholicism and having come to admire its great synthesis of Greek philosophy and medieval theology, sees it pointing the way out for our people. Witness:

"a synthesis of faith, reason, religion and philosophy, supernatural and natural knowledge is necessary for a unified culture. The medieval synthesis of faith and reason, religion and philosophy, super-natural and natural knowledge are brought about in the thinking of Maimonides and of Thomas Aquinas. The problem of modern culture in its necessity for such a synthesis is more complex and difficult. *It must necessarily include the medieval solution, but it can do so only by carrying the medieval principles to a higher level of comprehension.*" [My italics.]

But, the time is not ripe, he says, for the modern synthesis. Not enough people know science, philosophy, and religion, all three, to be able to prepare the way for the modern analogue of Moses Maimonides and Thomas Aquinas.

Adler blames the intellectual leaders — all the naturalists, and especially the pragmatist, positivist professors, Dewey in the lead.¹

"The defects of modern culture are the defects of its intellectual leaders, its teachers and savants. The disorder of modern culture is a disorder in their minds, a disorder which manifests itself in the universities they have built, in the educational system they have devised, in the teaching they do, and which, through that teaching, perpetuates itself and spreads out in ever widening circles from generation to generation."

... "The most serious threat to democracy is the positivism of the professors, which dominates every aspect of modern education and is the central corruption of modern culture. *Democracy*

¹ "God and the Professors," *Vital Speeches*, December 1, 1940.

has much more to fear from the mentality of its teachers than from the nihilism of Hitler. It is the same nihilism in both cases, but Hitler's is more honest and consistent, less blurred by subtleties and queasy qualifications, and hence less dangerous."

I can only infer that he means the builders of the philosophy of experience of the types I have discussed in Chapters VII to XVI. Of them he says:

"until the professors and their culture are liquidated the resolution of modern problems — a resolution which history demands shall be made — will not even begin."

Those sentences are clear. Mr. Adler denies the concepts that have been precipitated by three hundred years of creative work of the builders of the foundations of the new education. But he does so without logic or documentation; he relies on "self-evident truths."

Although he proclaims his belief in democracy — "I hold Democracy to be the greatest political good, the most perfect form of political community" — he says the democracy of John Dewey *et al.* is

"an essentially false conception. The social order they would like to preserve is the anarchic individualism, the corrupt liberalism, which is the most vicious caricature of democracy. . . . A democracy without hierarchy and without authority. . . . chaos, not order, a system in which everyone will be as free as if he lived alone, a community in which common bonds will not bind the individual at all."

Fifty years of Dewey's writing as I have stated it in this book cries out against such a flagrant misinterpretation. "Vicious caricature?" Vicious and adolescent intemperance!

Where Find the First Principles?

But, I come back to the main question: Where are we to find the First Principles? While the Progressives get them from the accumulation of human experience, focused on the best-guided living today, the Scholastics would have our youth get them primarily from the past; only minor concessions are made to the need of studying contemporary life. Both First Principles and the focal content of education are to be got from the Great Books. Three quarters of the Great Books were written before 1800; two thirds before 1700. Only two were written in the twentieth century. Of the Americans of our four

frontiers only one — William James and his *Principles of Psychology* — is included in a list of authors of the hundred books; of the Europeans, only two — Marx: *Capital* . . . Freud: *Studies in Hysteria*. It would be difficult, I believe impossible, to learn from the Hutchins-Adler Great Books how our modern industrial-democratic civilization developed, how the technological and social revolution of the last century emerged. The roots of the whole episode of the Age of Expression of the past three generations would be a blind spot.

Why do the Scholastics depend so completely on the Great Books? Because, says Adler:

“The question, ‘What is a good education?’ can be answered in two ways: either in terms of what is good for men at any time and place because they are men, or in terms of what is good for men considered only as members of a particular social or political order. The best education is the one in which the two answers are the same.”

Only the Great Books can possibly give such an answer. What are the Great Books? Hutchins says they are:

“those books which have throughout the centuries attained to the dimensions of classics. A classic is a book that is contemporary in every age. For example the conversations of Socrates raise questions as urgent today as they were when Plato wrote. These are the best books we know. The man who hasn’t read them isn’t educated. If we read Newton’s *Principia* we see a great genius in action; we make the acquaintance of a work of unequal simplicity and eloquence.”

Mark Van Doren, a sensitive literary man, but hampered by an abysmal ignorance of the positive foundations of education that have been built in the past two generations, says:

“The curriculum of the college is as follows” [naming the 125 books].

“If the list is imperfect, it can be improved by those who have the learning and the will to do so. Its present relevance to liberal education is immense in any case, for it represents *the first serious effort in contemporary America* to build a single and rational curriculum suited to the needs of minds which have work to do, and which someday should be unwilling to forgive any system of education that had required of them less discipline than this.” [My italics.]

We can have no quarrel with Mr. Van Doren's appreciation of the world's great writing. But, can anyone living in the most creative era in modern history and surrounded by schools and colleges that for a quarter century have practiced creatively every art of expression, persist in ignoring the vast range of expressive media that has paralleled words?

The Scholastics and the Social Transformation

I am convinced that the fundamental reason for the cleavage is that the Scholastics have not accepted what to the progressives is a fact — namely, that *Our Times constitute a New Day in history; their conditions and problems are new, unlike in many respects those faced by the great masters of antiquity.* It is this fact of actual social and intellectual revolution which Messrs. Adler, Hutchins, *et al.*, are unwilling to face. They grant social change, far-reaching in its effects, but they do not accept the finality with which we have already advanced across the threshold of a new day. Because they will not grant the transforming nature of our revolution, the remedies they provide for bringing order out of its chaos are made from the study of a very different civilization, and hence are inadequate. We agree that man's nature has not changed appreciably in recorded history but his social arrangements have, his problems have, and the relations of man to man have become fundamentally different. The meaning of every basic concept underlying man's social and political relationships has changed drastically in modern times. The data of Chapters III to XV have established this generalization.

There is another difference between the progressives and the Scholastics. The latter would turn back the educational history clock and reinstate an education devoted almost exclusively to words. It is one of the great contributions of the progressive movement that every medium of expression, communication, and understanding which has been employed by the galaxy of creative men and women is now employed in the schools in the fullest education of young people. Not just the "hand-minded" youth as Hutchins says — but *all* children and youth using *all* the channels of understanding, making, and doing in the broadest sense in order to produce *the broadest and deepest living and being.* Moreover, the Scholastics would employ only one medium in higher education through the 3 R's which they propose exclusively for the elementary schools. It is clear that if they had their way they would reinstate thoroughgoing schools of literacy, to

LAST STAND OF AUTHORITY IN EDUCATION

eliminate which has been one of the basic aims of the progressives for a half century.

Finally, in spite of the Scholastics' reiteration of loyalty to the democratic idea, they are really authoritarians, *educating for an elite*. The careful reading of Van Doren's *Liberal Education* reveals a finely painted picture of a class society with an aristocracy of intellect, guiding and protecting — *and ruling* — the others. Running through his and Hutchins's writings, and boldly set forth in their total program of education, is the concept of a liberal "intellectual" education for "those who have demonstrated their ability to profit by it"; the others "*are so exclusively 'hand-minded' as to suggest the wisdom of drawing them off into manual or technical schools.*" And in Hutchins's plan for higher education, "general education" stops at the end of what is now the sophomore year. Beyond that can pass only those for whom the cultivation of the intellect will be successful.

/ / /

But far too much space has already been given to the Scholastics. I am convinced that they constitute a minor tangent from the main line of educational reconstruction, and that they have shot their bow. I understand that their leaders themselves now grant that their program will not be fundamentally influential in shaping the education of the post-war world. One thing we must say for their shouting — it has served to accentuate the need for finding principles of unity around which to order the new education. And by contrast their philosophy and their practice have made the validity of the philosophy of experience clearer than ever. The principles of unity and the organizing concepts of the post-war curriculum lie in the documentation of this book.

III. THE CHIEF BULWARK OF AUTHORITARIANISM: THE LIBERAL ARTS IN COLLEGE AND SECONDARY SCHOOL

And that brings us to the factor of greatest power and prestige in American education during our times — the "liberal arts" colleges and their subject-centered program of studies. (I dissociate them from the special brand represented by the Adler Scholastics.) Throughout the past sixty years this tradition has been the principal citadel of authoritarianism in education. Above all other forces it determined

the character and the content of the high school curriculum; indeed, it exerted a stranglehold upon it. In spite of the fact that, up to World War II, less than one tenth of the children of all the people ever had the slightest chance of going to college, these studies — overwhelmingly college-preparatory, mathematical, and linguistic — dominated over the education of all. Smug and cocksure, this classic program insulated itself from the stirring changes around it. It jeered at Parker and Dewey. It closed its mind to the findings of its own scholars in the social and human sciences. It turned its back on the great shunned areas of education. It valued property above human life and dodged controversy as un-Americanism. It regarded social change as unimportant; anything that occurred after 1850 was “current events,” hence not fit material for the discipline of the mind. The problems of the people? . . . they were not the stuff of education.

All this is not to impugn the *sincerity* of the leaders of the prestige colleges. Throughout the fifty years these spokesmen for the Upper-uppers earnestly defended the classical studies because they honestly believed that they constituted the best education for the “best” people. They were frankly making an education for the upper classes. The defenders of the classical faith, although they knew that they dominated the education of *all* the people, gave no evidence of a sense of stewardship to build the *best* education for *all* the people.

Only today, a half century after their Committee of Ten, does the first clear break in that attitude appear — in the 1945 Harvard Report: *General Education in a Free Society*. In it, *for the first time in a half century of educational state papers, college men accept their stewardship for universal public education. And for the first time also they give evidence of having informed themselves of the facts of the changing society and culture, and school and college population.* Thus a new generation of officers and teachers in the private colleges has appeared on the educational scene. What is happening at Harvard and Columbia, and in a lesser way at Yale, Princeton, and other prestige colleges, is the most heartening educational development of a half century. As a consequence, and because a parallel profession of scholars has also emerged in educational sociology and psychology, the principal forces involved in educational reconstruction can now find common cause — the representatives of the colleges, the sociological and psychological students of educational foundations, and *the public school administrators and curriculum-makers; that is, if the latter two will also turn themselves into students of the foundations.*

Two Methods of Educational Change

Recent educational history has bequeathed to us two methods by which the program can be changed — individual innovation and experiment, and . . . the coöperative consensus. The former we have seen illustrated in the preceding chapters, especially in the rise of the progressive schools and colleges. A group founds a new school or college, or an individual reports novel curriculum experimentation. Discussion ensues, the plan is criticized and appraised. Revisions and modifications are made. Other schools and colleges imitate the new plan, or are inspired to try something different. More discussion and critical appraisal follow. Wider and wider becomes the adoption of new forms. Groups form, a movement emerges, labels are attached, controversy arises, and misunderstandings and cleavages develop. But both practice and theory have been changed. This is one of the two methods — carried to greater success in the United States, which has been chronically hospitable to innovation, variation, and experiment, than in any other country in the world.¹

CONSENSUS VIA THE COMMITTEE METHOD:

THREE MAJOR STEPS IN FIFTY YEARS

The other method through which educators have tried to bring about educational change is to use "The Committee," or, to dignify it according to the current tendency, THE COMMISSION. An educational organization, an institution, a government, or a group of individuals forms a Committee of representatives, whose joint deliberations produce policies and programs, descriptions and appraisals, platforms, manifestoes, statements of position — whatever is demanded for change in theory or practice.

To illustrate the method and to complete the record, I chart a score of major Committees and Commissions that have written the high

¹This fact was borne in upon my mind sharply by seeing the converse situation in three of the British Commonwealths. In Australia in 1937 I was unable to find a single experimental school; in New Zealand, only one. In the Union of South Africa in 1934 the situation was little better. The constant plea of teachers to visiting representatives of the New Education Fellowship was to intercede with the Minister of Education to get him to establish an experimental school. They themselves felt that they were not free, either to start one or to propose that it be done by government. In educational progressiveness and experiment America does actually lead the world.

THE EDUCATIONAL FRONTIER: 1890's-1940's

spots of our curriculum history. I have grouped them in accordance with the sponsoring groups and arranged them approximately in chronological order. Three stages are discernible:

THE FIRST STAGE:

THIRTY-FIVE YEARS - 1890's-1920's

Curriculum-making Via Liberal Arts Professors

These were the formative years. The only scholarly leadership available was that of the liberal arts professors of the colleges. Five national committees, beginning with the famous Committee of Ten, did the bulk of the work, but, in so doing, set the rigid academic mold of the curriculum:

- I. The National Education Association and affiliated departments and organizations:
 - Committee of Ten (on secondary education, 1893)
 - Committee of Fifteen (on elementary education, 1893)
 - Two Committees on Economy of Time (primarily in elementary education, 1908 and 1914-1919)
 - Commission on the Reorganization of Secondary Education (1920)
 - Various Committees of the Department of Superintendence, in the late 1920's; several of their yearbooks (see for example the Fourth, Fifth, Sixth, and Seventh Yearbooks) dealt with the curriculum.

- II. Curriculum-making by National Committees of three of the learned societies, financed on a large scale by Educational Foundations, in the early 1920's:
 - The National Committee on Mathematical Requirements by the Mathematical Association of America (1920-1923)
 - The Classical Investigation of the Classical Society of America (1921-1925)
 - The Modern Language Study of the Modern Language Association of America (1924-1927)

Thus the college professors of the subjects of study poured the curriculum mold of the nation's school in the 1890's. The content was

LAST STAND OF AUTHORITY IN EDUCATION

linguistic and mathematical, essentially built on the liberal arts, designed to satisfy college entrance requirements. It was an education for the "best" people, the school standing utterly aloof from the community and national life that was creating it. It lacked a sociology, an esthetics, and an ethics of the new society and reflected a false mechanistic psychology. Although a new professional study of education had developed in the teachers colleges, this had not achieved a position of influence; even if it had, it could not have contributed the needed social and esthetic content to the schools, because it was itself devoid of it.

Fifteen years after the Committee of Ten the personnel changed; there were fewer professors and more school superintendents, principals, and teachers; after World War I, more professors of education. *But the point of view did not change, it was always subject-centered, emphatically linguistic and mathematical.* Once in print, the pronouncements of these national committees were quite generally followed, both in major outline and in detail, by town and city schools throughout the United States. The curriculum crystallized, became difficult to change. One committee supported another and acquiesced in the elimination of particularly obnoxious elements from the curriculum only after prolonged and reiterated demand from curriculum reformers. This was curriculum-making by accretion and elimination, by scissors and paste. New topics were added slowly, but always within the school "subjects"; the total *reconstruction of the life and program* was never considered by these subject-minded committees.

The curriculum came to be dominated by the textbooks and these were made to fit the Committee recommendations by authors and publishers who feared to deviate from established practices. Textbook companies, with an eye to sales, formed partnerships of "professors" and superintendents, principals, or teachers. Few schoolbooks got wide adoption that were not prepared by such a partnership of subject-matter authority and practical school administration. The maintenance of the status quo was the desideratum; innovation was accepted only grudgingly after new proposals had secured a widespread hearing from progressive school people, themselves trained in the new educational teaching.

THE STRANGLEHOLD OF THE COLLEGE
THROUGH ITS EXAMINING BOARDS

But the colleges exerted their control most rigidly through their machinery of examining and admitting students, which they created and standardized for the country at the turn of the century. The need was evident for some method of bringing order out of the "chaos that prevailed fifty years ago," as the College Entrance Examination Board said in its Annual Hand Book for 1945:

"Each college then stated its own requirements, set and read its own papers. There was no agreement as to what subjects were necessary, or what the contents of these subjects should be."

In the twenty years following 1895 this chaos was changed into rigid uniformity by the setting up of regional and national organizations for the examination of candidates for college.¹ The coöperative system quickly gained in favor, and soon became the accepted method of college admission. In 1901 only 973 students were examined by the College Entrance Examination Board; today the annual number exceeds 25,000.

On the side of efficiency of administrative machinery the system was a great success — a saving of money, time, and effort and a convenience to the students. It also maintained meticulous standards of verbal scholarship. But the system cast public education in a rigid academic matrix of course-units, two thirds of which were prescribed. It forced the high school to maintain a narrow subject-organization, emphasizing mathematical skills, the minutiae of grammatical and rhetorical styles and techniques, and specific facts in science, history, and the literary classics. It minimized general reflective and organizing abilities, creative and appreciative aptitudes of students. It ignored the concepts and trends of the four great foundations of educa-

¹ The six outstanding examining and certifying bodies were established as follows:

- The New England Association of Schools and Colleges, 1885
- The Association of Middle States and Maryland, 1892
- The Southern Association, 1895
- The College Entrance Examination Board, 1901
- The North Central Association, 1905
- The Northwest Association, 1918

tion. *For the first forty years, nine tenths of the high schools were prevented from building a good education for American youth.*¹

FIFTY YEARS OF FUTILE ADMINISTRATIVE TINKERING

Nevertheless, from the very establishment of the subject-centered system progressive superintendents, principals, and teachers knew that there was something wrong with it. They did not perceive with Parker and Dewey that the whole psychological orientation was wrong. Their minds were centered on administration and not on the growth and development of children and their induction into society, and they really believed in the four characteristics of formal education that I sketched in Chapter XVI. Hence for sixty years they gave an inordinate amount of time and energy to a multitude of administrative tinkering. Since the story has been written in so many histories of education,² I shall not duplicate it here, contenting myself with a mere enumeration of the permutations and combinations of administrative machinery that were tried:

- Schemes for more frequent reclassification and promotion of pupils, such as those of Harris of St. Louis (1868-1874), Shearer of Elizabeth, New Jersey, and Van Sickle of North Denver, Colorado.
- Various "parallel-track" and terminal-point schemes of promotion by which more rapid learners of the fixed subject matter could pass more quickly through it.
- Concentric-circle schemes of supposed varying "richness of sub-

¹ As late as 1931, H. A. Kurani cited in his *Selecting the College Student in America* (Teachers College Doctoral thesis, 1931, page 53) the findings of Brown and Proctor's survey of 331 institutions:

- 98% of the institutions made subject specifications.
- Three fourths of them specified at least half of the total units required.
- Of those allowing electives, one third limited them completely but only 12% of the institutions allowed as many as 5 free electives.
- Three fourths of the institutions required language, two thirds of them required 2-4 units, 10% required 5 units, and five sixths specified either Latin or Greek.
- Nine tenths specified mathematics, seven eighths of them requiring at least 2 units.

² See, for example, Cubberley's *Public School Administration*, his *History of Education in the United States*, and my own *American Life and the School Curriculum*, Chapter IX.

- ject matter" for brighter learners — consisting essentially of more complicated forms of the same formal subject matter.
- Modifications of the marking-system (and of educational tests and measurements to which I shall devote Chapter XXI) to improve the validity and reliability of teachers' evaluation of pupils' mastery of subject matter (not of their true growth and development).
 - Such schemes for providing more powerful extrinsic incentives to learning as giving "credit for quality" of work done ("work-done" meaning "subject matter acquired").
 - Plans for supervising the study of young people in school, to guarantee more continuous learning and mastery of subject matter.
 - Plans of grouping pupils in "ability groups," to obviate the difficulties of wide individual differences. In sixty years this administrative proposal has been revived several times and has swept across the country in recurring and fairly identical movements for "homogeneous-ability-grouping."
 - Plans for the more efficient grouping of the twelve grades ... the abolition of the 8-4 Plan, the regrouped 6-3-3 or 6-6 Plan, based on the conception of the Junior High School ... plans still continued and extended by college and senior high school leaders as 6-4-4 and other grade-schemes ... still others insisting (including Hutchins *et al.* today) on "Economy of Time" and the elimination of two years from the usual 16-year chronology of education.

*"Individualize" the Curriculum:
Still Subject-Centered*

The authors of all the foregoing schemes assumed that the subject-curriculum was essentially right; the problem was to pass the pupils through it. During the sixty years since Preston Search attempted it as Superintendent in Pueblo, Colorado, a few leaders tried to devise self-teaching schemes that would let the young people master the fixed subject matter of the curriculum. They too left the content of the curriculum alone, but tried to devise self-teaching textbook and guide material that would facilitate the passage of young people through it. This was the central characteristic of Frederic Burk's work at the San Francisco Normal School and of that of his student and teacher, Carleton Washburne, in twenty-four years as Superin-

LAST STAND OF AUTHORITY IN EDUCATION

tendent of Schools at Winnetka, Illinois. For twenty years¹ Washburne and his teachers influenced the subject-centered schools of the entire nation by their new textbooks, study guides, and teaching materials for the subjects of study and their teachers' articles, bulletins, and yearbooks. But up to the middle 1920's it was subject-centered. Although they developed free group activities and creative work that broke down the rigid compartmentalization, nevertheless the acquiring of skills and knowledge was largely carried on through a subject organization of drill and learning.

/ / /

This, in briefest outline form, is the story of the first stage — the 1890's to the 1920's.

THE SECOND STAGE: 1926–1936.

LAYING SOCIETY-CENTERED FOUNDATIONS

Then, 1926, came a definite shift, a new personnel took the leadership in curriculum study, and a new type of national report was made. The shift was launched by

- The Curriculum Committee of the National Society for the Study of Education, reporting in its *Twenty-sixth Yearbook*, "*The Foundations of Curriculum-Making*" (1926).²

The shift in pattern came to its fruition in the early years of the depression, in the work of:

- The Commission on Teaching of History and Other Social Studies in the Schools (1929–1935) of the American Historical Association. Twelve volumes.
- The Commission of the Progressive Education Association on The Relation of School and College (1931–1944) already discussed in Chapter XVIII.

¹ See Washburne's stimulating book, *A Living Philosophy of Education*. John Day Company (1940).

² Originally the Society was called the National Herbart Society; it had five Yearbook Committees from 1895 to 1899 inclusive. The Committees and the Reports of the National Society have been continuous from the first Yearbook in 1902 to the forty-fifth Yearbook in 1946. Twenty-seven of these Yearbooks have dealt with one or more phases of the curriculum.

The "Twenty-sixth" Yearbook

I think I do not do violence to the consensus of judgment among professional students of *curriculum development* in ascribing the beginning of the new day to the *Twenty-sixth Yearbook*. It was new in three respects — personnel, social emphasis, and consensus of professional educational and psychological thought. Its Committee of twelve members included no professors of the liberal arts and no superintendents of schools; all were professional students of education, were indeed among the most vigorous leading "professors of education." The twenty associated contributors were administrators and teachers in (a) more progressive public subject-centered schools and (b) private child-centered schools.¹ The entire personnel was selected so as to assemble in one working committee the country's outstanding child-centered progressives (led by Kilpatrick and Bonser) and subject-centered Essentialists (led by Bagley and Judd) for the purpose of trying to achieve a body of agreed-upon theory and proposed curriculum revision. Some success in this search for a common psychology was reached. But in my judgment the most important achievement and the most lasting influence was in *the commitment of the group to a society-centered emphasis*. The first 116 pages of Part I of the report definitely accepted the concept of social change as basic, oriented the reconstruction of the curriculum in the changing society and culture, and laid the cornerstone of new foundations for a combined society-centered and child-centered school. Here was the start of what the Committee called *educational foundations*. That the report was widely read and discussed is a matter of history; the Secretary of the Society reported to me ten years later that the bulky two-volume report had sold 20,000 copies and mostly among public school workers — the largest circulation of any of the Yearbooks.

¹ Looking back at it after twenty years, I wish now that I had known enough in picking the committee to include several of the great leaders on the sociological, psychological, and esthetic frontiers. Although Veblen was dying, Turner, Thomas, Boas, Robinson, Beard, and others were all vigorous, and I knew them. It might have been difficult, if not impossible, to secure a community of discourse and thought between them and the professors of education for whose scholarship they had little respect. I did the next best thing: I wove into the report the essence of the views of these students of the social frontier. But as for esthetics, that was a blind spot, only to be filled in during the next decade of my own studies.

The Historians' Report — the 1930's

The other outstandingly significant Committee of this second stage was that of one of the learned societies — the Committee on the Teaching of History and Other Social Studies, carried on under the auspices of the American Historical Association. It was financed heavily by the great educational foundations, and maintained a paid research staff for several years, with an educational sociologist in charge — Dr. George S. Counts. The personnel as well as the reports of the Commission showed how far the concept of the social foundations of education had advanced: the Commission included distinguished historians Hayes, Ford, and Krey, the sociologist Steiner, political scientists Charles E. Merriam and Charles A. Beard; geographers Isaiah Bowman and Howard Odum; economists Leon C. Marshall and Edmund E. Day; social educationists George S. Counts and Jesse H. Newlon.¹ Of the sixteen volumes of the report those listed below show the social emphasis of the work.² These volumes were published just at the moment of the beginning of the New Deal government, the formation of the John Dewey Society, and the launching of *The Social Frontier*.

¹ The preparatory work for this Commission was done, in the years 1923–1928, largely by the Advisory Committee of the Commonwealth Fund under the leadership of Dr. Max Farrand. Robert Lynd was secretary; it was just at the moment of the Lynds' *Middletown*. I saw at first hand, as a member of this Committee, the careful preliminary explorations of society and the school made by the historians, economists, political scientists, and sociologists that he brought together with the students of education. Professor A. C. Krey, chairman of the American Historical Association's Commission on the Social Studies, took part in these exploratory studies of the Commonwealth group. These led directly to the first work of the Krey Commission.

- ² — *A Charter for the Social Sciences in the Schools*, by Charles A. Beard, formerly Professor of Politics, Columbia University
 — *Citizens' Organizations and the Civic Training of Youth*, by Bessie Louise Pierce, Associate Professor of History, University of Chicago
 — *Geography in Relation to the Social Sciences*, by Isaiah Bowman, Director, American Geographical Society, with a special study, *Geography in the Schools of Europe*, by Rose B. Clark, Nebraska Wesleyan University
 — *Civic Education in the United States*, by Charles E. Merriam, Professor of Political Science, University of Chicago
 — *The Nature of the Social Sciences*, by Charles A. Beard
 — *Social Foundations of Education*, by George S. Counts, Professor of Education, Teachers College, Columbia University
 — *The Social Ideas of American Educators*, by Merle Curti, Professor of History at Smith College

THE THIRD STAGE, 1936-:

THE CHANGING SCHOOL CURRICULUM AND COLLEGE

*Product of Social Forces
and Educational Experiment*

Forty years of social and educational progress accumulated on the American scene before the national leadership in formal education changed to catch up with it. But change it finally did, especially during the years of World War II, the results showing themselves in the new programs of both public schools and private colleges. The manner in which it came about can be seen first in an over-all summary of the forces and experiments.

On the side of social forces there was a growing recognition, outside the social sciences —

- of the revolutionary nature of the social changes of our times, especially those affecting production, employment and government.
- of the meaning of the planning movement, the TVA and other social engineering enterprises that had been stimulated by the depression and the New Deal government.
- of the growing interdependence of the entire world — that our earth would soon be “one world or none.”
- that the current fascist brand of authoritarianism was a dangerous threat to the true brand of the democratic way of life and that our collective thought and action must be harnessed to uphold the latter.

On the side of educational change, both public and private school and college leaders began to recognize —

- the educational significance for higher schools of the organic, wholeness orientation in curriculum and teaching.
- the true meaning of the Dewey-progressive interpretation of the philosophy and psychology of experience.
- the actual proved success in college of the graduates of the progressive schools, and the specific revelation of this in the Eight-Year Study of the Progressive Education Association.
- the validity of the new techniques of measurement and evaluation of educational outcomes and their usefulness in examinations for college entrance and advancement.

A. IN THE PUBLIC SCHOOLS. THE WORK
OF THE PROFESSIONAL CURRICULUM
STUDENTS: 1930's-1940's

The impact of these forces brought about a marked shift in the leadership of public educational reconstruction. If the first thirty-five years were the day of the liberal arts professors, the last twenty have been that of the professors of education and the public school curriculum-makers. By the middle 1930's a compact nucleus of professional curriculum students had emerged and formed themselves into the Society for Curriculum Study. The leaders, to name only outstanding ones, included Hollis Caswell, Paul Hanna, Henry Harap, Harold Hand, Laura Zirbes, Herbert Bruner, Thomas Hopkins, Gordon Mackenzie, J. Cecil Parker, Ruth Cunningham, Prudence Cutright, Will French — all of whom had been students of the progressive movement either in Teachers College (eight of them have taught there — five do now) or in another graduate school of education. All had come under both child-and-society-centered influences such as the Kilpatrick-Bode-progressive interpretation of the experience concepts, the New Deal experiments under the crisis conditions in the depression, and the work of *The Social Frontier*. It was this public-school-centered group that, in 1937, published the important report, *The Changing Curriculum*.

All had become professors of education, specializing in the curriculum and teaching. Their training had emphasized technical curriculum problems in a background of Thorndikean educational psychology — tintured, after 1930, with the wholeness point of view of Gestalt and with a dash of psychoanalysis, psychiatry, and the psychology of the person. There were no professional psychologists among them, no professed *students* of society, the culture, and esthetics, and only one or two students of philosophy and ethics. *Thus, even in the '30's, the leaders who led the vigorous movement to re-organize the public school curriculum — with most of their effort on the elementary school level — were not students of the four great foundations of education.*

*Getting Teachers and Citizens
into Curriculum-Development*

But they were excellent students of the technique of curriculum development and during the 1930's they definitely moved ahead the coöperative rebuilding of the public school program. The most conspicuous example was in the half dozen state programs of curriculum-development which they were asked to lead. In various states, they were the first to get large numbers of teachers and citizens into the task of curriculum-development. The entire staff of 260 teachers in Lynchburg, Virginia, and 450 in Little Rock, Arkansas, were used in remaking the curriculum; in other centers in similar fashion: "every teacher is looked upon as a curriculum-maker." In the state program of Virginia, "10,000 teachers participated in the first phase of the program"; in Arkansas, "7000 teachers and all teacher-training institutions in the State" . . . and "3000 members of the State Congress of Parents and Teachers." In several other states a similar thing took place.

BEST SOURCES FOR THE STUDY OF PUBLIC SCHOOL
CURRICULUM-DEVELOPMENT, 1930's-1940's

- Harap and others: *The Changing Curriculum* (1937)
- Caswell and Campbell: *Curriculum Development* (1935)
- Mackenzie and Parker and others: *Toward a New Curriculum* (1943)
- Arkansas Co-operative Program to Improve Instruction, Study Program, Bulletin No. 1, State Department of Education, Little Rock, Arkansas (1933)
- Flavius L. David: *The Selection and Organization of Personnel for Curriculum Revision*, Curriculum Laboratory, Bulletin No. 30, Western Reserve University, Cleveland, Ohio (October 1, 1932)
- Mississippi Program for the Improvement of Instruction, *Study Program*, Bulletin No. 1, State Department of Education, Jackson, Mississippi (October, 1934)
- North Carolina, *Suggested Procedures for Curriculum Construction and Course of Study Building*, 1934-35, Publication No. 179, State Superintendent of Public Instruction, Raleigh, North Carolina (1934)
- Texas, *Handbook for Curriculum Study*, Bulletin State Department of Education, Austin, Texas (September, 1934)
- Virginia, *Organization for Virginia State Curriculum Program*, Bulletin (March, 1932) . . . *Procedures for Virginia State Curriculum Program*, Bulletin (November, 1932) . . . *Study Course for Virginia State Curriculum Program*, Bulletin State Board of Education, Richmond, Virginia (January, 1932)

LAST STAND OF AUTHORITY IN EDUCATION

As for the lay citizens:

"Since education of its members is one of the important functions of society, the participation of laymen is implied in any fundamental reorganization of the instructional program. In our society the layman has certain rights and obligations in the direction of the instruction of future citizens of the democracy."¹

The NEA officials agree:

"The curriculum revision program which fails to carry editors, civic leaders, and other intelligent laymen along with it will encounter active opposition or lukewarm support."²

Confirmation of these principles and practices comes nowadays from all over the country. It is not too much to say that as a result of the efforts of public school curriculum specialists, *the democratizing of curriculum-development is well under way*. The technical conclusions from this work can be found in the state reports referred to earlier.

In 1937 these curriculum leaders brought their joint thinking together in their Society's report — *The Changing Curriculum* — to which we have already referred. The report reflects *a marked acceptance of a social and democratic philosophy and bears down on reconstruction*. Individualism is out, they say, emphasizing social coöperation. The philosophy is Dewey experimentalism via Bode-Kilpatrick ... the good life ("of continuous becoming") the critical study of experience ... man solving his own problems ... environment as important as inheritance but no more so. Man, experience, and society are organic, experience is continuous. Atomism and mechanism are invalid. A human life is goal-seeking ... learning is a creative process ... individual and society are inextricably one ... the good social life is achieved only by social planning and social co-operation. A vast amount of education must be carried on "in or with factories, farms, slums, picket lines, libraries, community-planning groups, welfare agencies, recreation centers, shops, newspapers, stores, pressure groups, legislative bodies; hence *the central problem of education is the good society, not a "direct search for personal culture."* The three hundred teacher-groups repudiated the formal-discipline psychology. Life and learning are organismic, learning is most ef-

¹ In their *Curriculum Development*, page 473.

² *Research Bulletins* Nos. 4 and 5, Vol. III, National Education Association, September and November, 1925, page 121.

THE EDUCATIONAL FRONTIER: 1890's-1940's

fective in situations meaningful to the learner. The textbook is well on the way to being dethroned, *the new focus of the curriculum being the needs, interests, and purposes of the students*. These are served by a broad range of activities — experimentation, excursions, surveys, round-table discussions, pictures, interviews, the movies, what-not. There is a shift from emphasis on skill and memorizing to the conscious development of attitudes, appreciations, and the wholesome all-roundness of the individual. Skills are taught “through use in meaningful situations.” And there is a shift from emphasis on the past to stress on the present and the emerging future. Issues in curriculum-development are confronted squarely in the social philosophy and in the psychology of learning. The current consensus of the philosophy of experience is applied directly in selecting and organizing curriculum content.

THE NEA'S EDUCATIONAL POLICIES COMMISSION REFLECTS THE SOCIAL-PROGRESSIVE GAINS

For fifty years the most powerful public educational force in America has been the National Education Association. With one fourth of all of America's teachers in its membership, and most of the superintendents, principals, and supervisors in its related departments, with a huge annual budget and a trained and experienced headquarters research staff, it has not only been the spokesman for American public education, it has practically formulated public policies and

SELECTED REPORTS FROM A DECADE OF CONTRIBUTIONS BY THE EDUCATIONAL POLICIES COMMISSION

- *The Unique Function of Education in American Democracy* (1937); 129 pages
- *The Structure and Administration of Education in American Democracy* (1938); 128 pages
- *The Purposes of Education in American Democracy* (1938); 157 pages
- *Federal Activities in Education* (1939); 151 pages
- *Learning the Ways of Democracy; A Case Book of Civic Education* (1940); 486 pages
- *Education and Economic Well-Being in American Democracy* (1940); 227 pages
- *The Education of Free Men in American Democracy* (1941); 115 pages
- *The Civilian Conservation Corps, the National Youth Administration, and the Public Schools* (1941); 79 pages
- *Education for All American Youth* (1944); 63 pages
- *Policies for Education in American Democracy* (1946); 277 pages

LAST STAND OF AUTHORITY IN EDUCATION

programs. During the first thirty-five years of the past half century it alone was the chief sponsoring group of the great national committees.

About the beginning of the depression a new leadership came to the headquarters staff — especially revealed in the research directorship of Dr. William G. Carr. The conspicuous constructive product of the new leadership, since 1935, is the work of its Educational Policies Commission. While definitely under the direction of the more progressive school administrators — witness its chairman, Alexander J. Stoddard, and such progressive professors of school administration as Jesse H. Newlon and John K. Norton — it utilized the talent of *The Social Frontier* group in Messrs. Counts and Newlon, and the scholarly equipment of the liberal arts in Harvard's President James B. Conant. The integration of these forces during the depression years brought forth a most impressive body of social and educational principles of organization and administration.¹ The student of public educational reconstruction should not miss such publications as those which are enumerated in the accompanying list of reports.

Not the least important development was to bring President Conant into the membership of this public school group. Not only did this guarantee the cultivation of the foundations of our heritage in Western thought and institutions; in addition it confronted the private leadership with the insistent facts and imperatives of the changing high school. I think I do not exaggerate in suggesting that this contact helped to bring about, in the ensuing war years, the appointment of the new Harvard Committee on General Education and the publication of its important 1945 Report, *General Education in a Free Society*. I make much, therefore, of the cumulative effect of the social and progressive forces on the subject-centered group and the cross-fertilization of their ideas and attitudes with those of the progressive leaders and the public school administrators and curriculum-makers.

B. IN THE COLLEGES AND UNIVERSITIES

I. DETERMINING FITNESS FOR COLLEGE

“LIBERALIZING” THE COLLEGE ENTRANCE REQUIREMENTS

I have made much of the resistance of the colleges and universities to the social forces impinging upon education. Certainly there

¹ These constitute one of the bases of my discussion of new trends in administration in Chapter XXII.

was little change in the college curriculum until the 1940's; with the exception of the introduction of new types of general courses by a few of the more progressive colleges immediately after World War I, almost nothing new developed. But to the so-called "scientific" or measuring movement in education they responded much more promptly. Even before World War I there had been slight indications of a willingness to loosen the hold of college entrance requirements on the secondary school curriculum. The first steps, it must be confessed, constituted little more than the benevolent gesture of a dictator in control, but, viewed in the sequence of the bigger steps of the next thirty years, they were important; witness, for example, the major events in a quarter century of liberalizing the requirements of the College Entrance Examination Board:

- 1916, the introduction of Comprehensive Examinations
- 1920, the beginning of the work of the Commission on New Types of Examinations
- 1926, the establishment of the Scholastic Aptitude Test
- 1937, the first of a series of conspicuous experimental steps - for example, the Comprehensive Examination in English in place of the old "restricted" examination and the installation of the objective Scholastic Achievement Test for candidates for scholarships
- 1940, the extension of the Scholastic Achievement Tests to all candidates for admission to college
- 1942, the abandonment of the traditional essay form of examination covering a defined subject-matter field and the substitution of the discursive test (objective type) in English composition

The New Tests in English Composition

The shift in aim and procedure in college entrance examining is illustrated very well indeed by the changing nature of the tests in English composition. The new tests are designed to measure the "normal skill" of the candidates in written composition; the aim is to discover and measure their ability to organize material and express themselves clearly and accurately. The newer tests consist of short essays, single paragraphs of 400 to 500 words, in recent years still

shorter — of only 150 words. Moreover, they are no longer restricted to literary matters; instead they are written on topics with which every candidate will be familiar.

The Scholastic Aptitude Test

The measuring movement in education which I discuss in Chapter XXII had been running for about fifteen years when the College Entrance Examination Board decided to establish its own Scholastic Aptitude Test (1926). This was and continues to be an objective type of examination, closely resembling, and correlating highly with, the verbal intelligence tests. In order to pass it, the only specific facts one would need to have on tap would be those involved in arithmetic, elementary algebra and geometry, and a reading vocabulary such as is today the common property of relatively all high school graduates. For twenty years this test has been used as one of the basic measures of determining fitness for college. This again is a revelation of the determination of the college officers to give up the measurement of specific knowledge and skill in favor of appraisal of general traits, the ability to organize material, to detect relationships and to solve problems, and to understand moderately complicated written material.

As Spicer said, five years after the adoption of the Scholastic Aptitude Test, although

“some inroads on specification had been made . . . a large majority of the colleges and universities specified the nature of the larger part of the credit presented for admission, included in their requirements at least two units each of mathematics and of language (much of it classical), and allowed little, if any, freedom of electives.”

Brown and Proctor's survey of 331 institutions showed that from 75 to 90 per cent required specified subject-units in language and mathematics.

Steadily through the depression years the leavening of the college mood advanced, partly under the impact of the devastating social changes themselves, partly as a result of the progressive movement in education. In 1938 two systematic surveys were reported; one by the research headquarters of the National Education Association, the

THE EDUCATIONAL FRONTIER: 1890's-1940's

other a study by H. A. Ferguson. I quote the statistical findings of the NEA study.¹ Ferguson's conclusions are quoted herewith:²

Ferguson's Findings

- Increased emphasis on the school record ... less emphasis on examination results and marks in subjects
- Tendency to interpret the Carnegie unit more liberally
- Increase in use of certification in place of examinations
- Greater inclination to judge applicants on their merits
- Plan to secure wide geographic distribution
- Progressive education experiments have changed attitude of some colleges
- Reduction in emphasis on foreign languages
- Marked growth in the use of aptitude tests
- Marked increase in varieties of admission procedures
- Greater emphasis upon comprehensive examinations
- Greater tendency in Middle and Far West toward freedom in electives
- Greater emphasis upon marks, certifying standards, and rank of the pupil in his class
- Increased attention to personal qualities
- Marked tendency to aid able students financially
- Tendency to encourage personal interviews

¹ DIGEST OF FINDINGS FROM NEA STUDY

	SCHOOLS REPORTING	SCHOOLS USING	PER CENT
1. Transcript of H. S. credits and subject marks	407	371	
2. Rank in H. S. graduating class	371	279	66
3. H. S. principal's judgment	354	268	
4. Personal interview with college representative	304	235	
5. Description of character and personality from H. S.	308	214	50
6. Results of intelligence test taken in H. S.	278	168	
7. Results of College Entrance Board Examinations	192	166	
8. Results of general intelligence test taken at college	293	143	33
9. Results of objective achievement test in H. S.	256	135	
10. Results of health examination taken at college	272	132	
11. High school diploma	163	132	
12. H. S. extracurricular record	304	131	
13. Objective achievement test taken at college	233	117	
14. H. S. health record	166	111	25
15. Essay type examination at college	104	70	

- N.E.A., *Research Bulletin: From High School to College*, Vol. XVI, No. 2 (1938), pages 78, 79.

² "Trends in College Admission Requirements," *School and Society*, 48: 407-411, September 24, 1938.

LAST STAND OF AUTHORITY IN EDUCATION

THE COLLEGES ACCEPT THE CONCEPT OF "GENERAL EDUCATION" FOR ALL

On the problem of organizing the curriculum there is also a heartening swinging together of the professional students of education and the leaders of private colleges, shown clearly in the latter's recent tendency to accept the trend toward general education. This development has already been discussed in Chapter I and its background in the progressive movement in Chapters XVII and XVIII. I shall do no more here, therefore, than to recall Columbia's success, twenty years ago, in building its general freshman course in Contemporary Civilization and the new action at Harvard in requiring a general year-course in Western Thought and Institutions, another in American Democracy, another in the Humanities — Great Texts of Literature, one in General Biology, and one in General Physical Science. At Columbia, after twenty-five years' experience with the course in Contemporary Civilization, the faculty have put into operation similar general courses in other fields — an Introduction to the Humanities — Literature, Music, and the Fine Arts, and an "integrated . . . required introductory course in the sciences." This new practice at Columbia and Harvard is supported, although less emphatically, by the new programs at Yale and Princeton and in the younger colleges and universities. One can generalize the trend and say that the vanguard of the colleges and the secondary schools stand together in organizing general education in "broad fields" of study. So much has fifty years of experiment and study contributed.

Is the Social Orientation of the Colleges Changing?

But leaders of the philosophy of experience, confronted by these signs of change with respect to college entrance and organization of courses, are puzzled to know whether the colleges are really prepared to reconstruct the content of their education to fit the changing world. Certainly they have accepted some of the social changes in our society and are rebuilding their programs accordingly. A notable example is their frank abandonment of the long-held concept (still held by the Scholastics) of a private liberal education for the "best people" and their bold assertion that a sound secondary as well as college education must be designed for *all* the people. "We must improve the average and speed the able *while holding common goals before each.*"

Common goals before each! This predicts a new kind of "liberal" or "general" education, for common goals in education cannot be implemented in our modern industrial society with the dead verbal and abstract material of the ancient and medieval liberal arts. And common goals will guarantee that we do not give the high IQ's a verbal education and the low IQ's a "hand-minded" one. Thus we see faint signs of profound changes in orientation in our higher institutions in their theory of education for a free society and in the techniques by which they pick their student personnel.

But have they really accepted the philosophy of experience with all its implications as stated in Chapters II to XIV of this book? We do not know. I personally doubt that the rank and file of the college professors today have done so. The reaction of the members of the American Economic Association to the Great Depression (witness also the statements of the authors of *Recent Economic Changes* in the spring of 1928¹) is a good measure of their loathness to change their ideas to fit the established social changes. And in every other learned discipline there abounds a similar mental inertia as well as a sincere belief in the outmoded concepts of economic society. Hence the progressives, while acclaiming such new statements as *General Education in a Free Society*, ask: "Do they carry it out in their actual teaching? Within these modern-sounding titles will young men and women really come to grips with the actual forces of our industrial culture? Will they deal with the real concepts of the New Sociology?" No definite answer can be given to these questions, for the new courses are only now being organized for the first time. The directives that the college committees give to the professors who will create the new content are encouraging. Certainly the implementation of these directives in the next few years will be scrutinized with great interest by the students of educational reconstruction.

LOOKING BACKWARD AT FIFTY YEARS OF "LIBERAL ARTS," SUBJECT-CENTERED EDUCATION

This must conclude our study of the reaction of the defenders of the liberal arts faith and program to the changes in society and to the innovations in education. What contribution to the post-war school can it be said to have made? Granted that they have done

¹ Quoted in my Chapter IX.

well to keep educators alert to the necessity of finding first principles of reconstruction and of preserving and passing on the indispensable qualities in the social heritage of Western civilization: has there been a positive residue of *new concepts*, as in the case of the other movements? A brief casting up of the intellectual balance sheet will supply the answer:

I. *The Essentialists*. Developed the practical implementation of the *doctrine of social use*, insisting that the school shall build technical competence in skills actually used by the people . . . Held before the profession the necessity of passing on the essentials of the social heritage and the role of a "community of culture," based on a "common core of ideas, meanings, understandings, and ideals representing the most precious elements of the human heritage."

II. *The Scholastics*. Secured much publicity for the necessity of discovering *first principles* of philosophy that will bring unity out of our cultural confusion. I can find no other unique positive contribution from this group.

III. *The College Professors of the Liberal Arts*. Constant reiteration of the importance of preserving and passing on the sense of great social heritage that has grown through the history of Western civilization.

IV. *The Professional Curriculum-Makers of Public Schools*. Led in the democratizing of curriculum-development by teachers and citizens . . . Furthered the social purpose of education and the concept that education is a basic instrument in social reconstruction . . . Emphasized that the curriculum shall be built directly from the culture, especially the problems and forces of contemporary society, and that curriculum-development shall keep up with social change . . . A dynamic force in spreading the new organic psychology, in helping to dethrone the textbooks from their rule over teaching, and in focusing the curriculum on the needs, purposes, and interests of the students.

CHAPTER XX

The Curriculum: What Have We Learned?

The New Meaning of "Curriculum"

Above all else we have learned that the curriculum is, after the teacher, the nub of the educational problem. While the other problems are important — administration, financing, an efficient plant and equipment, to name only three — yet more important than all these is the curriculum. One of the clearest marks of this today is shown by the new meaning that the term, "the curriculum," has come to have. I use it as the title of this chapter merely because custom has fastened it upon us. Out of fifty years of vigorous thought and experimentation we have come to *conceive the school as an enterprise in living*; hence, what was narrowly and forbiddingly called in the old education the curriculum becomes in the new education "the life and program of the school." Every aspect of a truly vital education partakes of life itself; the school becomes a school of living . . . learning is seen as living through novel situations . . . the curriculum becomes the very stream of dynamic activities that constitute the life of the young people and their elders. Thus the new school is a social as well as a personal enterprise in living.

But the school is more than that; it is an enterprise in *guided living*. The life of any social group can be said to be an enterprise in living, but for most groups the living is not consciously guided to

KEY VOLUMES OF THE NEW EDUCATIONAL CONSENSUS

Many primary documents in the new sociology, psychology, esthetics, and ethics have been employed in Parts II to V of this book. Many more are available from the educational frontier of the past fifty years. Most of these I have used in my various publications since 1914. In the background of this huge library I pick twelve educational documents which seem to me to be the best of the current ones. These are given on pages 4 to 5 of Chapter I.

THE CURRICULUM: WHAT HAVE WE LEARNED?

produce desirable kinds of growth. It is the anticipation of desirable kinds of growth and conscious guidance to produce them that distinguishes the school from any other social enterprise. By *guided* and *anticipated* I do not mean fixing in advance a pattern of knowledge, skill, and attitude into which our young people shall be fitted. To guide the education of another person is, I think, the most subtle as well as the most crucial of all the vital professions. It puts upon the educator the twofold obligation: first, he must strive to be sensitive to that person's potentialities for day-by-day *growth in living*; second, he must be alert to bring within the learner's reach the best possible facilities for the growing process. The goal the educator never for a moment forgets is the changing, maturing, day-by-day living that the young people give promise of achieving. Thus the educator strives to *anticipate* these promising kinds of better living and to make available effective facilities to aid the young people in achieving them.

DESIGN IN CURRICULUM-DEVELOPMENT

Man's efforts to create have produced an inclusive concept that is alive with meaning to describe the primary task of the educator. That concept is "design," more casually expressed by the word "plan." Before any enterprise can be built, it must be designed. The engineer, it is said, must design his bridge, his railroad, his engine or machine, before he can build it. He dare not build without a plan and he builds on a casual plan with great risk. The writer must design his novel or poem before he can construct it, the playwright his theater piece, the painter, the sculptor, the costume maker, the architect, their works of art. The educator is no exception to this principle. He will design the life and program of the school with the utmost care to give assurance that the day-by-day living within it will approach the potentiality for living that he feels in the young people. To become a program in guided living, educational activities must be designed; certainly they must not be left to the casual circumstances of whim or chance. In this sense, both the goal and the program of education are designed; that is, they are developed from an ever continuing appraisal of anticipated kinds of growth. In a profound sense, then, the new education is a "design for living."

THREE PRINCIPLES OF DESIGN

Out of the entire history of the creative act emerges *the first principle of design*: define the purpose of the structure. Answer the

great prior question: What function is this to serve? What is this to do? The architect asks: What kind of life is to be lived in this house? The social planner: What is this economic system for, for whom and for what kind of life? So the teacher designing the curriculum with a group of children must answer two prior questions: What kind of life is this program of education to build? What activities of children and grownups will do that best? To confront the designer with this question will compel him to strike the attitude precisely needed for the total design of the structure. It is the prior question. It will determine both the content and the form of the educational program. As Frank Lloyd Wright says: "Does form follow function, as Sullivan said? Yes, but more than that. Form and function are one." But I say, even more than that—both content and form are created in answering the function question. The "content" of the program—What are the learners to do? and its "form," How are they to do it?—are both precipitated in the test tube of purpose.

But this is nothing more nor less than the prescription of the curriculum-makers of a generation ago that first of all one must state clearly the "aims and outcomes of the course of study." And it is, of course, a reaffirmation of the Dewey-progressive emphasis on purpose.

The second principle of design also emerges from the history of the creative act: *all* the known data that bear in any way on the design of the structure must be assembled and organized. *All* the known data—the unlimited community of ideas, facts, relationships, and principles. The consensus of judgment concerning this principle emerges from every activity in which man has practiced creative design. In the design of a bridge, for example, the engineer gathers a vast body of established facts dealing with every phase of the structure, both contemporary and historical: the river—soundings and measured records—to determine the nature of its bed, its flow and velocity, estimated pressures against piers under cumulative seasonal conditions; facts of span, traffic, strength of the materials; comparative facts of types of construction; probable peak loads to be imposed upon the bridge, legal facts of ownership of land, including riparian rights; political facts of communities, regions, and states; psychological facts of human relationships; esthetic facts and principles involved in design—and many more. All must be organized in the design of the bridge. This brief reference to design in the arts of mechanical engineering can be duplicated from any other human activity. Irrespective of the nature of the enterprise, all the known data—historical or

THE CURRICULUM: WHAT HAVE WE LEARNED?

contemporary, physical, scientific, economic, political, legal, social, psychological, esthetic — must be assembled and organized in terms of the needed design.

The third principle of design. Working as artist, the designer conceives in imagined outline the content and form of his structure. This is the crux of design in the creative act. This is the stage described by Sheldon Cheney as “the imagined conception.” In my own homely statement of the act: “I say, what I see, my way — with form,” it is the stage “what I see.” Framed in the matrix of his concept of purpose the artist-teacher struggles to foresee in imagination what the young people are to do and in what form they are to do it. The content is sketched in an outline of basic concepts and proposed activities; these “known facts” are the life needs of children, youths and adults. In scientific terms, the content is gathered from the ontology and culture patterns, from the sociology, psychology, esthetics, and ethics of the people; the form emerges from the sensed data and principles of psychology and esthetics. Thus the imagined structure of the curriculum takes content and form in written, printed, and graphic material. Here is the very heart of the creative act in educational design.

THE CURRICULUM DESIGNED DIRECTLY FROM THE TOTAL CULTURE

A designed school we envisage — but designed from what materials? From the very life of the American children as they live with their elders — their contemporary doings, their problems and issues and the social trends that have precipitated them. The combined contribution of the child-centered, society-centered, and social-heritage-centered schools taken together gives another profound concept for curriculum-building — *the curriculum designed from the total culture*. All that we have discovered about the new sociology, psychology, esthetics, and ethics comes to our service at this point. The total culture, for the nonschool aspects mold our youths far more than the formal school itself. Even in the best of our mass schools the young people are exposed to the pressures of the school less than 10 per cent of their time; during nine tenths of it they are subjected to the powerful stereotyping influences of family and neighborhood groups and other community influences.

*1. From the Needs
of the Young People*

This does not mean that the curriculum is to be based solely on adult life, as was done all too commonly in the past. The doings of 40,000,000 young Americans constitute a vital part of the culture, educationally the most important part. It is the needs of the children and youths at any particular time, it is their problems and interests, that must constitute the nuclear activities of the curriculum. What are these? Ask the student what he needs; he will tell you. Listen:

"I need to keep alive, to know my body and how to nourish it and keep it strong and beautiful. I need a mate and a home, to understand sex, to know how to love and cherish my family, and to build my house well and cultivate my scene. I need work, to know how to work, to respect work and to enjoy it. I need to know my country and the world, their history and the true forces that make them what they are and the factors that stall them from being what they might be and the keys to the present economic jam. I need to express myself in many ways, to create my own statement and to appreciate to the fullest the sensitive statements of other men of integrity. I need ballast and balance in my life, a plan, a design to show me the points of life's compass and to guide me in a direction. I need to feel the purpose of my life, both here and in the universe, here and hereafter."

*2. From the Key Concepts
of the Four Foundations*

What my student needs — that is the irreducible basis of my design of education. But these needs emerge in part from a wider social content, adult created. They spring from the four great foundations. The central concepts of the Sociology and the Esthetics will govern the content of the program of studies; the concepts of the Psychology will determine the curriculum organization and teaching; the concepts of the Ethics will guide the climate of freedom and discipline and set the code of behavior for the life of the school.

THE CURRICULUM: WHAT HAVE WE LEARNED?

THE CURRICULUM-DESIGNER, A STUDENT OF THE NEW SOCIOLOGY, PSYCHOLOGY, ESTHETICS, AND ETHICS

Hence the curriculum-designer must become a thorough student of the culture. He must *know* his America — the modes of living of the people, their achievements and their deficiencies, their liabilities and their assets. He must *know* not only its material civilization but its basic institutions and its directive psychology. He must be sensitive to the values and ideals which the people hold, their taboos as well as their objects of allegiance. Moreover, he must really understand the parent European culture that gave birth to American life and that is now rapidly proselytizing the peoples of the entire earth. The outline of that knowledge is presented in the material of Chapters VIII to XII inclusive and need not be repeated here.

But the building of a sound program of education is as dependent upon the facts of individual personality as upon the content of the group culture. The predominant traits that comprise the personality of an individual are the very foundation of the social behavior that we call the culture. Thus they supply the curriculum-designer with basic content for his program at the same time that they determine its form.

But the task is even bigger than that of educational sociology and psychology. It is a profound esthetic task as well, and the designer must also be a student of esthetics. If he is not, his curriculum will be devoid of the creative act and reflect a low order of esthetic sensitivity. It follows, finally, that the curriculum-designer must be a student of the philosophy of modern living, including its morals and ethics: only by so doing can he get to the bottom of the great dichotomy of freedom and control and solve the problem of disciplined initiative.

In short the curriculum-designer must be a student, for educational purposes, of the new sociology, psychology, esthetics, and ethics.

SHALL THE CURRICULUM BE PLANNED IN ADVANCE?

This extended discussion of design has implied a commitment on one of the recurring controversies of the past generation — namely, Shall the curriculum be planned in advance? It was characteristic of the formal conception of education that the entire program

should be planned in advance; everything that the young people did was "set-out-to-be-learned." All phases of "instruction" were meticulously itemized in the printed "Course of Study" — the number of pages to be read, the words to be spelled, the arithmetic exercises to be worked. The question: Which things in the curriculum shall be planned in advance and which ones made "on-the-spot"? was never raised. Everything was planned in advance.

The leaders of progressive education reacted violently against this mechanized system. Some, particularly those who followed Mr. Kilpatrick, went to the other extreme, insisting that the curriculum should be "made-on-the-spot." There was a time, in the years of the 1920's and 1930's, when some of the new progressive schools tried to create much of their program of work by this method. They made the teacher responsible to seize upon the educative possibilities in the moment-by-moment life of the group and to plan with the young people the activities of the days and the hours. In some of the schools, in which I can testify as an eyewitness, the result of trying to carry on the educative process in this way — with thirty or more young people in a group — was educational disorder, mental and emotional confusion, and waste.

But after a generation of experiment and discussion we have come to a position between these two extremes. Both practical administrative and social conditions and theoretical imperatives compel us to plan the general structure of the life and program of the school; witness the obvious physical and social conditions:

- in our towns and cities enormous schools, large classes, mass production of learning.
- vast range of individual differences in abilities, aptitudes, and interests in every school and class.
- the social world itself, bewilderingly complex and baffling, presenting a multitude of situations which are potentially educative, but need the most careful selection.
- to build understanding, concepts, episodic descriptions, generalizations, which are manifold and complex, must be carefully graded.
- a vast number of problems and topics for study . . . the consequent necessity that the school shall select optimal examples for school study — a task far too difficult and technical for most group teachers.

THE CURRICULUM: WHAT HAVE WE LEARNED?

- the unorganized nature of the materials to be used in the school program, demanding technical and administrative assistance for the teachers.

The consideration of theory buttresses the imperatives from these practical conditions. As we have seen, "to educate" means to guide the growth of young people and this means to guide the selection of the experiences which are to constitute the curriculum. Certainly, growth must not be left to the vicissitudes of casual events; maximal growth must be guaranteed by the school, and this can be accomplished only by the most careful planning in advance.

It is agreed, therefore, that some phases of curriculum-development must be designed in advance with the greatest care and that this can be done only by workers of technical competence; but other phases will be developed spontaneously, "on the spot," with the initiative and help of the children and youth. Let us distinguish these two phases:

1. Some Things You Design in Advance

First: The over-all structure of the curriculum, from nursery school to adult life. This is designed on:

- a clear prevision of the kind of man and woman the school aims to produce.
- the consensus of scientific knowledge of growth. The curve of curriculum-development is plotted against the known growth curves of physical, mental, and other human traits. In each stage of the curriculum gradient the life of the school must comprise a planned succession of experiences that have been designed to stretch the capacities of the young people to their very limits. Maximal growth is possible only when the educational program consists of a succession of designed graded experiences.
- a technical knowledge of the four foundations of education — Sociology, Psychology, Esthetics, and Ethics.

Second: The grade-year structure of the program of activity must also be designed in the light of the foregoing knowledge.

Third: Important factors in this planned over-all structure are:

- the problems and interests that are keys to the personal lives of the children and the youths.
- the cue concepts of the social world, of the physical earth and universe, and of its living creatures.
- the key conditions, problems, and issues of the people in the community, the region, the nation, and the world.

Fourth: Included in the foregoing, but given special attention here, a body of technical skills and information which has been shown by investigations of social use to constitute minimal essentials needed in common by all effective members of society.

Fifth: These factors are sufficient illustrations of the living experiences that constitute the skeleton of the subject matter of the curriculum. These can be discovered and assembled for educational use only by professional research and technical organization. The limited knowledge and interests of particular children, parents, teachers, or administrators are not a sufficient guarantee of adequate design of the over-all structure. That must be created in advance by the coöperation of all competent persons.

2. Some Things You Design on the Spot with the Children and the Youths

But there are some phases of the program of the school that are created in the moment-by-moment living of the young people and their teachers. Out of a generation of progressive experimentation has emerged the concept of pupil-teacher planning of such educative experiences. This is a joint enterprise; the teacher becomes the responsible leader and guide, but much initiative is left to the children and the youth and reliance is chiefly on their interests and experiences. To illustrate:

- the day-by-day planning of group and individual work. This centers in the group Morning Exercise which is set aside for each age-group to plan its work of the day. Good practice, at least in the elementary school, requires the daily discussion and planning of work of each group. This, perhaps, should be supplemented by the use of some form of "Dalton contract plan"¹ to guarantee constant growth in the mastery of needed techniques and knowledge. But all such planning must be done within the over-all structure of design which has been made for the total work of the year.
- the assembling of the whole school almost daily (for example, the Morning Exercise at the F. W. Parker School, Chicago) to provide adequate opportunity to plan and appraise the ongoing life of the whole school.

¹The best example of this I have found in practice is in John French's Cambridge School at Kendall Green, Massachusetts.

THE CURRICULUM: WHAT HAVE WE LEARNED?

- carrying-on of the organizational life of the school: through the school and class councils, the newspaper, magazine, and other creative activities of the school.
- the moment-by-moment decisions that must be made spontaneously in the ongoing life of each group within the school.

In these and other similar activities which fall within the competence of the group teachers and of the young people, the initiative and responsibility for planning are left as largely as possible to them. But it is all carried on within the framework of the over-all planning which is done by the whole school community under the leadership of competent specialists in curriculum-development.

WHO DESIGNS THE CURRICULUM?

To Those Who Are Given the Great Opportunity to Create a New School

Were I building a school today, I'll tell you what I'd do.

First: I would gather some eager young parents, for they would be the nucleus of the School Community. The Community of the School would be fourfold:

- The parents
- The children and the youths
- The teachers
- The director and the administration

This conception of the School as a Community is sharply contrasted with the straight-line authoritarian school of the 1890's, which omitted the parents altogether and reversed the rank-order of importance, creating a hierarchy of control-command-and-obedience that reached down through *führer* levels from Board of Education to administrator ... administrator to teacher ... and teacher to pupil. The newer concept of the School Community postulates democracy, the control resides in the multitude of individuals, and design is based upon the efforts of all working together. Hence the parents are first in my concern, because the education of the children, especially the younger ones, is centered sixteen to eighteen hours a day in the home and only six to eight hours a day in the School. So the parents are really charged with greater potential as teachers than are the professional teachers themselves.

Second: I would select a staff of teachers. A few would be mature, wise ones of considerable experience of life and education; but most of the teachers would be young, of not too much experience — probably four or five years would be best. And there would be many young internes, just out of college, eager to study and to learn.

Third: I would pick the more mature young people among the students themselves. They, with their parents and teachers and the administrative associates, would constitute the Community of the School. This is the Design Group which would plan the building of the School.

Fourth: Finally, there is need for another kind of competence, for the task is a technical job requiring special expertness. A new profession of curriculum-designers has appeared, and I would insist that the school budget carry a special appropriation for an Office of Curriculum Design with a professionally trained and experienced designer in charge. If the school were small, the Director should serve in that capacity, although even in a small school one professionally competent leader should give his entire time to the continuing redesign and reconstruction of the curriculum. This person should be a qualified student of the foundations of education, surrounding himself with the part-time energies of other persons on the staff who have special competence in those fields in which his own experience is more limited. These three or four persons would constitute the central nucleus of the Design Group.

A Continuing Study Group

First and foremost we would be a continuing Study Group. Seeking unshakable foundations for the curriculum, we would make ourselves students of the creative events of the past sixty years on the five frontiers of the imagination.

- From the Social Frontier we would accumulate the concepts of the New Sociology.
- From the Human Frontier, the concepts of the new Biopsychology.
- From the Expressive Frontier, the spirit and concepts of the New Esthetics.
- From the Moral-Ethical Frontier, the mood and concepts of the governing philosophy of life.
- From the Educational Frontier, the creative ideas projected by a half century of school experimentation.

THE CURRICULUM: WHAT HAVE WE LEARNED?

Thus we would make our very own the consensus of thought about man, his nature and behavior, his universe and his changing society, his expression, religion, and ethics. *And from the Great Consensus we would build the life and program of the School, reaching from the nursery to the adult institute. It would be person-centered, society-centered, and social-heritage-centered. It would be functional, springing from the depths of American life, designed from the needs of the children and their elders. It would be expressive in the fullest sense, a work of art measuring up to every rigorous criterion of form.*

THE PROBLEMS OF THE CURRICULUM

As a consequence of the half century of clarification we can see that there are three insistent problems of curriculum-development:

- The Problem of Philosophy: the formulation of the guiding theory of the school; a never finished task basic to all the others. Four centuries of physical science have established the principle that the first step in design is the critical construction of theory.
- The First Problem of Subject Matter: I. Its Selection - deciding what to teach, both in over-all perspective and at each level of development.
 - the subordinate but critical problem of deciding what shall be designed in advance, who shall do it and how much shall grow "on-the-spot."
- The Second Problem of Subject Matter: II. Its Organization.

I. THE PROBLEM OF PHILOSOPHY

The American Philosophy of Experience

From the beginning we must never lose sight of the necessity of continuously building our philosophy. The heart of the process is the decision as to what kind of man and woman we want the School to produce. This is basic, for the content and organization of the curriculum will be determined by that decision. How do we decide? By scientific study? No, although in the early excitement of trying to use the scientific method in education there was much talk about that. But today there is a growing recognition that the great goals of education are matters of human thought and feeling. They are

ultimates of life, products of our philosophizing. All that we have said about the curriculum-designer being a student of society and the culture, the biopsychology of man and his behavior, the new esthetics and ethics, comes to bear on this problem. The great goals of education are themselves the product of the beliefs and values (the ontology) and culture-patterns of the people; they spring from the Design Group's knowledge of the foundations of education. And that, as we have said, is developed with as rigorous a use of scientific method as the group can command. But the decision as to the kind of man we want to develop fundamentally will be an ultimate stated by the judgment of the community.

In formulating our philosophy the curriculum-director will guide us through the modern revolution in thought. From a carefully documented study of Western man's sophisticated history we will trace his success in ousting the long-ruling philosophy of authority. Constantly we will be guided by the philosophy of experience, the social order of Democracy, and the Great Tradition. We shall never lose sight of their leading concepts: that in spite of our differences each of us is a Person, and each a Supreme. Each of us lives a unique life of experience and has some original power of thought. Only together can we distill judgment and decision out of human experience, and so we shall rule together. Thus, in the framework of the philosophy of experience, we design the curriculum. Since this has been the central theme of this book, it is not necessary to develop it further as a basic curriculum concept.

II. THE FIRST PROBLEM OF SUBJECT MATTER: WHAT SHALL WE TEACH?

The Meaning of the Concept "Subject Matter"

The question, "What shall we teach?" cannot be answered without a careful exploration of the perennial problem of subject matter. Throughout history philosophers and students of education have wrestled with it; in our times Mr. Dewey in his Laboratory School, Colonel Parker in his great Practice School, and a host of other leaders. No one has ever solved it. As Mr. Dewey said a generation ago, "in its fullness it [the solution] will never be reached." Throughout the decades of noisy attacks and counterattacks of the warring schools of thought there has been a muddled confusion concerning the concept of subject matter. Neither side made an appraisal of its nature and its

THE CURRICULUM: WHAT HAVE WE LEARNED?

role in the curriculum. The liberal arts leaders denounced the progressive schools on the ground that they got a lot of activity but mighty little "subject matter." By this they meant that the literary and the mathematical content and the technical skills of the program were slighted, the classics were minimized, there was little attention to the great books of the past. *All of these, they said, were the true subject matter of education.*

Instead of countering with an intellectual analysis, the leaders of the progressive schools met the attacks of the liberal arts with a counterattack. They condemned the conventional program of studies as "a subject-matter approach." In the writings of Kilpatrick learning was criticized as "giving back on demand subject-matter-set-out-to-be-learned." Whether or not the contenders believed the full implications of what they said, the attacks and the counterattacks during the 1920's and 1930's actually set the Dewey-progressive concept of "the reconstruction of experience" over against the conservatives' "subject matter." A controversy that was needless and pointless raged for a quarter of a century. Through it all the concept of subject matter was a straw man set up by one side and knocked down by the other.

But in reality the problem of subject matter is not only the most important problem of education; it is the most difficult one. The nub of the problem was Herbert Spencer's classic question — "What knowledge is of the most worth?" restated for educational reconstruction today — *What experience can be used most educatively?* Far from being opposed in meaning and usefulness, *the concepts of subject matter and experience are synonymous. The data of experience are the subject matter of education. Any human experience that can be used educatively is potential subject matter.* Much of what the schools of 1890 did in acquiring mastery over mathematical symbols, words, and other linguistic forms was subject matter — *when it was used educatively.* And the newer content of the progressives is subject matter *if used educatively*; for example:

- young people conducting an assembly in the auditorium or an open forum on some issue of community, national, or international affairs.
- the activities involved in the life of the school as a whole — school council, newspaper, band, orchestra, glee club.
- socially useful work such as we have already illustrated.
- excursions for directed study.

- creative activities, either individual or group - writing, casting, staging, directing, costuming, lighting, producing an original play ... painting an easel picture or a mural, composing a poem, a song, a symphony ...
- many others, the list multiplied n -fold; all such experiences of the progressive schools are true subject matter, *if used educatively.*

The chief difference between the liberal educationists and the progressives with respect to subject matter is that while the former restrict the subject matter of education to narrow verbal fields, abstractly linguistic and mathematical, *the latter employ the entire range of human experience.* But, it is important to reiterate: any human experience, *if used educatively,* is potential subject matter for education.

A Critical Test of Selection: Educativeness

Throughout this discussion the term "if used educatively" is the critical one and must be defined. An experience is "educative" if the person who undergoes it is equipped, as a consequence of it, to live another experience more sensitively, more fully, more competently. To define it precisely we must distinguish growth in the present moment from growth over a long period of development. With respect to present growth there are three measures of educativeness. We sometimes say, "I can manage myself better as a result of that experience"; one criterion of "educative," therefore, is that the individual has learned. A second measure is that the learner has consciously generalized what he has learned. A third measure is that the experience has been designed with conscious reference to the anticipated outcomes of the learning; a casual experience has not been so designed. That is what Mr. Dewey meant by his recurring emphasis upon the *reconstruction of experience*; subject matter is used educatively when the experience of which it consists is reconstructed by the learner.

Under what conditions will the learner learn best? First, when he *intends to learn.* Second, to guarantee his intention to learn, the curriculum-designer must pick out experiences that are, as Mr. Dewey said in planning the subject matter of his school, "genuinely personal" ... "in the direct experience" of the learner. The later disciples among the progressives said that the experiences must be

“real” to the young people, related to their personal problems. They must satisfy their needs, their purposes. In planning every stage of the curriculum the designer will ask, therefore: Upon what needs, interests, problems of the young people can we build?

*A Supreme Test: Satisfying
the Conditions for Growth*

But the curriculum-designer must envisage the long-term growth of the learner as well as the dynamic awakening of the moment. Hence an experience which the curriculum-designer conceives in imagination to be educative must meet another criterion. In addition to being “genuinely personal,” the chosen experience must promise to “lead out into the future and into a wider and more controlled range of interests and purposes.” Does it provide “those things in the direct roots out of which would grow more elaborate technical and organized knowledge in later years?” Does the chosen experience promise continuity in development? Is it needed as an earlier or primary stage in the development of later and more mature experiences?

In the fifty years since the Dewey School opened, progressives have increasingly adopted the principle of growth as the chief criterion of an effective education. Another test of educativeness, therefore, is the question: Do the experiences that have been planned for the curriculum satisfy the conditions that conduce to maximal growth from infancy to adulthood? Quickly summed up, these conditions are:

- freedom for young people to investigate and experiment.
- appropriateness to the changing interests, attitudes, and capacities of the pupils.
- organization as problems to confront youth with the necessity for choice.
- fusion of individual creativeness and social coöperation.
- interest and effort moving hand in hand, so that the learner will be increasingly willing “to perfect means and to *postpone satisfaction in order to arrive at* better ends.”

In our School, therefore, we would periodically measure the effectiveness of the subject matter — that is, the experience supplied by the curriculum — against these tests of educativeness.

✓ ✓ ✓

THE EDUCATIONAL FRONTIER: 1890's-1940's*

Having considered this important test of subject matter, we can now turn to our major question: How have our curriculum-makers solved the First Problem of Subject Matter?

WHAT SHALL WE TEACH? CONTRASTED APPROACHES

Since World War I educators have blazed many trails on the curriculum frontier, but all have finally led out upon the broad, clear highway of human need. Some saw the program of education in terms of adult needs today, some in terms of child and youth needs, some indeed in terms of society's need of preserving its traditions; but all *saw the solution in terms of need*. Let us see their contrasted approaches in broad outline:

I. SOCIETY'S NEED TO PRESERVE AND PASS ON THE SOCIAL HERITAGE

This theory was pushed by the devotees of the great intellectual tradition of the West, represented best by the reformed students of the seven liberal arts in the private colleges. Finding a deep sense of heritage coursing through Western history, they insist that the curriculum must build an abiding appreciation for it; it is this which will serve as the organizing nucleus of education to bring order out of our cultural confusion. If other curriculum students question this as implying too much devotion to the past, these contemporary exponents of the liberal arts faith remind us that "to study the past is immensely to enrich the present." It is not difficult to agree with them — that is, if one does not commit oneself to the trivium and quadrivium which their more conservative adherents still use as content. But their new history of Western thought and institutions does indeed open the door to understanding our contemporary problems; only from the deep-running movements of our modern centuries can the sure pathways toward the social order of the next generation be plotted. Thus we see that there are two critical centers of reconstructive thought concerning our dynamic society. One is Change . . . the other, Permanence. The study of Change guarantees that the curriculum will keep pace with the transforming culture. The study of Permanence will supply the continuing thread of order demanded by the modern students of the liberal arts tradition. The contemporary professional curriculum students will be well advised to provide a definite place

THE CURRICULUM: WHAT HAVE WE LEARNED?

in their design of the life and program of the new school for Permanence as well as for Change.

A Current Example

I have already spoken at sufficient length of examples on the college level; witness, the Harvard and Columbia Reports. In the secondary school a capital example is the Culture-Epoch approach of the faculty of the Horace Mann School during its participation in the Eight-Year Study.¹ The program of the high school was built around two major themes:

1. The Story of Man through the Ages
 - Grade 7. From beginning through ancient period
 - Grade 8. To the discovery of America
 - Grade 9. From the discovery of America to life in the modern world
2. Modern Civilizations and Cultures
 - Grade 10. American civilization and culture
 - Grade 11. Other modern civilization and culture
 - Grade 12. Modern problems and issues in America

The staff was consciously seeking to use the history of earlier cultures to enrich the present. Their aim was to —

“show how the steps in the progress or retardation in the life of man have affected the life and problems contemporary with the child;

further the child's conception of himself as an individual engaged in a complete social activity;

develop the child's ability to make valid generalizations and deductions, and to recognize significant relationships through an understanding of the past;

develop social, spiritual, and political ideals which result in action commensurate with the child's ability and opportunity;

emphasize the elements of permanence in a society, as well as the elements of change.²

About half the school day in the junior high school was devoted to this broad study. It was carried on under the home-room teacher's coördination but utilized the services of the teachers of the fine arts,

¹ See Vol. III, *Exploring the Curriculum*, by Giles, McCutcheon, and Zechiel, pages 36-40, and Vol. V, *The Thirty Schools Tell Their Story*.

² Horace Mann School, Vol. V, *Thirty Schools Tell Their Story*.

science, industrial and household arts, mathematics, language, and music. Pupil-teacher planning was employed constantly in selecting specific problems and developing new organizations of material. The personally expressed interests of the students were used as one basis for selecting the problems and themes and organizing the materials: for example, safeguarding health, earning a living, recreational activities, human relationships. One aim was to build up the understanding that our modern problems have persisted throughout the ages.

In the senior high school a broad study of American culture was carried on, using literature as well as history. A large amount of time was devoted to special individual interests; there was much making of things by hand, such as a model New England village, a group painting of a mural showing the growth of the Bill of Rights, the writing and production of a play on the theme of the farm problem today. Regional studies of American life built an understanding of the culture of the region. Four different national cultures were studied each year, class interest as well as the probable significance to the future of America helping to decide which ones. The growth of democracy, nationalism, imperialism, and fascism became the controlling theme in the upper years; in the twelfth year the study of American problems of significance.

Here, then, is a careful working out of the culture-epoch approach, an excellent example of what the best of the historical scholars and the students of civilization have constantly urged the schools to do. But even in its best practice, it is a "subject-matter approach," based on chronological development and the systematic study of an entire culture in any one epoch.

II. SOCIETY'S NEEDS: THE SOCIAL-DEMANDS, OR ADULT-NEEDS, APPROACH

From the implicit lessons for our students of the cultures of history we turn to the direct study of our present-day society. Build the curriculum directly from our own culture is the contemporary challenge. "Teach the arithmetic facts and skills that our people will use," said Guy Wilson, *et al.*, in 1915. "Teach people to spell the 4000 words that they will use in writing," said the group around Ernest Horn. "Teach the grammatical forms human beings use, particularly those that they find hard to learn to use correctly," said Charters. The same theory led to the Thorndike *Teachers Word Book*, the Rugg-Clark monograph and course in *Fundamentals of*

THE CURRICULUM: WHAT HAVE WE LEARNED?

High School Mathematics. My social science research group at Lincoln practiced the same principle: build instruction around the key concepts needed for understanding modern society ... organize the high school curriculum around the Problems of American life ... Teach the map locations crucial to human use and understanding ... select your history critically, organize it around the great trends that have produced the conditions and problems of today.

"Society's needs? Society needs a generation of informed, skillful, thoughtful young citizens," said the new curriculum-makers, building the Doctrine of Social Use (Horn named three types — universality of use, frequency of use, and cruciality of use), carrying it out in the vocations as Job Analysis (Charters) and developing the Social Demands or Areas of Living approach (Caswell, Hanna, Harap, Hand, Zirbes, Mackenzie, Parker, French). Society's need is not adequately met merely by preserving and passing on the social heritage through culture-epoch studies, no matter how psychologically organized they may be. The needs of a revolutionary society must be organized around the focus of Change as well as around that of Permanence. Hence for a full generation there has been a concerted emphasis on the Present, using such criteria as "Areas of Human Activity and Problems of Life." Dr. Hollis L. Caswell called it the "social functions procedure"; as the outstanding leader in the reconstruction of state courses of study he gave the idea nation-wide circulation. For example, in discussing the scope of work in a "core curriculum" proposed for the Virginia public schools, he listed the following Major Functions of Social Life:

- Protection and Conservation of Life, Property, and Natural Resources
- Production of Goods and Services and Distribution of the Returns of Production
- Consumption of Goods and Services
- Communication and Transportation of Goods and People
- Recreation
- Expression of Aesthetic Impulses
- Expression of Religious Impulses
- Education
- Extension of Freedom
- Integration of the Individual
- Exploration

The skeleton of the core curriculum of each of the eleven grades of the Virginia common schools was constructed around key questions on each of these major functions. A procedure approximating this one was followed in state and city curriculum reconstruction by other professional students in the 1930's.

Thus, in their search for principles which will guide the selection of subject matter the curriculum students have tried for a full generation to make use of the concept, "main areas of living." Each of the dozen leaders of the group has his own phraseology for his list of areas or functions, but most of their plans reflect the trend first marked by the Seven Cardinal Principles enunciated in 1916 by a committee of the National Education Association. Several of them, indeed, trace this social-demands or adult-needs approach to the original impetus given by that committee.¹ The areas of living pointed to by its much-discussed report were work, citizenship, health, leisure, and provision for food, shelter, and clothing. Out of this early impetus we get such lists as Dr. Caswell's Areas of Human Activity and Problems of Life, which constituted the skeleton of the Mississippi Program for the Improvement of Instruction.

- Protecting Life and Health
- Getting a Living
- Making a Home
- Expressing Religious Impulses
- Satisfying the Desire for Beauty
- Securing Education
- Coöperating in Social and Civic Action
- Engaging in Recreation
- Improving Material Conditions

In the Los Angeles schools the physical science instruction in the junior year of the high school was outlined around such problems as:

"our water supply ... the Metropolitan Water District ... the building of Boulder Dam ... water purification, softening ... conservation of watersheds. Approaching these problems the students make models, demonstrate artesian wells, make model amphibian planes, traps for bathtubs, sinks, construct bird-baths,

¹ It is quite clear that it is the product of the complex of factors and conditions that led to the progressive movement in American life; the NEA committee was itself reflecting this deep-seated trend in the culture.

THE CURRICULUM: WHAT HAVE WE LEARNED?

demonstrate water coolers, test carbonated water, and the like. In stating their aims the teachers insist that the subject matter should be chosen from those elements of science of the greatest significance to understanding and that the teacher should be free to select and organize his subject matter to fit the needs of the particular learning situation. Considerable controversial discussion has developed over this plan, the critics taking position that the pupils do not really get an essential grasp of the 'area of knowledge.'"

The advocates of the social-demands plan reply that the students need only a knowledge of the sources of information and the techniques of acquiring and using it. Some progressive teachers, however, refuse to accept this approach on the ground that intellectual rigor of thought is lacking. The real difficulty seems to be that under the conditions of experimentation a clear intellectual organization is not generally achieved. Given a prolonged opportunity to develop such an organization, say the protagonists of the approach, intellectual order as well as interest and application would result.

/ / /

One implied assumption underlying the practical applications of this social-demands approach must be noted and appraised. This is that the units in which the curriculum is organized and the study goes on should be essentially the same as the "areas of human living and problems of life." The consensus of thought appears to agree that *the content of what to teach* can be found, in part at least, by ascertaining the problems and conditions of adult society. But it does not follow that these areas of living constitute the *best learning organization* for young people in a school. If our society had succeeded in incorporating the lives of children and youths fully into the actual work and social life of the community, then it *would* follow; we know, for example, that one can learn to work best by working on a real job — providing that a skilled workman-teacher stands by constantly to guide the learning process. The motive to learn is at its intensest level. But that is not the condition today. Schools still stand aloof from the community. *Young people are still learning about jobs, not working in them.* The best of our progressive schools do no more than make their pupils into good *observers* of community life — not real participants in it. Under such conditions the personal and social motive to learn, provided by the actual job, is not present. Hence there is no

clear psychological reason for believing that the best learning organization in the schools will be that which is identical with the actual social organization outside the school.

So much for Society's Needs — either the need to preserve the social heritage or to solve society's current problems. What about the criterion of the needs of the young people themselves?

III. THE PERSONAL NEEDS OF THE STUDENTS

This has been the chief concern of the progressives from their pioneer utterances in the last century. As we should, therefore, we find that approach uppermost in the reports of the Commissions on the Progressive Education Association.¹ In Volume III of the report of the Eight-Year Study, Giles, McCutchen, and Zechiel say: ²

“The reports of the Commission on the Secondary School Curriculum, and the ‘Concerns of Adolescents’ listed by the Commission on Human Relations, have greatly influenced a number of schools in their attempts to build a core curriculum. Drawing heavily from the formulations of adolescent needs as defined in *Science in General Education* and the ‘Concerns of Adolescents,’ these schools sought to plan their curricula around the problems arising from the personal-social interactions of the individual in the various aspects of living. Using the categories of *personal living*, *immediate personal-social relationships*, *social-civic relationships*, and *economic relationships*, the schools attempted to determine basic adolescent needs in a given situation, and to design units of study to meet these needs in such a way as to develop the *characteristics of personality* needed for effective functioning in a democratic society. This may be called the *adolescent-needs* approach to core-course organization.”

This approach was definitely illustrated by the teachers of the Ohio State University High School. In designing their curriculum they made preliminary surveys of pupils' backgrounds and needs; in terms of these they set up criteria for the choice of group experiences and appraised many alternatives; they chose for the curriculum those experiences which promised to fit best into both pupil and social needs.³ To cite a single example, the seventh-grade class in mathe-

¹ I would urge the reader to bring into quick review, at this point, the findings of Chapters XVII and XVIII.

² *Exploring the Curriculum*, page 44.

³ See their report in Vol. V, *Thirty Schools Tell Their Story*.

THE CURRICULUM: WHAT HAVE WE LEARNED?

matics built its quantitative problems out of the data they collected from their own anthropometrical measurements.

In Denver, Colorado, classes organized a unit of study and work — “Living in the Home” — around such pupil-teacher-phrased questions as: How can I make the most of the home I live in? What is the relation between poor housing and crime? How can a home be made attractive on a limited budget? What are the advantages and disadvantages of home ownership as compared with rental? What proportion of income should be allocated to housing? What provisions should be the contents of the home medicine cabinet?

A junior high school class in mathematics in Altoona, Pennsylvania, set themselves up as a going insurance firm, selling policies, investing money, studying banking, accounting, and the like with a socially and personally significant problem as the nub of the study. At the Tower Hill School, the Beaver Country Day School, the George School, and others, the children ran their own school store and school bank, carrying on all the processes of a real store or bank, handling money, accounts, buying and selling, making financial statements and reports, and similar practical matters. The literature of the newer practices in education abounds with examples like these and we need not multiply them here.



To this point we have considered the First Problem of Subject Matter from three academic approaches. Although they constitute a vast improvement on the textbook procedure of the earlier mass school, they leave me with a profound feeling of inadequacy. Although there is much talk about experience curriculum and the needs of adults and of young people, I scan the record with many reservations. Does this core curriculum represent the best that we can do after a half century of creative building of firm foundations for a new education? Is this the best product the educational leaders of our time can turn out? Will these units of work inform and school a generation of young Americans to confront the conditions and problems of our confused society?

In Chapter XXI I shall illustrate my doubts by reference to eight vital experiences, five of which are still definitely shunned by the school and three are too much neglected.

CHAPTER XXI

The Curriculum: Shunned and Neglected Areas

I. FIVE SHUNNED PHASES OF LIFE: CENTERS OF CURRICULUM MATERIALS

Put First Things First

There is a source of judgment about what the School should teach that we must not overlook — young parents who have not been inhibited by long addiction to academic ways. Ask them: “What do you want the School to do for your children?” Freed from our scholastic preconceptions, they cut straight through to the vital problems: “Put your philosophy of experience to work,” they say. “And put first things first. Forget your academic categories of subjects and fields and areas.”

They set before us five great themes that the conventional school has ignored — yes, has evaded:

- Real Work, personally and socially useful
- Sex and Home Life
- Inferiority and the intimate problems of personal living
- The insistent controversial issues of the social system — Property and the struggle for power, Race Conflict, and the control of Public Opinion
- Religion

Every one of these five themes is important, both to the young people personally and to the community and the nation. In one way or another they are all “dangerous thoughts” to a fearsome school . . . “hot spots” . . . taboo. But the frank young parents of our School, studying from scratch, bring them squarely out into the limelight of discussion.

I. WORK, PERSONALLY AND SOCIALLY USEFUL

Children and Youth at Work

There is no doubt as to what the parents want first for their children. "We want them, above all, to have the experience of real work — and work for pay — while they are young, and to continue to work every month and year of their youth. They must find out what kinds of work they want to do and are best fitted to do. Let them learn by working that *one's work is the center of his life*. Only in this way can they learn what it is to work and the value of different kinds of work.

"Let them build regular habits of work. Let them harden their habits of facing things that have to be done, no matter how disagreeable they are. Let them do all the kinds of labor that are necessary to keep a school going. Let them get jobs in the community from the earliest possible years. We will include them in the work of the home and in the long summer vacations we'll send them into other regions to learn other kinds of work. First, and foremost then, **WORK!**"

This is, perhaps, the hardest of all nuts for the educator to crack — to use the life of the community in such a way as to incorporate socially useful work into the education of young people. To enlist *their* purposes, to *make what they do real to them and of use to the adult world, and at the same time to be truly educative*. If we demur, saying the community will not coöperate, the parents insist:

"See what a score of towns did in the war years, and before that under the NYA — Moultrie, Georgia; Sedan, Kansas; Oakland and Carpentaria, California; Hamden, Connecticut; Seattle, Washington; Clayton, New Mexico; Saline, Pennsylvania; De Forest, Wisconsin — to name only a few. They surveyed the work opportunities of their towns and fitted their educational plan into them. They collaborated with the NYA and set up coöperative work projects — gardening, poultry raising, canning fruits and vegetables 'on shares,' ran cafeterias, served school lunches at cost. Entire student bodies went into harvest fields, or built and repaired school plants, furniture, and equipment; worked in offices, libraries, hospitals, and shipyards. The historic Schneider part-time plan — a week in the shop and a week in the school — was put to work. Of course, much of this was stimulated by the emergency needs of man power in war, but something of the lesson

THE EDUCATIONAL FRONTIER: 1890's-1940's

of work for youth and of incorporating schools into the work life of the community will remain. How much, we have no way of estimating, but a beginning has been made."

2. SEX, LOVE, AND HOME LIFE

Fused with the social curriculum, rarely separated from it, are the deeply rooted personal needs of youth. Confronting the Design Group every day of its existence is the primary aim of education: to transform the egocentric, aggressive-defensive individuals, which little children are when they enter nursery school or kindergarten, into sensitive, coöperative Persons. Central in this process is the tabooed problem of sex. Indeed, if our "shunned areas" of life were arranged in order of cruciality to youth I would put sex, with work, at the top of the list.

All our parents are deeply concerned with this problem. With eager love in their eyes for their mates and their children they tell us: "If one focus of the ellipse of life is work and property, the other is sex and all that springs from it and is bound up around it. It is one of the driving mainsprings of action, the dynamo of our love, the motivating force that keeps us ever building our House and our Home, cultivating our scene. The physical thing is the basis of it, and subtle though it is we must understand how to educate our children in the understanding and appreciation of it. Sex is not to be feared; the School must not dodge it any longer. It is to be respected and admired and treasured — *and educated*. Let us in this Community find out, by studying it together, how to cultivate it."

But by "sex" the parents mean more than the sheer physical response of the body, basic though that is. They mean the total feeling and emotional life of loved and loving ones. They mean that the family is the center of social communion, the nub of the nation and the world and of security for every person. They want their young people to grow up with that conviction. The adolescents among us agree, happy and somewhat astonished at their parents' frank directness about their greatest secret difficulty.

3. THE PROBLEM OF INFERIORITY AND THE BUILDING OF STRONG PERSONS

But, plead the parents, *can* you get close enough to our children to discover how to help them with their innermost emotional problems?

SHUNNED AND NEGLECTED AREAS

Before the sex problems emerge in adolescence and after it, and all through life, there are manifold experiences and traits that have to do with their personal fears and frustrations. *At the bottom of it all is a sense of inferiority.* We have read Freud and the psychoanalysts and psychiatrists, and while we think Freud overstressed sex and the supposed permanence of infantile repressed wishes, nevertheless there is real guidance in the new psychiatry. It has taught us that the conditions of family and community life breed inferiority in most of us and with it fears, anxieties, sense of guilt, and tendencies to rationalize and compensate and otherwise escape; only those few avoid them who are naturally self-balanced and whose good fortune it was to have grown up in a very wise home. We have no illusions about the ego-centric traits in our children. Growing up in a competitive society, they are indeed aggressive and defensive Individualists — even before they enter our School. Your task, in the School, is to help us in the home, turn these individuals with their inherited and unique physiques, temperaments, and intelligences into mature, wise, coöperative, cultivated Persons. We know this task is fraught with great difficulty. But let this Design Group of the School be the place in which to study it. Help us to discover the inferiorities and anxieties and their causes. Get the young people to talk about them frankly — that's half the battle toward conquering them; similarly with their fears and their doubts about themselves and about life and its values.

4. THE INSISTENT CONTROVERSIAL ISSUES OF THE SOCIAL SYSTEM

The parents come and ask, "What are you going to do about controversial issues?"

"Meet them, head on," we say. "Our studies of the psychology of problem-solving show that to keep issues out of the school is to keep thought out of it, to denude it of intellectual life." The parents agree, although at the beginning of our psychological studies some were dubious, saying, "Young minds shouldn't be tainted with problems." But the foundations study convinced them that *all of life must be brought into the school* — not merely the magnificent achievements, the losses and deficiencies as well. And issues are the incitement to thought, the very focus of the psychology of consent.

(1) Property and the Struggle for Power

The chief conflict theme that is intimately related to work is property and its role in personal and social life — in fact, the whole problem of a full and frank study of society and culture. With work, the ownership of property is, in our kind of society, the guarantee of personal security, but it is also the crux of our social problems today. We are owners of property, our parents say, and we know the danger that the desire to preserve security tends to make one a partisan defender of a *laissez-faire* system. We want to avoid that if we can and yet keep property ownership as private as possible. We want our children to be owners also; but we want them to be “little” owners — not monopolistic Big Owners. *We feel that the “little ownership” of property, disseminated throughout the entire population, is the surest foundation upon which to guarantee the perpetuation of the American democracy.* Ownership, widely disseminated, gives all the people, a personal stake in the nation, its problems and conditions; it prods them to study and keep alert, to vote and share in government. It is the surest way *to relocate legitimate power in the individual men and women of the nation.* Jefferson said most of that, and we have an unshakable faith in it today.

The parents continue: But we know perfectly well that the trend is not toward the widespread “little ownership” of property; it is away from it — toward a menacing monopoly. We have been studying the history of our country and of other industrializing countries. We have studied the direct approach that Veblen, Turner, Robinson, and Beard made to the factors and forces that produced our industrial society and we are strong enough to take their conclusions as documented historical fact. We understand and accept much of the picture they painted of our industrial society; and that it was a corporate, privately owned, competitive system of financial rivalry, an unstable production and consumption system standardized in terms of price, a system which, in order to give the owners profits, frequently withheld the plant from use and produced a succession of depressions. *Our young people must know all this. We know, and we want our children to know, that the focus of our economic history was the struggle over the ownership of property.*

Believing these things, we recognize that the changes brought about by industrial and pecuniary capitalism require corresponding changes in our views and laws regarding the rights of property and

the control of industry. We know now, say these parents, that the time has come when *laissez faire* must be discarded for good and all. Freedom no longer means absence of restraint — in any area of life. It means a subtle balance between what one wants most to do and what the good of the community prescribes. The new concept of *freedom is disciplined initiative*. Hence the history that you teach in the School should show our young people that the concept of “I found it first,” or “I invented it, built it, or my grandfather did,” no longer carries the ancient right of preëmption and withholding from use. *We want our young people taught the Sustained-Yield principle*, the principle that ownership carries the obligation of fullest development for the use of the people.

So the Design Group frankly confronts the task of building much of the study of the social system around the baffling problems of Work and Property. From this we get a cue for the organization of one important area of the intellectual program of the School. This is what you call the Social Studies, although much of it is in the new “humanities” study and in the “Sciences” also.

(2) *Racial and Other Social Conflicts*

How can we deal wisely with the race problem, ask the parents — the problem politely called “minorities,” or “racial and religious intolerance”; the problem that is more frankly stated as dislike and aversion for all “Outgroups”? This is, indeed, a basic issue for the curriculum-designer.

To the present moment there has never been a people who have really liked or been tolerant of people that are different from “our people.” Today, after thirty years of war, the conflict between groups in America is particularly virulent. In the South, Jim-crowism and the poll tax are “hot”; the Negro is an issue in the Northern cities, the Mexican-American on the Southwest border, the Eurasian on the West Coast; the Jew interjects himself into all the places where cultivated “Nordics” have been accustomed to live alone, and the Catholic is a sore spot in the old Protestant communities. The friction is multi-caused: witness the confusion of “race,” “religion,” “aliens,” and economic rivalry in the “Jew problem,” in the Mexican and Oriental conflicts of the South and West, and in the political contests of our larger cities. We know it is a combined economic and psychological problem — not fundamentally one of race except in extreme cases. The phrase

"racial intolerance" is in part a front to hide the presence of economic rivalry and to disguise downright dislike for an alien Outgroup.

"At least you can bring our children," say the parents, "the best-documented facts concerning differences and inequalities between population groups. Teach the obvious facts that peoples differ in superficial things — skin and hair color, shape of face and head — but that the fundamental traits are common to all peoples. Get rid of the myth of black and white blood by teaching the scientific facts. Teach the oneness of the *human* race — the structure of body, intelligence, temperament common to humanity. Teach the facts of relative equality in intelligence, and build respect for the Outgroups by examples of their creative achievements in the world's history."

On the side of knowledge the grasp of these facts will make some contribution, but *living together* will be more effective. Above all we must aim at building among our young people a high order of sensitivity to other people. The basic difficulty is psychological. "We just don't like them" is the final answer given by many cultivated persons. "They are *vulgar*. They push. They take advantage." So the measures are often stated by people who "would like to be tolerant." These are measures of sensitivity and cultivation, and we have a long-time problem on our hands. *Although the passage of laws is needed to guarantee equal jobs, equal pay, equal education, equal opportunity in all things, it is only a first physical step. The long haul will be psychological and deeply educational. Admiration and liking cannot be legislated into being. They will grow only by social living and by slow advances in education until equality in education, sensitive awareness, and feeling is achieved.* Then, with economic and political equality achieved, mutual respect and admiration for sensitive self-cultivation on all sides will mark the disappearance of the problem. That is the long-time goal. In the meantime in the School we shall take all the steps within our reach to move toward it.

(3) *The Control of Public Opinion*

All these problems are at bottom phases of the problem of consent in a democratic society. We know now that the consent of the people is not guaranteed merely by the statement of their freedoms in charters of liberty or in the actual erection of machinery for the popular suffrage. *The real nub of consent is that people shall understand their problems and conditions.* The Battle for Consent may well prove to be the chief battle of those who are now in our schools.

SHUNNED AND NEGLECTED AREAS

It will be fought, as we have said before, upon "a social-psychological frontier of property ownerships and power complexes, a jungle of competing desires and possessions." Hence one of the tasks of our School is to recognize the pitfalls in the way of popular understanding, the physical difficulty of getting the necessary facts to the people—especially of getting the facts to them organized in meaningful form so that their significance can be understood.

Hence we shall teach our youth in the School that while we have great admiration for the success of modern peoples in building a remarkable physical machinery of communication, barriers still stand between the people and the events which they must understand in order to carry on a world of peace and abundance. Through countless episodes in the School we build up a knowledge of the great principle of public opinion: *He that controls the agencies of communication, controls the public mind and can defeat the building of the great society to which we aspire.* He can defeat it by determining what stereotypes shall grip the public mind, either negatively by withholding the critical facts—*which we call censorship*—or positively by distorting the facts—*which we call propaganda.* Moreover, as we build our positive education in understanding and communication we shall not forget that the "pseudo-environment"—the stereotyped world of actual responses which each human being, even with access to the facts, erects around himself—constitutes still another barrier to real understanding.

The parents, studying this problem of consent, confirm us in our conviction that thinking, problem-solving, are central in intellectual education. In the School, therefore, we shall recognize three kinds of thought: (1) the thinking that solves problems directly . . . (2) various kinds of uncontrolled, free association involved in the creative act . . . (3) varieties of defensive thought—rationalization, compensation, defense, escape, and the like. The school program will provide and consciously develop manifold instances of the first two types of thinking, using both face-to-face personal and group situations of moment-by-moment living and the non-face-to-face personal and social problems of the young people and the world in which they live.

Instead of avoiding controversial issues at all costs, as is the custom today, the intellectual side of our curriculum will abound in "problems." *And no real problem will be shunned.*

Hence our program of systematic study will be built upon a curriculum skeleton of the great psychological concepts of man, his

nature and behavior and his changing society. *The cue concept is the fundamental nucleus of this curriculum structure.* The organism adopts a general attitude, or mental motor-set, a readiness or "field" that is appropriate to the meaning. The cue concepts, magnetizing this field, explode the meaning. We respond *with* them, and this is the process of generalization; the concept is our "stereotyped" response. The attitude — the total gesture of the organism — serves the powerful role of carrying, framing, and determining the meaning with which we respond. It does this via the body-response which is self-feeling. Hence we base much of our program of education on the role of the feelings — remembering, however, that feeling and idea are one. Thus our curriculum shall be founded on the best we know today of the psychology of thinking and understanding.

5. THE PROBLEM OF RELIGION

But *what* are we going to do about "Religion" in our School? — is the constant inquiry of the parents. This is another "dangerous" area, shunned by the formal school and banned by law in some states of our country. By religion we *don't* mean theology, the parents remind us, although many among us find going to church very helpful. We mean the religion of Man and the Universe, the cosmic forces gripping mankind and the earth and heaven above. There's a religious mood that grips the sensitive man, that gives him a deep feeling of awareness of the beauty of manifold unknown forces that, whether we are aware of it or not, play their role in moving the universe and mankind with it. These doubts and questionings of our young people must be capitalized upon and used educationally. These wantings to know the proselyting of sects or the bigotry of provincial legislators who pass laws banning the reading of the Bibles of the world. Indeed, in the Bibles of the earth is the simple but most powerful and profound literature mankind has brought forth. Let our young people read it, feel its cosmic rhythm, sense its shaking impact upon a thousand peoples in five thousand years of human record.

Moreover, there are issues that must be frankly faced — issues between this great religious literature of man and his modern Darwinian science! But they are issues that present us with our great opportunity for educational growth. Let us study the evolutionary hypothesis, respect it, admire it as an intellectual product of modern

SHUNNED AND NEGLECTED AREAS

man's scientific ingenuity — the acme of his scientific inquiry at work. But each of these — the religious affirmation and the scientific hypothesis — has its indispensable role in our School. Let us not fear to use them both — the realm of faith and belief and the generalizations of documented observation and of scientific thinking.

/ / /

Here, then, are five vital problems of life, every one of which has been more or less neglected in the conventional educational program. But every one should play an important role in the curriculum of the new school.

II. THREE OTHER NEGLECTED CONCEPTS

But there are several other concepts that the most forward-looking leaders will hold before their schools to guide in curriculum reconstruction. Like the great tabooed concepts, they set the sights of educational reconstruction high — perhaps higher than the present stage of culture can grasp and utilize, although in occasional isolated places of great cultivation they are already being practiced. Three of these stand out pretty clearly.

I. THE EDUCATION-CENTERED COMMUNITY

This curriculum problem forces us to deal with the nature of the community and its attitude toward education. It takes us so far out on the social frontier that it is entirely possible that it cannot be solved until the social practices of the people and their basic philosophy of life take new and definite form in the epoch into which we are advancing. From the advances of the past generation we have learned that three very different concepts are tangled in this apparently simple problem. The first and most obvious one is the conception that Parker, Dewey, and their associates have taught us since the 1890's — the COMMUNITY OF THE SCHOOL. This is a fourfold like-minded cooperative group — parents, children, and youth, teachers and administration. There is no reason, except our own stupidity, for not practicing this concept now in building the post-war school. It was discussed so thoroughly in Chapter XVI that I shall say no more about it.

But there are two other conceptions of school and community that must be sharply distinguished. *The first one* — THE COMMUNITY-CENTERED SCHOOL — can be used as the caption for our *best* practices

today. This is the stage of development in which the school reaches out into the community and brings its conditions and problems into the program of study. Progressive schools, both private and public, have been doing this for fifty years. *This is essentially the stage in which we are now working*, but it is merely a next step in the direction toward the third great conception of community; namely —

THE EDUCATION-CENTERED COMMUNITY. To achieve this is the great goal of social reconstruction. No community in America has ever really done so, although a few have moved far in that direction. I have already spoken at some length of Elsie Clapp's splendid seven years (1929-1936) of pioneering in Kentucky and West Virginia. She began *with* the people of the community, made the school the center of the rebuilding of their lives and their living the center of the life of the school. At Ballard and Arthurdale the child-and-society-centered school took form and direction in *a community that became centered in education*. As more and more communities reach this mature stage of modern human development, *the people*, self-consciously aware of their culture and their personal and social growth, *will understand that all the social processes of a democratic society ARE education, and they will deliberately organize their government and all community enterprises in terms of education*. We shall then think and live in terms of the education-centered community. But it seems clear that that cannot come about until the people generally understand their society and culture and change its basic structure in the direction demanded by the conditions and factors we have laid bare in this book. Who can predict, in the midst of our complex social order and confused times, how soon the people can bring that about? Certainly it does not seem likely to be in our day.

2. BUILDING A HIGH ORDER OF ESTHETIC LIFE IN THE SCHOOL

I doubt if I would undertake to build a School unless among the parents who gathered around me I found a nucleus that felt deeply about the expressive and appreciative life. For sensitive self-cultivation is the mark of the educated man and one of the great measures of the School is the quality of its creative work and the level of its esthetic appreciation. But to build a high order of expression without the support, even the prodding, of sensitive and eager parents would be too difficult.

SHUNNED AND NEGLECTED AREAS

Among the parents in our School, therefore, we should expect to find, as among our people generally, two attitudes toward life and expression, two kinds of people and two norms of art will show themselves. There will be both "Thing" people and "Force" people among us. There will be people who center on the superficial shape of things and who expect *likeness* as the product of expression. And there will be others who dig to the relationships between things and who expect to find *Form* in the creative work of the School. So our Design Group must turn itself part of the time into a creative work group; parents as well as youth must work in some activity — get the actual feel of using some material to produce ordered form. Only in that way will each one in the Design Group grasp the new psychology of the esthetic act and go along with us whole-heartedly in building it in the School. Only by doing it will they accept the esthetic dictum of the School: "I say . . . what I feel (see, think, intend) . . . with Form." Only thus will they grasp that it is the Self's expression, the Self's imagination, the Self's creative ordeal, that transform a miscellany of materials into Form.

It will not be too difficult, once we start, to get most of the parents and teachers into the creative work group; every human being wants to make his personal statement with some material. Their natural reticence toward Expression will be broken down and with it, likewise, the conventional habit of saying: What do *you* want *me* to say? By saying themselves what *they* think, *their* way, and learning the rigor in the process of producing form, they will encourage us in building in the School the great twofold Bill-of-Rights-and-Duties: "I am really *free to think* my own thoughts, to feel my own feelings; but I am also *obligated to express* them in some objective form."



In a School in which the creative and appreciative acts play such a formidable role, one deep-running mood will pervade it — the conviction that Our Times is a great age of Expression. Every phase of the life and program of studies will teach it. Our youth will see the great land and regional reconstructive enterprises, as the advancing role of government, the changing role of America in world participation and leadership, all as phases of the same great revolution in thought and feeling that has already produced a thrilling revelation in the arts of expression.

3. THE PROBLEM OF FREEDOM AND ORDER:
MAKING THE DEMOCRATIC IDEA WORK

Finally, pervading the design of our School is the problem of discipline. No meeting of our Design Group is concluded without some reference to it. Constantly the parents bring it up: "What shall we do about freedom and control? We theorize about democracy, but how can we make it work?"

Democracy begins at home — in this case in the school. But to bring it about in our School will be difficult indeed, for around us on all sides in the schools of America today there is little practice of democracy. The course of study is still made in the central office, and there the textbooks and other materials of instruction are chosen. The selection of the teachers, the design of the buildings, their furnishing and operation and the direction of the teaching are in the hands of the board, the superintendent, the principals, and the supervisors. In spite of the gains of the progressive movement in the past half century the teachers in the mass school still have little to do with these things, and the parents and the pupils nothing. The structure of the school is still a hierarchy of dictatorship and its life is dominated by the spirit of authoritarianism. How, then, knowing that our homes and communities are honeycombed with authoritarianism, can we put democracy to work in our School?

Obstacles in the Culture

The difficulties which beset our path in the post-war world, as we try to implement the concept of democracy in the school, are large. Within the culture itself even the concept of democracy is on trial. American history has ingrained in the teachers that they cannot move far in advance of the people's understanding and approval. The mood of the American school will continue to reflect the popular climate of opinion and it will do little to change it. The dominant concerns of the American people, their characteristic traits, beliefs, and values, will mold the mood and governing ideas of the administration and life of the school. Disheartening though it is, educators must never lose sight of the fact that the dominant sector of their communities still define freedom as absence of restraint! This in spite of the recent acts of the people themselves in creating through the legislation of their own representatives a vast governmental structure

of social control. They are flying straight in the face of what American and European history has proved — namely, that without social restraints, the human being is not competent to cope with nature or his fellow man.

The Lack of a Theory

A theoretical difficulty parallels this practical one that resides in the social order: we still lack a theory of freedom and control which is appropriate to our special American brand of democracy and is designed definitely for the present stage of development of industrial society. The data of Part III (supported by Chapter II) have established that for a half century, while we have been moving swiftly into a second technological era of industrial society, the mass of the students of the theoretical structure of that society have continued to frame their theory in a body of concepts that are rapidly becoming outmoded — *laissez faire*, supply and demand, the free market, an expanding economy, and the relation between productivity and purchasing power. These ideas are utterly alien to the problem of a compensating industrial economy. Moreover, the concepts that worked fairly well in a competitive society and an authoritarian and exploitive social order simply do not fit a culture in which the cultivation of individuality and the spirit of coöperation are the two great goals.

Social Control and the Development of the Person

This is not to say that sensitive students of social theory have not reached considerable unanimity about the great purposes for which social and educational systems exist in modern times. Most students would not dissent from the statement that the great educational goal is to build the Person in all possible ways from birth to death and that the process has two foci — the production of individuality and of sociality. All but the die-hards among the students of man and culture would assent to T. V. Smith's dictum that what we want is "an individualism that individualizes." It is creative individuality that constitutes the nucleus of the Good Society.

The educational routes to creative individuality are twofold. One is the exercise of creative initiative. "Let me be the one to do what is done" was Robert Frost's fine exclamatory way of saying it. But in a ruthless competitive society such as industrial capitalism

has generally proved to be, the aspiration of let-me-be-the-one-to-do-what-is-done will be denied by the nature of the culture itself unless all the Individualists in it are hedged about by controls. The Individual will never become the Person in such a society unless the controls guarantee Walt Whitman's "Each singing what belongs to him and to none else." We know now beyond peradventure that if the resultant society is to be good, no man can be left free with unlimited opportunity to exploit the land and his neighbor. Every individual must be protected against his own drives for the power and the comfort and the glory. In each of our latest social crises we have kept even the leaders on leash; witness the manner in which we gave up many of our freedoms in 1933 and in 1941-1945, but — we gave them up "for the duration only"!

Each will sing what belongs to him and to none else *only if each is "self-balanced for contingency,"* as Walt said. For the second focus of the process of transforming the aggressive egocentric Individual into the Person is sociality. We know now that the Self is socially constituted. Hence, while we shall go to great lengths to preserve the freedoms of the individual and insist on his right to make his own creative statement in his own unique way, we know that this will not be possible unless his personal development is accompanied by an implicit acceptance of every other Person and an inner awareness of the necessity of frequent social communion. Thus even the great goal of Individuality — the Person — cannot be achieved if we fail to reconcile I and We.

The Problem of Sovereignty

Two concepts are bound up here closely together — sovereignty ... competence. The concept of sovereignty has come to be regarded in legal terms as the form that control takes in political life — "supreme power or dominion" — "absolute and independent authority." At every transitional stage of society's development, when organized populations find it necessary to relinquish some of their sovereign powers to larger groups — regional, as in the TVA, national, or even world in extent — the concept becomes crucial. That was true in 1787 when the Americans in thirteen quarreling provinces found that a confederation of sovereign states was insufficient to guarantee security and peace. It was tested again from 1861 to 1865. It revealed its nature in the 1930's in the creation of the Tennessee Valley Authority. It is now the crucial issue confronting the United Na-

tions as they deal with such problems as the control of atomic energy. The problem of the *allocation of sovereignty to those who are most competent* is the root problem of control in every family, in every school, in every social organization in which men join together to live a life that is better than they can live singly.

*The Problem of Competence:
Where Shall Sovereignty Reside?*

The phrase, "To those who are most competent," is used, not casually, but with design aforethought. The question, In whom shall sovereignty reside? must be answered for the family, for the school, for city, state, regional, national, or world government, for every social organization. One direct answer is: "Sovereignty shall reside in those who are most competent." The recent history of the TVA has illustrated it clearly for three separate and distinct functions: Policy-making . . . Design . . . Construction and operation.

As for *the first function*: By definition, in a democratic society only the people are sovereign in policy-making; in the long run only they are competent; hence control resides in them. Only the people know the purpose of the structure they are creating, only they know what its function is to be *in their lives*. No matter how unwise their policies may appear to be to experts, those who in the light of history believe in democracy will let the people decide and will abide by the policies they make. Thus, in order to guarantee the perpetuation of the democratic idea, we are content to forego a more "efficient" policy-making that might be achieved by expert but authoritarian methods.

As for *the second function*: The design of a structure is a technical matter and only those who are technically qualified are competent. At this point we frequently encounter a clash between sovereignty and competence because lawmaking and understanding lag behind science and technology. It has often happened that custom and legislation confer sovereign control on those who are incompetent to design the structure. This is still true in millions of homes today, but year by year it is becoming less true in schools and in various aspects of local, regional, and national government. Nevertheless, both the principle of design and the goal are clear: to design a structure requires technical competence, and society increasingly tends today to allocate sovereign control to the technical expert.

Finally, as for *the third function*: In operating a structure in a democratic society both the people and the technicians have special

THE EDUCATIONAL FRONTIER: 1890's-1940's

kinds of competence. Some functions can be executed properly only by technicians and skilled mechanics who have the most rigorous knowledge and experience; many others can and should be practiced by the rank and file of the people.

THE CONSENSUS: TWO KINDS OF CONTROL

All these comments throw into sharp relief the problem of control and the methods of its imposition. Control there must be, but who is going to impose it and by what method? The goal, in a democratic society, is expressed by Whitman's ideal, "Oh, to be self-balanced for contingency!" In the case of the few who are endowed from childhood with mature poise and self-control this goal can begin to function even from the earliest days. But for the great majority of immature and irresponsible individuals the principle will emerge rarely in childhood and only with great difficulty in youth and adulthood. The consensus agrees that the vast mediocrity in the population show little capacity for self-regulation — what Cannon calls *homeostasis*. Thus every society in the history of mankind has learned that the group must impose controls upon the individual. In infancy, to insure the preservation of life the mother, the father, and other adults around the child constantly and rigorously impose restrictions upon his behavior. In the first years the control is rigorously complete and imposed by the Others. But as the child matures the imposing of these controls passes slowly from the Others to the Self. The goal of the educator, whether he be parent or professional teacher in the school, is to bring about the assumption of these controls upon behavior by each Self.

DO THESE EIGHT AREAS PROVIDE THE TOTAL SUBJECT MATTER OF THE CURRICULUM?

Here, then, are eight vital experiences, eight fundamental problems of life. Each is important. Each has been neglected in the conventional educational program. Each must play its special role in the curriculum of the new school. But do these areas, important though they are, constitute the total subject matter of the school?

The conventional program-maker will certainly protest that they do not: "You've omitted the indispensable Common Essentials of education!" — meaning the common essentials of a *literary* education. To design the curriculum so that it will fit the tabooed themes alone would naturally omit much of the reading, writing, and arithmetic,

SHUNNED AND NEGLECTED AREAS

language and mathematics of the conventional program of studies. The latter also constitute part of the "subject matter" of the new school. "Yes," the conventionalist will comment, "but you have also omitted some of the 'science,' too — the physical and biological sciences are not at all completely represented in your statement." That is right; to be informed and competent citizens our young people must have command of the great concepts and techniques of these fields of knowledge also.

There is, therefore, no pretense that these long-neglected areas alone will provide the total subject matter of the school. They do serve us, however, as great orientating statements of human needs and interests, as central focusing themes to keep our minds on first things. But the over-all design of the curriculum will necessitate an even more all-inclusive view of the individual and the culture than these eight areas alone constitute.

THE TOTAL SUBJECT MATTER OF THE SCHOOL: ITS TWO CATEGORIES

The total curriculum of the new school must be seen in terms of two categories:

- *First*: As a conceptual outline of intellectual content — a fusion of feeling and ideas. These are composed of *the great cue concepts of the new sociology, psychology, esthetics, and ethics.*
- *Second*: As a body of activities in which the young people and their elders engage, and through which an understanding of the concepts is built and a dynamic will to do something about them developed.

1. THREE MAJOR SUBJECT-MATTER DIVISIONS STILL RETAINED

Out of the interminable discussion of academic subjects, of innovations, experiments, and new bodies of subject matter throughout a half century of controversy over the content of the school program, three great categories of subject matter still persist:

- The Sciences
- The Arts of Expression
- The Techniques of Life

THE EDUCATIONAL FRONTIER: 1890's-1940's

Those who are designing the curriculum of the new school must learn that for clarity and effectiveness the program must be visualized in such broad categories as these rather than in the score of narrow academic subjects into which convention has tended to throw them. I find in the consensus of the best schools agreement on these three:

I. THE SCIENCES

1. The physical sciences: man's knowledge of the universe, of the earth, and of its relation to other heavenly bodies — as presented in the most modern statements of the new astronomy, physics, chemistry, geology, and related fields.
2. The biological sciences: man's knowledge of himself, his nature and behavior, and of other living creatures — as presented in the new biology, physiology, psychology, and related fields.
3. The social sciences: man's knowledge of human societies and their cultures as shown by the "new sociology" — anthropology, economics, political science, social psychology, human geography, and their respective histories.

II. THE ARTS OF EXPRESSION

1. The literary arts — the novel, the poem, the essay, etc.
2. The theater arts — playwriting, production and direction, use of light, the architecture of the stage, choral speech, movement, etc.
3. The graphic and plastic arts — painting, sculpture, ceramics, and the like.
4. Music.
5. The movement arts — "dance" and physical activity in all their ramifications.
6. The building arts — the House of Man as it penetrates to every phase of his cultivation of his total scene.

III. THE TECHNIQUES OF LIFE

1. The quantitative techniques as determined by the function concept through investigation of the universality, frequency, and cruciality of social use, represented in the essentials of arithmetic, algebra, geometry, and the more advanced forms of mathematics.
2. The linguistic techniques — determined by the investigation of social use — as represented in the essentials of reading, composition, grammar, and expression in poetry and prose of the native and other languages.

3. The body techniques — determined by the application of the principle of social use — as illustrated in the posture of the body, control of movement in walking and all physical activities, and in the technical skills of writing, typewriting, stenography, drawing, and the use of widely used tools and machines.
4. The social techniques — also determined by the principle of social use. These appear in all the universal human activities of social life — in organizing, teaching, and otherwise leading human groups and in the coöperation and followership of their members.

This is the skeleton of the intellectual content of the new program, expressed in the familiar terms of formal education: To fill in the details of this outline would require the pages of another large book; the task is far beyond the limited scope of my remaining pages in this present book. But the intellectual ideas and the attitudes that guide the human being in his attempt to live successfully in the modern world are developed in "activities," and about these we have learned much in the past fifty years.

2. THE VARIED ACTIVITIES OF THE NEW SCHOOL PROGRAM

I said "activities" advisedly, for the four foundations of education are permeated by the concept of action. Our psychology, that of Peirce, James, Dewey, is an action psychology. Our progressive educational practices have emphasized living and making and doing. The passive atmosphere and life of the old school are fast disappearing. Although the old school program was in a sense a program of activities, these, largely linguistic and symbolic, were narrowly restricted. Most of the school's work was done in a single classroom — most of it, indeed, in the pupil's seat or in the space in which he could stand beside it — and it was carried on through the written or spoken words or other abstract symbols.

But in the fifty years in which the new education has been building we have learned to use many kinds of activities. Learning is no longer conceived as mere giving back the words and mathematical symbols that have been read or heard and memorized. In place of verbal "lessons" memorized from the textbooks and recited in abbreviated class periods, the new program consists of a vast range and

variety of activities which utilize all the powers, traits, and interests of the children. Today we employ less than seven characteristic activities in the new school program.

(1) *Activities of Observation and Orientation*

These include trips, excursions, and field studies: trips to stores, factories, markets, farms, warehouses and banks, libraries and museums, to the offices of local and other government, to railroad and steamship facilities, to art galleries and artists' studios. For the young people of the city, in addition to the foregoing, there are trips to the surrounding countryside for the study of the geography and life of rural regions; for those in the country, corresponding trips to town and city and metropolitan center. Here, then, is one guiding activity of the school—the dramatic orientation and introduction of young people to the key doings of the local community, to the near-by regions and to remote parts of the nation and the world.

(2) *Activities of Research: Finding Out*

The new schools of the past half century have taught us to use in education all the ways there are of finding out things:

- gathering data from the libraries of the school, the town or city, the country or state and national libraries and museums
- gathering information in local industrial technology and agriculture from strategic centers in the neighborhood
- studying the past through the experiences of old residents and the documentation of old records
- reading from books of drama, travel, romance, biography
- the building up of collections of technical bulletins, pamphlets, monographs, survey reports, statistical reference materials, through correspondence with county, state, and national bureaus of reference and research
- lectures from scholars in near-by universities and colleges and museums
- motion-picture materials in cumulating school movie-libraries

All the ways there are of finding out things are brought into the school and organized in the service of education.

(3) Activities of Physical Construction

Acting on the dictum of free the arms and legs, free the body generally, as the first step toward freeing the mind, the progressive schools have taught us to incorporate a vast range of building activities into the curriculum. These in the elementary school reproduce in miniature the outstanding characteristics of community and national life — stores and homes, courthouses, post offices, and other public buildings; in the junior high school — water supply and power plants, transportation and communication services, the making of a designed object in the form of a model as well as a drawing or drawn plan. Even more directly conceived, the manual work of the school plant itself, the repair and extension of the building, the making of physical equipment, electric wiring, designing and weaving of rugs, drapes, and other furnishings, the framing of pictures, and the making of wall maps as decoration.

(4) Expressive and Appreciative Activities

The deep-running role of creative and appreciative production in the new education has taught us to increase markedly the amount of time devoted to the esthetic act. The great purpose of building sensitive persons out of aggressive and competitive individuals directs us to build into the new program a wealth of creative activities. These will range throughout all the sciences and the arts of expression as well as the mastery of technical skills. The material facilities of the school expand correspondingly — a great range of physical or intellectual materials supplanting the pencil, paper, and pen of the old mass school.

(5) Activities Leading to Mastery of Skill

The measuring movement in education, now nearly a half century old, has taught us to respect the concept of mastery. One hundred per cent mastery, not seventy, or sixty, is the goal. A new psychology of skill, a psychology of the repetition, of building habit through recurring but varied situations, has given us the instruments with which to achieve it. Thus the new program will have incorporated into it an economical and efficient body of techniques — the mental skills of arithmetic, spelling, scientific and mathematical manipulation; the manual skills involved in handwriting, typewriting,

and business practice; the craft techniques in using tools and machines; the social skills involved in organizing people.

(6) *Form and Discussion Activities*

Skill in the technique of study and discussion has been a central aim of the cooperative new education. The study group, with either adults or young people, is now recognized as being an educational resource of profound importance. Thus the new education provides conference tables at which young people and their elders exchange and validate ideas, learn the art of cooperation, and grow under the stimulating impact of personalities upon one another. Years ago pioneers of educational psychology added another new concept to our educational equipment: free the larynx of the child, they said, if you would free his mind; practice him in the formulation and presentation of his ideas and in the give-and-take of interpenetration of minds.

(7) *Lecture and Assembly Activities*

From Colonel Parker's Morning Exercise to the current Town Meetings of the post-war school, the new education has learned to retain the school and group assembly as an important educational technique. The function is manifold: to create a feeling of the community of the school, to bring before the young people constant exhibits of its own creative productions, to provide a forum in which individuals can be practiced in the art of public presentation of their ideas, esthetic and forensic skill, to provide a place of community criticism of the work of the school, to practice young people in the art of listening and to introduce them to the best that the local community and region can supply in the way of public address. Thus the new school finds important educational assets in the art of the lecture even though the extremists among the progressives frowned upon it as a stiff and outmoded instrument. It is an instrument through which the drama of human civilization can be presented by means of grand examples of the spoken word. Keep the lecture, says the new school, but keep it in its place — and require it to be creatively and esthetically of a high standard.

Here, then, are seven examples of the dynamic activities that make up the life and program of the new school.

SHUNNED AND NEGLECTED AREAS

This concludes my discussion of the First Problem of Subject Matter. We have now appraised past and current academic approaches to the question: What shall we teach? and have brought into juxtaposition with them a new yardstick — eight shunned and too-much-neglected areas of living.

This brings us, therefore, to the Second Problem of Subject Matter.

CHAPTER XXI

The Organization of the Curriculum

THE SECOND PROBLEM OF SUBJECT MATTER

Curriculum Materials Must Be Grouped

Anyone who has taught school knows that the educative process will advance smoothly and effectively only if the materials used in learning and teaching are organized in orderly fashion. The complexity of the social world and the necessity for drastic selection from the multitudinous samples of human experience, as well as the intricacy of the learning and teaching processes, make this imperative. I can testify, from my own years of teaching, that whenever I was compelled to improvise content and organization of the study in day-by-day fashion with the group,¹ the inevitable consequence was chaotic disorder in learning, emotional insecurity, and educational waste. If the schools of the future can learn this lesson from the record of the experimental schools of the past two generations, they will guard against a tragic waste. I repeat, therefore: the materials of the curriculum must be carefully selected, grouped, and organized if the life and program of the school are to produce maximum growth in the children and youth.

There Is No "Royal Road"

But I hasten to add a second generalization: out of the fifty years of experimentation with many and different plans of organization, the curriculum-designers of today agree that there is no royal road to social understanding. There is no one best plan. There are many different ways to start, many different sequences of material, many different uses of excursion, discussion, reading, open forum,

¹ As in the first hectic years of the Lincoln social science experiment, 1919-1922.

ORGANIZATION OF THE CURRICULUM

practice activities, episodes, historical movements, and treatments of social problems. Any single organization of these might prove to be as educative as any other.

THREE PSYCHOLOGICAL CRITERIA OF ORGANIZATION

But no organization will be effective unless it satisfies at least three necessary psychological principles of organization:

First, the criterion of related meanings: Meanings in relationship for understanding must be developed together in the learning process. Under this principle the curriculum-designer must bring together in any one unit of study materials which in the traditional curriculum are presented in widely separated subjects and school years. In the study of civilization, for example, he must cut straight across the boundaries of traditional subjects, integrating closely the history, geography, psychology, economics, and government of the life of a community or nation. Other facts which have been conventionally classified in the separated subjects of anthropology, archaeology, ethnology, and geology must also be closely related to them. I doubt if one can find a single social problem today which can be intelligently studied and understood without assembling and organizing in closest inter-relationship facts, concepts, and principles which in the liberal arts curriculum are presented in at least a half-dozen separated subjects of study. If the reader will scan quickly the captions of Part III which deal with the foundations of a science of culture and society, he will have an impressive body of illustrative data.

Second, the criterion of development in learning: In the vast literature of learning and organization of subject matter, illustrations abound of the necessity for the meticulously graded development of subject matter to guarantee steady advance in learning. Consider, as a single example, the learning of the meaning of a fraction by young children. The traditional deductive treatment, which rarely led to clear understanding, required the learning of abstract definitions of the component parts of a fraction, followed by applications in computational problems. In contrast, the new methods are "operational," concrete, and developmental, distributing the building of understanding of the meaning of a fraction over four or five years of child life. Thorndike's classic treatment of the problem, in his *Psychology of Arithmetic*, provides a beautiful illustration of the careful design of subject matter. It discriminates no less than seventeen separate steps in the total learning process from kindergarten to fifth grade —

THE EDUCATIONAL FRONTIER: 1890's-1940's

from the first simple manipulations of halves and quarters of actual objects to the final abstract defining of the meaning of a fraction by the child himself. Countless other examples could be cited; witness in the social studies the building of the meanings of the cue concepts of the "new sociology" through ten years of graded study.¹

Third, the criterion of intrinsic development within the discipline itself. This principle is related to the second one, but may need special elaboration. The concepts of the various branches of mathematics, for example, are held together in a structure of intrinsic interdependence, sequence, and development. Modern man's success in using the concepts of the higher mathematics has been made possible by this very hierarchy of levels in which they are developed. One cannot violate this hierarchy and sequence without breaking down the structure itself, and we cannot understand its advanced levels without first mastering the preceding and "lower" ones. The curriculum-maker must, therefore, design his psychological principles of development in terms of the fixed intrinsic conditions of development within the subject matter itself.

These, then, are three psychological criteria of organization, which must be satisfied if any organization of subject matter is to be effectively educative.

THROUGHOUT THE FIFTY YEARS: TWO CONFLICTING THEORIES AND CURRICULUM PLANS

In the past half century educators have devised several different organizations of the subject matter of the curriculum. But they all reflect either one or another of two opposed theories of life, education and curriculum design. To see these clearly, recall the fourfold analysis that we have made of the great formative movements of the past half century:

- Public education - subject-centered
- Liberal education - two varieties, both subject-centered
- Progressive education - experience or child-centered
- Social education - society-centered but also subject-centered

¹Elaborate examples are given in the many teachers' guides for directed study accompanying the fourteen volumes of my *Man and His Changing Society*. These can be obtained from Ginn & Company at a nominal charge. See also Guides such as those designed for the half-year courses; for example, the Guide accompanying *Governments and Changing Cultures*.

ORGANIZATION OF THE CURRICULUM

But these four really reflect the two classic theories with which we began this book — the Authoritarian *versus* the Experience theory. For fifty years the Authoritarian or subject-centered curriculum-makers have opposed the Experience or human-centered ones. The half century of curriculum reorganization, spawning a bewildering variety of plans, has really moved steadily in two fairly sharply distinguished channels of thought and action:

- *First*, curriculum *rearrangement* via the school subjects — either within the subjects or through a regrouping or reconstituting of two or more of them
- *Second* thorough curriculum *reconstruction*, including the discarding of the subjects and the total rebuilding on some plan of human or experience-centered organization

Two curriculum plans, set off by single captions:

- Subjects *vs.* Experience

And this brings us to an important distinction.

Distinguishing Subject Matter from School Subject

While the new education will retain the important concept of subject matter, the question of the school "subject" is of minor significance. *Subject matter is the material of any educative experience*, and hence is fundamental to a theory of the curriculum. But the school subject is merely a name given to an artificial body of linguistic and symbolic material in the traditional curriculum. It is reading, writing, arithmetic, algebra, geometry, chemistry, physics, botany, English, French, German, music, literature, drawing. The traditional curriculum consisted of nothing more than a score of these narrow literary and mathematical subjects, arbitrarily put together from the learned disciplines of the scholars. So greatly did the compartmental organization of subjects retard the improvement of the life and program of the school, that earlier progressive workers were forced to give far too much time and energy to demolishing them. But they were not attacking the names; they were demolishing the unsound conception of life and education that domineered over growth and learning. We know now that the name that we give to the content and organization of any body of subject matter is not important; if it has been selected and organized on sound psychological principles, it matters not one bit whether we call it a "subject," a "unit of work," a

"center of interest," a "broad field of study," or an "educative experience." Hence, as we build the new programs of the post-war world, we shall be concerned about our subject matter but not the title which we give to its groupings. With this caution in mind we turn to the consideration of the two great plans of curriculum organization.

First, the most profoundly reconstructive one — that based on the philosophy of experience.

I. EXPERIENCE-CENTERED PLANS FOR CURRICULUM ORGANIZATION

One basic curriculum question will guide our analysis:

- How shall we organize the life of the school and its program of work to guarantee *the greatest possible personal and social growth?*²

Since the pioneering of Parker and Dewey the progressive schools have given many answers to this question, but they all reflect one central theme: the curriculum shall be built directly out of the experience, needs, and aptitudes of those for whom it is designed, and directly from their culture and its historical development. Broken down into a four-fold detail, our curriculum question becomes:

- How can we guarantee maximum growth in —
- interest in man, his earth and universe, and his changing society;
- understanding it all intellectually, and appreciating it with feeling;
- capacity to express oneself about it all, to make one's statement personal and social;
- technical competence enough to live in the world well?

To illustrate the answer given by the progressive schools, I reproduce the outline of a "Unit of Work" — the "Study of Boats" — from the third grade of the Lincoln School.¹ Although this example dates from the 1920's, I have found no better one in studying the results of twenty years of curriculum experimentation. It is one of the most effectively reported curriculum units that we have ever had. A careful study of this chart will answer several curriculum questions: How did the study start? Who planned it? What questions did the chil-

¹ See pages 704-705.

dren themselves want answered? What subject matter was used by the children and the teacher in answering these questions? How well was it organized? What outcomes did the teacher visualize? What new interests were developed which would lead the children to build further educative activities? In general, how were the total personalities of the children modified?

Three Major Differences between the Subject and the Experience Activity

The study of this unit will bring out sharply the distinctions between the subject-centered and experience-centered curriculums. First, an experience unit is infinitely broader than the traditional school subject in its scope of concepts and ideas, problems and interests, and hence of understanding human life and activities. The third column of the chart shows that the subject-matter content which the children drew upon came from no less than ten school subjects, including the several social studies, the fine and industrial arts, reading, and science. An experience curriculum ignores all the boundaries between the conventional school subjects.

The second difference concerns the motivation of learning. As Miss Shumaker and I said twenty years ago: "The new school organizes itself around the child's intention to learn; the old school organized itself around the teacher's intention to teach. The latter may produce learning, but the former is sure to."¹ The child's intention to learn! The first two columns of the chart illustrate the point clearly, by showing that the children's own questions played an important part in guiding and propelling their work. This does not mean that the unit was made completely "on the spot," that when it started the teacher waited for the children to express an interest in a particular theme of study. On the contrary, as the first column of the chart shows, the whole unit was planned very carefully in advance, its "stimulation" being designed by the teacher in the light of her rich experience in teaching children of that age. It sprang from work that they had done the previous year, from experiences that many had had in the summer, from materials that the teacher had carefully arranged in the room, from excursions that the teacher organized and led the children to take in the community. All that we have said about the necessity of planning in advance was illustrated in this study.

¹ *The Child-Centered School*, page 102.

STUDY OF BOATS

THIRD GRADE

THE LINCOLN SCHOOL

SUBJECT-MATTER CONTENT WHICH HELPED SOLVE THE PROBLEMS

STIMULATION

In the spring of last year many of the boys of this group were interested in trains and other means of travel.

Many summer experiences with boats. Wood in supply box cut in shapes suggestive of boats.

Bulletin prepared by the teacher.

Trip to see Half-Moon.

Trip to see boat models.

PROBLEMS-QUESTIONS

To construct boats that will look like a certain kind and with which children can play.

How do boats "go"?

Who first thought of making a sailboat?

How did people get the idea for different shapes for boats?

To know more about the people who traveled on the seas in early times.

To find out about the making of boats.

How many different kinds of boats do we have today and how is each kind used?

How did early people use their ships?

To find out about the different parts of a boat.

How do people know how much to put into a boat before it will sink?

This chart was drawn up by Miss Martha Groggel. It outlines what Miss Nell Curtis did in her units on the study of boats, which were developed during several years of her work in the Lincoln School. This chart has been made from notes and records kept by Miss Curtis at the time that the units were in progress.

INDUSTRIAL ARTS

Construction of boats - making pattern, shaping hull, making sail, making keel, casting weight for keel, making rack for boat, and testing boat.

How boats developed from early times to the present day. The difficulty involved in building a toy boat so it will balance in water.

Different kinds of sailboats.

The need for a keel on a boat.

Different methods of propelling a boat.

Modern inventions in connection with the propulsion of boats.

What makes boats float?

Different uses of boats today.

HISTORY

The Half Moon directed interest to Hendrick Hudson and his ship.

Historic Ships - Santa Maria, Mayflower

Reference work, reading and discussions about: -

Vikings - What color and kinds of clothing did they wear?

What did they eat? What kind of houses did they have? What were their boats like? Did Vikings have stores? How did Viking writing look? Story of Leif Ericson. The gods of the Vikings. Their beliefs.

Phoenicians - Scenery, boats, people, trade, beliefs, clothing, cities, industries, etc.

Egyptians - Scenery, country, boats, beliefs, tools, writing, etc.

Story of the building of Solomon's Temple.

Early Mediterranean peoples.

GEOGRAPHY

Pictures of boat from newspaper which interested children in world geography.

Geography related to countries studied.

Norway - Country, climate, people and occupations.

Phoenicia - Country, climate, people, trading routes, daily life of early people compared with that of today.

Egypt - Country, climate, trading, etc.

Map interest - Norway, showing ancient home of the Vikings.

The Mediterranean countries, showing cities of Phoenicia and routes which the King of Tyre sent materials for Solomon's Temple.

Plasticene map of Mediterranean Sea and surrounding countries on which children sailed cardboard models of early boats.

Globe in frequent use to locate places mentioned.

Outline world map, locating countries.

Interest in determining distances (reading scales on map).

How far is it from Norway to Phoenicia?

How far is it from Norway to America?

Building Lower Manhattan on floor with blocks to exhibit boats.

Map was drawn on floor buildings in New York City that helped most with sea travel.

ARITHMETIC

Measuring for boat patterns and measurements in boat making.

Figuring the number of board feet used by class in building boat racks.

Arithmetic problems in connection with science experiment of water displacement and floating objects.

What is a gram?

What is a cubit?

Dimensions of Solomon's Temple compared with dimensions of the Lincoln School.

Children saw a cubit measure at the Museum.

FINE ARTS

Sketching and painting pictures of Half-Moon.

Sketching and painting boat models.

Drawing blackboard frieze showing history of boats.

Ten easel pictures showing story of Leif Ericson.

Cut paper pictures of boats.

Painting Egyptian boats seen at Museum.

Painting Viking pictures showing clothing.

Painting modern boats.

Making clay tablet.

COMPOSITION-LITERATURE

Stories written about the trip to see Half-Moon.

Stories of other trips by individual children.

Original poems about boats and the sea.

Labels and invitations for boat exhibit.

Written and oral reports about boats, Vikings, Phoenicia and Egypt.

Stories for bulletin, room paper, council news, or absent class members, telling of class interest and study.

READING

Reference material pertaining to topics under discussion, found in school library or at home.

Children's reading material - Leif and Thorakel, Viking Stories, Early sea people, Boat book prepared by other Third Grade, material prepared by student teachers.

SCIENCE

How can we tell if our boats will float and balance? Try out in delta table.

Three experiments - Why do some objects float and why do some sink?

How do people know how much to put into boat before it will sink?

DRAMATIZATION

Play-Story of Leif Ericson, spontaneously prepared by class.

MUSIC

Old Gaelic Lullaby.

Volga Boat Song.

Sail, Bonnie Boat.

PROBABLE OUTCOMES

DESIRABLE HABITS AND SKILLS

Better skill in sketching.
 Better skill in handling brush and paints.
 A beginning of the development of how to sew.
 Developing the habit of making a pattern before constructing an article.
 Developing skill in shaping wood by means of plane and spokeshave.
 Developing skill in using gouge and mallet.
 Developing skill in reading distances on map.
 Rapid growth in map drawing.
 Developing habit of reading the newspaper.
 Better skill in measuring.
 Ability to gather information on a certain subject and reporting to class.
 Increased ability in writing.

ATTITUDES AND APPRECIATIONS

Economic:-
 An appreciation of the use of weights and measures.
 What it means to construct a real boat that will float and balance properly.
 Appreciation of the change in the lives of the people caused by the discovery of iron and the use of sails.
 Appreciation of paper as a writing material.
 Appreciation of the modern inventions in connection with the propulsion of ships.

Social:-
 What the early people contributed to the world.
 The number of people and industry it takes to supply materials for the construction of one building.
 Comparison of the ideas of fairnees of the early people with the present day.

Recreational:-
 Developing a joy in painting, sketching and drawing.
 Growing interest in reading books about historical peoples, inventions or boats.
 Playing with boats made.
 Interest in the construction of a toy boat.
 Interest in the construction of a real boat.
 The pleasure in making maps.
 The pleasure of playing with maps.

Aesthetic:-
 Appreciation of the beauty in line and construction of boats.
 The adventure of the ship.

INFORMATION

Knowledge of the development of the boat from raft to steamship.
 Who Hendrick Hudson was.
 General idea of historic ships.
 An interesting acquaintance with Vikings, Phoenicians, and Egyptians.
 General geographical knowledge of the world.
 What a cubit measure is.
 Knowledge of how to draw maps.
 Some idea of what makes objects float.
 Some idea of how to make boats balance in water.
 Some idea of how to construct a toy boat.
 How the early people made their clay tablets.
 How to make a clay tablet.
 The need for molds in casting metals.
 Some idea of how iron is made into different shapes.

NEW INTERESTS LEADING TOWARD FURTHER ACTIVITIES

Interest in world geography and travel.
 Maps and actual distances between given places.
 The time it takes to get to certain places.

Interest in silk through answering the questions:-
 What kind of clothing did the Vikings wear?
 How is velvet made?

Interest in what clay is: how it is prepared for our use and how it was prepared by early people for making clay tablets.

Interest in the Egyptian and Phoenician alphabet and how our alphabet was developed from it.
 The materials the Egyptians used for writing.

Interest in metals.
 Interest in weight of different metals through casting of lead for keels.
 How metals are shaped.

Interest in the construction of modern buildings through reading about Solomon's Temple and comparing it with the construction of the Lincoln School.

Interest in other phases of transportation.

TOTAL PERSONALITY AS MODIFIED BY THE FOREGOING EXPERIENCES

THE EDUCATIONAL FRONTIER: 1890's-1940's

The third difference between the subject-centered and the experience-centered curriculum lies in the emphasis upon "the total personality," upon attitudes and appreciation (see the right-hand section of the chart). The experience curriculum practices the school's responsibility for transforming the Individual into the Person. The concept "the whole child" becomes much more than a new shibboleth in education; the curriculum is consciously designed to get as much as possible of the child into action at any moment. The "centers of interest" or "units of work" are good educatively, to the extent that they branch into the total experience of the children; witness the questions in the fourth column of the chart. Not only is the question asked: Can the children read, write, reckon, and spell better? But in addition: Can they handle tools better? Read maps better? Use printed information better in newspapers, magazines, and books? Report facts either by word of mouth or in writing better? Are they more appreciative? Have they had a good time while they have been learning all these things? Have their feelings been developed constructively?

Which Criterion: Maximum Realness? . . .

Maximum Lifelikeness? Or Maximum Growth?

For half a century the progressive schools have vigorously explored the principles upon which the work and study of the school shall be designed. Recurringly, in the literature of this discussion, appear the concepts "real life situation" and "lifelikeness." After ten years of curriculum-development the staff of the elementary division of the Lincoln School stated their basic principle:

"The unit of work must be selected from real-life situation and must be considered worth while by the child because he feels that he has helped select it because he finds in it many opportunities to satisfy his needs."¹

This principle embraced three criteria:

- *First*: Realness — generally defined as either "lifelikeness," or child-interest
- *Second*: That the child help select what he is doing
- *Third*: That the child must see that he can satisfy his own needs

¹ Tippett, James S., and others: *Curriculum-making in an Elementary School*, page 31 (1927).

ORGANIZATION OF THE CURRICULUM

A major question is presented here: Is curriculum content to be chosen on the ground that it is real to the child? that it is lifelike? Are these the guarantees that the curriculum material will be educative? Is the "lifelike" situation the educative one? Is the "real" the educative? Are lifelikeness and realness synonymous? In fifty years of discussion, the progressives have sought the answers to these questions in the life activities and interests of children and in organized bodies of subject matter. One agreement they certainly have reached — namely, that *educativeness* is the chief measure, irrespective of whether the situations are found in or out of school. There was a time, in the 1920's, when the progressives seemed to make educativeness synonymous with "lifelikeness" and "realness" and the latter two were measured in terms of out-of-school standards. They have learned otherwise, however, for obviously much out-of-school life is thoroughly *un*-educative (witness the chaotic character of much undirected group play!) while many in-school activities, so far as they are designed, are sure to be educative. Hence, neither lifelikeness nor realness on the basis of being "out-of-school" activities is found to be a good curriculum criterion. I can find only one really sound measure for curriculum material: Does it educate — that is, does it satisfy the psychological principles developed in Part II of my book? Does it produce growth in the definite respects which have been enumerated in the earlier pages of this chapter?

II. THE REORGANIZATION OF THE SCHOOL SUBJECTS: FOUR PLANS

While the progressives were experimenting with the more far-reaching experience-centered plans of curriculum reconstruction, the other three groups were struggling to find acceptable forms of reorganization that would improve matters but leave the curriculum in some form of subject-organization. Many plans were tried, but all fell into one or another of four types:

1. Reorganization *within* a school subject
2. Correlation of subject matter within or between school subjects
3. Building new courses from "Broad Fields" which embrace related subjects; either —
— "General" courses, or
— "Fusion" . . . "Integrated" courses
4. The "Core Curriculum"

Here, then, are four types, each one to some extent an exhibit of the tinkering that has gone on for half a century within the framework of the subject-organization.

1. REORGANIZATION WITHIN THE SCHOOL SUBJECT

Since the characteristics of the subject-organization have been canvassed so extensively in Chapter XIX, I shall refer here only to attempts to bring about improvements within it. Suffice it to recall that from the 1890's until well into the 1920's curriculum-making was carried on primarily through committees of the NEA, the National Society for the Study of Education, the Progressive Education Association, various educational foundations, and many regional associations. These committees all recommended the continuation of the standard subjects, contenting themselves with a kind of patchwork rearrangement of bodies of intellectual content. The preponderance of the stuff of English, the languages, mathematics, science, history, and other subjects was preserved. Slight rearrangements of grade placement of items of subject matter were made; *Macbeth* and *Hamlet* were taken out of one of the grades and placed in another; likewise with certain language forms, operations of algebra, propositions in geometry, epochs of history, or phases of the science subjects. But no fundamental redesign of the content or psychological redetermination of its organization was achieved. This was rearrangement — not reconstruction.

It was assumed, for example, that skill in computation could be developed effectively through made-up or "described" problems in arithmetic. Hundreds of hours of drill on the skills of the ancient and modern languages, algebra, and geometry, which would never be used in practical life, were defended on the ground that they "trained" the so-called mind; a generation of studies had failed to prove that they did. Habits and attitudes of good citizenship were supposed to emerge from the recitational study of encyclopedic paragraphs in textbooks on the structure of government; how government actually worked was never shown concretely.

Through it all, the curriculum was assumed to consist of a body of facts and skills which mankind had discovered and organized. The task of the school was to teach these to the children and by this method each generation would "preserve the social heritage." That the great concepts of the new sociology, psychology, esthetics, and ethics — not

these academic trappings — were the keys to the social heritage apparently was not perceived by these defenders of the classic faith. And the question of usefulness to the students was not raised.¹ The needs, interests, and aptitudes of the learner and problems of his personal motivation were either ignored or given a minimum of lip service. Even the most progressive of the subject-centered investigators assumed that learning would be effective and the educative process efficient if the subjects were made interesting enough.²

2. CORRELATION OF SUBJECT MATTER

The need to break down the isolation of concepts caused by separation in school subjects led reformers to try "correlation" as a remedy. This idea was not new to our times. Hundreds of years ago reformers saw that concepts and principles closely related in human experience inevitably got separated whenever they were taught in academic subjects. As early as the seventeenth century Comenius advised teachers that on every possible occasion they should correlate the ideas developed in one subject with those in others. In the nine-

¹ Except by the educational measures, whose work on social analysis is discussed in Chapter XXI.

² I do not ignore the many fine psychological reorganizations of subject matter that were achieved within the framework of school subjects by rare artist-teachers. There can be no doubt, for example, that the reorganizing work of such mathematics teachers as Mr. H. P. Fawcett at the Ohio State University High School was psychologically stimulating and in learning outcomes effective; see his *The Nature of Proof*, page 66. A "new system of geometry" was developed, based on the pupils' own school life. Under the theme "the nature of proof," the teachers made marked advances in building an understanding of the use of definitions and assumptions and the relation of these to the conclusions reached.

Neither do I neglect several definite improvements that have come about through changes in the school subjects themselves. Conspicuous changes have been made and in some instances with proved success. To cite a single one: the proposal of Professor Harold F. Clark to find out whether the actual diet, clothing, and housing of communities could be improved by reconstructing the content and teaching of the school subjects. This study has been going on for several years, financed by the Alfred P. Sloan Foundation in collaboration with the universities of Florida, Kentucky, and Vermont, and directed by Dr. Clark. See:

— C. M. Olson: *Learn and Live*

— H. F. Clark in *Teachers College Record* for March, 1943, page 408 . . . *The Bulletin of the National Association of Secondary School Principals*, pages 7, 36, 44 . . . *The American Association of Teachers Colleges, Twenty-second Yearbook*, 1943, page 20

teenth century Herbart and his followers, especially Ziller, developed a close correlation between the study of history and the study of language, geography, and science. These earlier leaders made no proposals to discard the school subjects and begin with the study of institutions and contemporary problems; they accepted the conventional subject plan but insisted on the maximum possible "co-relation" between the obviously related concepts, facts, episodes, conditions, and problems.

In every decade since 1890 the idea of correlation was a recurring educational reform. In the 1890's, especially through the influence of the Herbartians and of Colonel Parker, it became a popular movement among public and private schools, being made a special recommendation of the Committee of Ten. In the 1910's and again after World War I the "correlation" of subjects was a platform theme of educational conventions. Courses in history, geography, and literature were taught "in parallel," the same chronological epochs studied at the same moment in various subjects. Mathematics and science courses were designed with close reference to one another. The written work of courses in English was based upon the content of the social studies and the physical and natural sciences. Under such constant urging teachers felt so much compulsion to "correlate" that they frequently went to absurd lengths in artificially bringing together the content of the various subjects. Nevertheless, looking back upon it, we can see that the correlation movement was a slight step in the direction of a more meaningful organization of the curriculum.



Nevertheless, these two plans — changes made within single school subjects and the correlation of subjects — can be considered to be no better than makeshift tinkering with the curriculum.

The third plan, to which we turn next, was the dominant idea that gripped the reformers throughout the half century.

3. GROUPING TOGETHER RELATED SUBJECTS WITHIN BROAD FIELDS OF KNOWLEDGE

This was a forty-year attempt to broaden the groupings of subject matter, to merge or fuse or integrate subjects, to blur the boundaries between them. By one plan or another the curriculum-makers of our time have tried to *organize* curriculum materials by putting them into broader units and giving them longer and more flexible allot-

ORGANIZATION OF THE CURRICULUM

ments of time. Many different patterns have been employed in the last half century and many different names — “Broad Fields,” “Fusion,” “Integration,” “General Courses” — but all of them fall within the “subject” conception. This trend engrossed the attention of most curriculum-makers from the turn of the twentieth century until well into the Great Depression. It revealed itself in two distinctive forms — a major form under which most of the work has been done and a minor and distinctively separate and unique pattern:

- building new and broader subjects out of the existing subject matter of the conventional subjects of study
- selecting and organizing in one broad study the subject matter shown by social and psychological investigation to be indispensable to social and personal development

Each of these two types will be described and appraised.

Broadening and Regrouping Existing Subjects of Study

Seen in chronological terms, this trend, now just a half century old, consisted of the creation of the new “general” subjects of study — General Mathematics, General Science, General Social Studies, General Arts. It began in England in the 1890’s with the development of “general mathematics” known as the Perry Movement. It spread in the United States in the early years of this century under the leadership of George Myers and his successor, Ernest Breslich, at the University of Chicago. It received a larger national impetus after 1915 through the work of John Roscoe Clark,¹ Raleigh Schorling, and the experimental work which they and their colleagues were doing in centers like the Lincoln School, Teachers College, and the School of Education of the University of Michigan, and through the discussions and yearbooks of the National Council on Mathematics. The movement brought about the assembly in an integrated junior-senior high

¹ Professor Clark and I produced our monograph, *Scientific Method in the Reconstruction of Ninth-Grade Mathematics*, at the University of Chicago in 1917. It was followed by our textbook, *Fundamentals of High School Mathematics*, in 1918. This applied the principle of social use rigorously to curriculum construction and eliminated a vast amount of useless content from algebra and geometry, which even the college professors had recommended be abolished. Nevertheless, because the standard college entrance material was not all included the book received almost no use in the schools generally.

school course of the material traditionally separated into advanced arithmetic, mensuration, algebra, plain solid and analytic geometry, trigonometry, and the calculus. This was advocated primarily on psychological criteria. Each so-called subject, it was said, illustrated common mathematical principles and concepts; for example, the function concept. For clarity of understanding and for permanence of learning all related processes, meanings, and principles must be brought into clear interrelationship. This required broad courses — general mathematics — in place of algebra, geometry, and trigonometry. For a generation, most professors and teachers of mathematics, unversed in the psychology of learning, fought these innovations. Slowly, however, and with increasing acceleration after 1925, the conception was accepted by larger numbers of teachers, textbook writers, and leaders of national and regional committees. Curriculum committees and the newer textbooks adopted some form of “General Mathematics.”

/ / /

This first glimpse of the possibilities of general education had barely been visualized in mathematics when leaders in the teaching of the science also got it. In the years from 1910 to the 1920's a dozen examples of General Science appeared under the leadership of such personalities as James Hessler, Otis W. Caldwell, Samuel Ralph Powers, Gerald Craig, Benjamin Gruenberg, and Paul Mann. As in the case of mathematics, so in the sciences — the reorganizing work was done through two media: the writing of new textbooks constructed on the general subject plan, and the increasing influence of the authors and their associates on national and regional committees. In the first years, up to World War I, the new books and the new committee reports consisted of little more than the mechanical assembling of the materials of the separate sciences within the covers of a textbook, or a Course of Study. But as the years passed, more knowledge of psychology and curriculum-making developed; the teachers of science education became aware of the learning problems involved, and the organization of the material became more and more an integration of related meaningful content. The work that was going on in such centers as the Lincoln School of Teachers College, in the reconstruction of curricula around the basic concepts of the new sociology and sciences, also contributed to the integration of the material and to the application of the criterion of social usefulness. This reconstructive

ORGANIZATION OF THE CURRICULUM

work was focused and given nation-wide circulation in the publication of the report of the National Society's Committee on Organization and Teaching of Science under the chairmanship of Professor Samuel Ralph Powers.



Lagging behind mathematics and science, the first pioneering in the reconstruction of the social sciences came just at the close of World War I,¹ in the form of integrated courses in the study of society and the culture. These courses reached from the lowest years of the elementary school through the senior high school. In the colleges they were paralleled by such famous experimental beginnings as the I. C. C. course — Introduction to Contemporary Civilization — required of all freshmen and sophomores at Columbia since 1919. During the 1920's various forms of "fused" or "integrated" study of society and the culture were tried out in the colleges — especially in the newer and more progressive ones such as Bennington, Sarah Lawrence, Antioch, Mills, and Black Mountain. As already indicated, however, the years of the depression and World War II expedited curriculum reconstruction in the direction of General Education. This eventuated in the past two years in the publication of several reports from the private prestige institutions which have already been discussed in Chapters I and XIX. In the meantime several publishers, prodded by the nation-wide use of my own social science materials — *Man and His Changing Society*, from 1929 to 1940² — issued new "fused" or "general" courses in the social studies which were essentially compilations of materials conventionally presented in separate courses in history, civics, geography, sociology, and economics. These were "general" in the sense that units of subjects formerly scattered in separated books were brought together in one. In the sense of sound psychological design it is doubtful if they were much more truly integrated than had been the separated courses.



By the 1930's the two practices of (1) selecting curriculum materials in terms of either adult or pupil needs and (2) organizing them in

¹ See my story of this development in *That Men May Understand*.

² More than 5,000,000 young Americans used them in those years; see *That Men May Understand*.

groupings broader than those customarily represented by the school subjects, were definitely recognized. The concept of "broad fields" had been widely accepted as a principle of curriculum organization. As we have seen, it was being made the basis of the extension of the General Education movement into the liberal arts colleges and universities.

4. THE CORE CURRICULUM: THE CURRENT FORM OF BROADENING THE UNITS OF STUDY

The current end-point of all this innovation and experimentation is the "Core Curriculum." By the outbreak of World War II the professional curriculum-makers appeared to agree upon this as the best working plan of organization for schools as they are carried on today. The plan consists of setting aside a large block of time in each school day — quite generally the entire morning — in which to meet the common social and personal needs of the young people in one broad and continuous unit of work. So far as I can learn the initial step in this direction was taken by one of the pioneer workshops of the Progressive Education Association; this was the Rocky Mountain Workshop at Denver, under the leadership of Dr. Harold B. Alberty. In this workshop they built a "core program" of work and study around activities and problems which

- are common to many pupils
- persist or recur in experience
- are not well handled in traditional subjects
- profit from coöperative planning and teaching and learning
- explore several areas of experience
- bring together a wide range of relationships
- necessitate study of different points of view
- require large blocs of time
- call for relatively continuous experience
- apply skills of thought, work, creativeness, to wide range of experience
- require a minimum of special equipment
- do not require extended drill in specific skills

Since that summer's pioneering, curriculum students generally have turned to the core program idea as a good practicable solution

ORGANIZATION OF THE CURRICULUM

for a baffling organizing problem.¹ There is, of course, no single curriculum organization known as "the core curriculum"; on the contrary, a multitude of new types of practices have appeared in the last fifteen years under this caption. These range all the way from mere sequences of subjects such as mathematics, the social studies, science, or English to other reconstructions of the curriculum in which the lines between the subjects have been obliterated or at least greatly blurred. Moreover, many different names have been applied to these examples of core curriculum — core courses, integrated courses, unified studies, fused courses, stem courses, social living courses, basic courses. But in all of them the common characteristics just enumerated can be discerned.

In these new core programs have been grouped together projects, civic experiences, field studies, the wider use of the facilities of the community — indeed, many things which formerly had been regarded as "extracurriculum"; witness Dr. Caswell's comment: ²

"The core program is derived from the needs which are common to all youth and which can best be achieved in undifferentiated groups. The need of all for guidance and help in selecting and integrating their many experiences into a consistent, meaningful whole gives the core an over-all function; it is the central part of the curriculum, as is implied in the term 'core.' It is not, as here supported, a socio-civic core to be paralleled by cores in other areas of living. However, coverage of these areas is an appropriate check on the adequacy of the scope of the program proposed. This is a distinction growing out of the conception of learning held by the committee which is of major importance.

Harold Spear's writing on "The Changing Curriculum"³ says:

"But now as the center of attention shifts from subject to learner, there is opened up for the curriculum planner the whole field of relationships among subjects, among lifelike activities of youth, and among school and community endeavors. This tend-

¹ Witness the current approval given to it by the leaders of the former Society for Curriculum Study, the authors of the new reports on general education in the schools and colleges, the members of the recent curriculum committees of the John Dewey Society, the Society of Supervisors and Directors of Instruction, the North Central Association, and others.

² In the John Dewey Society's Eighth Yearbook, *The American High School*, page 150.

³ *Ibid.*, page 116.

ency to relate learning experiences was first explored under the title of integration, but recently the programs growing out of this approach have been designated as core courses."

The core program is visualized as a body of activity and material that is central to the whole curriculum and is given "a long and flexible" amount of time — generally half of the school day. This long period provides enough continuous free time to engage in extensive community and regional studies. Since it builds the common knowledge and skill, it is required of all the young people. It draws a cross section of the entire school community together into one group, made up of youth of all shades of interests, social status, and orienting backgrounds.

Such a comprehensive study requires expert knowledge on the part of the teachers and most careful design and organization; hence the use of a single Core Teacher who directs and is always present, aided by specialists in the various fields who are "on call." Applied to the high school, this is the kind of program with which the early progressive schools such as Lincoln experimented in the years immediately after World War I. In a sense the core program is the systematic expansion in content and in time of the earlier experimental "Units of Work."

Summing Up

I find a definite consensus of agreement among the specialists concerning the core curriculum:

1. It is the broadest of the broad fields — providing for the common experiences of all the pupils.
2. It is based on the present consensus of thought concerning growth and the psychology of learning.
3. Its basis is a combination of pupil needs and social demands.
4. In subject matter it replaces several narrow school subjects, drawing upon general areas of "knowledge and culture that seem to promise the help needed."
5. It utilizes a large amount of time — generally half of the working day.
6. It provides for much active experience in the direct study of family, neighborhood, and community life, group projects, civic investigation, the building of health as a common need of the people.

ORGANIZATION OF THE CURRICULUM

7. It assumes responsibility for the common skills of communication, computation.
8. It necessitates careful planning and direction under the leadership of a single Core Teacher, but with the coöperation of specialists in the study of physical and natural sciences, health, the arts, the society, and the culture. Mathematical and linguistic techniques.
9. The core course, therefore, is the latest attempt to unify the best of the broad fields approach and the experience-centered plan of curriculum reorganization.
10. Planning is of critical importance, and this is done through the coöperation of specialists and the Core Teacher.
11. Responsibility for guidance is central and is located in the leadership of the Core Teacher.

LOOKING BACKWARD AT FIFTY YEARS OF CURRICULUM-MAKING

What is the residue of theory and practice deposited by the fifty years of vigorous curriculum reconstruction? Without repeating here the concepts already stated from the work of the Progressives, the Essentialists, and the Perennialists, I assemble the major conceptions brought forth by the curriculum-makers:

- A new meaning for “curriculum” — the total life and program of the school.
- A clarification of the necessity for and the principles of design.
- The curriculum designed from the total culture, including the needs of the young people and the key concepts of the four foundations.
- Hence the curriculum-designer must be a student of the four foundations.
- Some things you design in advance, others on-the-spot.
- The continuing Study-Design Group of the school includes parents, children and youths, teachers, and administrators.
- There are three problems of the curriculum:
 - The Problem of Philosophy.
 - The First Problem of Subject Matter: What Shall We Teach?
 - The Second Problem of Subject Matter: How Organize the Curriculum?

THE EDUCATIONAL FRONTIER: 1890's-1940's

- Subject matter is vital and is seen now as any human experience *which can be used educationally*.
- The chief criterion for the selection of subject matter is Needs: either Society's need to preserve and pass on the social heritage, or adults' current needs of students.
- The current curriculum developments still shun and neglect eight areas of living:
 - Work, personally and socially useful.
 - Sex, love, and home life.
 - Inferiority and the building of strong Persons.
 - The insistent controversial issues of the social systems: property, racial conflict, the control of public opinion.
 - Religion.
 - The centering of the community life in education.
 - Building a high order of esthetic life in the school.
 - The problem of freedom and order: making democracy work.
- The study of the Second Problem of Subject Matter – its organization – has contributed three psychological principles:
 - The criterion of related meanings.
 - The criterion of development in learning.
 - The criterion of intrinsic development of the subject matter of the discipline itself.
- All conflicting theories and curriculum-plans reduce to two:
 - Curriculum *rearrangement via school subjects*.
 - Curriculum *reconstruction via human experience*.
- The differences in theory and practice are now clear.
- Four plans of reorganizing the school subjects have been tried:
 - Reorganization within a subject.
 - Correlation of subjects.
 - Building "broad fields" of general, fused, or integrated subjects.
 - The Core Curriculum.

This is the currently accepted "best practice," by the public school curriculum specialists.

CHAPTER XXIII

Fifty Years of Scientific Method in Education: What Have We Learned?

“Whatever exists, exists in some amount.”

I repeat this much-quoted generalization of Edward Lee Thorndike's¹ because it states the key thesis of those who have led in the quantitative study of education in the last half-century. In 1890 the country had no bureaus of educational research, and psychological laboratories could be counted on the fingers of two hands. Today most universities, colleges, and school systems maintain educational research bureaus, laboratories, or departments, and the combined memberships of the scientific organizations — for example, Phi Delta Kappa and the American Educational Research Association — are large. By the middle 1940's tens of thousands of educational workers had some familiarity with the concepts of the scientific method as applied to education. Thus, it is not an exaggeration to say that the educational movement generally referred to as “scientific” constituted one of the major trends in education in our times.

Its chief motivating concept, applied to human nature and behavior, was crystallized in Thorndike's slogan — namely, the precise determination of the amount of things. Interpreted in the background of four centuries of modern science, the slogan could be paraphrased: “Whatever exists, exists in some amount, and, with precaution and the careful use of technical aids, can be exactly observed.” Thus, in the twentieth century the students of education extended the psychologists' earlier attempts to observe man's behavior more precisely by applying quantitative techniques to every aspect of education.

¹ *Seventeenth Yearbook*, National Society for the Study of Education, “The History and Status of Educational Measurements.” Part II, pages 9–15, 1918.

HOW THE EDUCATIONAL PSYCHOLOGISTS CARRIED
QUANTITATIVE METHODS OVER INTO EDUCATION

The story of this rather astonishing development can be sketched quickly. The immediate impetus for the new educational research was the growing science of psychology. Cultural factors of longer history contributed also — such factors as the swift development of technology and the scientific movement, which were affecting many aspects of American life at the turn of the twentieth century; but the immediate bridge was laboratory psychology and its handmaiden, statistical methods.

Two men and their students were the chief intermediaries — Edward Lee Thorndike and Charles Hubbard Judd. Their connecting links in psychology were William James and Wilhelm Max Wundt; but of the two, the chief source was Wundt. It is true that Thorndike spent a year (1895-1896) with James at Harvard, but I have never been able to discern in Thorndike's work more than a general orienting influence of the author of *The Principles*. It was James McKeen Cattell, with whom Thorndike studied from 1896 to 1898 at Columbia, who exposed the latter to both the laboratory and the statistical points of view — and Cattell had worked with Wundt (1881).¹ Judd also got his orientation and drive from two years with Wundt at Leipzig (1894-1896).

Judd and Thorndike were contemporaries in the fullest sense. They were college mates, of approximately the same age (and I understand rivals), at Wesleyan University in the 1890's. Both chose the scientific study of psychology as their special interest; both were pioneers in the development of the new educational psychology, and both carried scientific techniques into the study of school administration, the curriculum, the design of measuring instruments, and the study of the teaching staff. Although they fought each other for three decades over the issues involved in the mechanism-organism (transfer of train-

¹ For the fuller description of the role of Cattell as intermediary between Wundt's laboratory methods in psychology and Calton's statistical methods, turn back to Chapter II. Inspired by Cattell, Thorndike became the one to carry over into education the use of statistical methods — methods which Cattell had acquired from the intellectual grandfather of this field, Sir Francis Galton. Judd missed this kind of training and never developed an interest in statistical methods; in fact, amusing episodes, to some of which I was an eyewitness, revealed a profound distaste for them.

ing) controversy, I am convinced that fundamentally both worked in the framework of a deep mechanist psychology; certainly they exhibited it in their devotion to the subject-matter curriculum.

Every Phase of Education Affected

Between 1900 and 1920 every aspect of education was subjected to the quantitative method of inquiry under the leadership of these two men — the study of learning, curriculum, teaching methods, marks, examinations, entrance requirements for colleges, and the administration of schools. Thorndike's influence overshadowed Judd's in all phases but administration; witness the former's pioneer studies of animal and human learning, the improvement of mental functions by practice, the course and nature of the growth curve, the transfer of training, mental fatigue, individual differences, and mental work. His work on the improvement of mental functions was in the background of earlier studies made by such persons as Bryan and Harter in telegraphy (1897), others in typewriting and shorthand (1904), by Swift and Schuyler (1907), and by Book (1908). Several investigators had studied improvement: Leuba and Hyde (1905), Munn (1909), Dearborn (1910), and Starch (1912); Ebert and Meumann (1904) the ability to memorize; Swift (1906) improvement in learning to read Russian; Kirby (1913) studied the effects of practice in column addition with fourth-grade children. I cite these few studies made in the first decade of our century to illustrate that the investigation of the rate and course of learning was under way generally in the psychological laboratories of both the United States and Europe.

Thorndike was using the quantitative technique in the first study of retardation and elimination of pupils from schools. Cliff Stone, working in Thorndike's laboratory at Teachers College, produced the first objective tests in arithmetic¹ (1906). Strayer, Elliott, and Cubberley, among Thorndike's first graduate students, carried the use of factual and statistical methods into administration;² Leonard Ayres' (Roland Falkner's student at Pennsylvania and a superintendent of

¹ Cliff W. Stone: *Arithmetical Abilities and Factors Determining Them*, Teachers College Bureau of Publications (1908).

For a critique of the early studies of "School Marks and Marking Systems," see my article in the *Journal of Educational Administration and Supervision* (1916).

² G. D. Strayer with *City School Expenditures* (1905), the *Age-Grade Census* (1905), Edward Elliott with *Some Fiscal Aspects of Public Education in American Cities* (1905), and Cubberley with the first analysis of state and Federal administration — *School Funds and Their Apportionment* (1906).

schools in Puerto Rico) much-discussed *Laggards in Our Schools* followed in 1911. Max Meyer at Missouri (1908) was launching a vigorous movement for the objectification of marks and marking systems; in the same year Binet and Simon published the American edition of their epoch-marking intelligence test. As the new quantitative concepts and procedures became available, a nation-wide movement for the expert surveying of schools got under way. All these things went on concurrently between 1900 and World War I.

/ / /

Meanwhile Mr. Judd had been making the School of Education of the University of Chicago the second center of the quantitative study of education. It was a smaller nucleus, and designedly so, for Judd believed in having a small, highly selected body of students who would work with meticulous care at the laboratory analysis of human behavior. He had returned from Leipzig imbued with two of Wundt's lifelong interests. The first was the exact instrumental analysis of human behavior. This led him to develop the famous psychological laboratory at the School of Education, from which he and his students, from 1910 to 1930, reported a score of objective investigations. Judd, in contradistinction to Thorndike's lifelong measurement of the *products* of education, fixed his study on the *processes* of education.¹

From Wundt, Judd had absorbed not only the point of view of the precise laboratory worker; he had also developed an interest in the psychology of social forces. He did not make a direct Veblen-like study of the forces and factors of our American scene in the twentieth century.² It was a more academic "anthropological" study — in the

¹ Outstanding examples of these were:

Buswell, G.: *An Experimental Study of the Eye-Voice Span in Reading* (1920)

Freeman, F. N.: *The Handwriting Movement* (1918)

Gray, C. T.: *Types of Reading Ability as Exhibited through Tests and Laboratory Experiments* (1917)

Gray, W. S.: *Studies of Elementary-School Reading through Standardized Tests* (1917)

Judd, C. H.: *Reading: Its Nature and Development* (1918)

Stuart A. Courtis of the Detroit schools, sponsored by Judd, also devised his pioneer Series A Arithmetic Tests at this time and for some years led in the development of scales and tests for the measurement of specific educational products.

² If one is to understand the directions taken by various educational groups in our times, he must appraise the aloofness of both Judd and Thorndike and the bulk of their students from the vital social forces playing on the American and world scene. It is impossible to do so in these already overpacked pages. I have promised myself the pleasure of undertaking the task in a later volume.

FIFTY YEARS OF SCIENTIFIC METHOD

nineteenth-century sense — of such social institutions as language, exchange, government, and society's methods of recording facts. But his course at Chicago on the Psychology of Social Forces was a pioneer ground-breaking course, as was his book, *Psychology of Social Institutions* (1926).

A HECTIC FACT-FINDING MOVEMENT: SALVATION VIA STATISTICS

Between 1905 and 1925 every aspect of school practice was surveyed, question-blanked, and measured. From the impetus given by the Thorndike and Judd centers of inquiry, the quantitative mood in education took its drive and its characteristics for a quarter of a century. By the beginning of the Great Depression Phi Delta Kappa, the graduate "scientific" fraternity in education, had initiated over 2000 members, the American Educational Research Association was a department of the NEA and its *Journal* was well established, and there were scores of Schools and Departments of Education. Hundreds of professors of education were question-blanking the country and counting and tabulating everything observable in the schools. Everywhere the slogans proclaimed: "Better schools, better grading, classification, promotion, marking, and certification of pupils by more exact collection, classification, and treatment of the facts." This was the route to salvation embraced by the neophytes of the statistical method.

Their influence began to subside in the late 1920's as the prestige of the Dewey-Child-Centered movement advanced. By the trough of the Great Depression the novelty of measurement had worn off. Moreover, the Social Frontier group had made schoolmen aware of the important role of society and the culture. As Thorndike astutely — and I thought wistfully — summed it up in an aside to me one day in the depression years — "So! Sociology's the thing now!"

IN A SENSATE CULTURE EDUCATION COULD NOT ESCAPE THE QUANTITATIVE MOLD

More formative factors than the spread of laboratory and statistical methods from psychology poured the new educationalists into the quantitative matrix. By far the most potent one was the transformation of the culture itself as the Second Technological Revolution ushered in a startling materialistic era of "bigness and bedamnedness." Everything in the physical environment emphasized quantity and move-

ment rather than quality — the sprawling communities, the skyscrapers, the corporations, the speeding rhythm of transport and communication, and the hectic escape recreations of the people. At the turn of the century the huge concentration of resources and power in the hands of a few exponents of the Gospel of Wealth movement led to the creation of great research foundations — witness the various Carnegie and Rockefeller endowments. Easy money was available in gigantic amounts — even for education.¹

It was in this atmosphere that the community surveys were made and that Frederick Taylor's work-time-studies ushered in a wide-spreading efficiency movement in industry. It would have been an insensitive Judd or Thorndike that could have turned a deaf ear to the voices that spoke from this noisy culture of efficiency: "Go and do thou likewise."

The New Professors of Education and the Higher Studies

We must not forget that the new scientific movement was built up at the very moment that the profession of education was being created on the graduate level of the universities. In 1895 there were no professors or doctors of philosophy in Education; fifty years later several thousand held professorships of various grades in universities, liberal arts colleges, and teachers colleges. Most of these were recruited from public school positions — superintendents, principals, supervisors, and teachers; only a negligible percentage had a mastery of the basic foundations in the sciences or the arts, neither mathematical nor logical studies.

Pushed into the adoption of scientific methods of inquiry, all they were prepared to do was count and tabulate and measure. They could use formulas, but could not derive the laws which gave birth to them; for example, until very recently statistical methods meant no more than arithmetic to most professors of education.² Thus the tab-

¹ See Eduard C. Lindeman's *Wealth and Culture* (1936) for a first statistical analysis of the grants that were made, and the successive Annual Reports of the Carnegie Foundation for the Advancement of Teaching, the Carnegie Corporation, the Carnegie Endowment for the Advancement of Peace, the Rockefeller Foundation, the General Education Board (also Rockefeller), the Laura Spellman Rockefeller Foundation, the Commonwealth Fund — to name only the conspicuous early ones.

² I doubt if more than ten educationalists in America could understand Truman Kelley's *Statistical Method* when it was published in 1923. In twenty-five years I

FIFTY YEARS OF SCIENTIFIC METHOD

ulation of numbers in frequency distributions, the computation of averages and measures of dispersion, took the place of the theory of numbers and the profound scientific concept of relationship and law. Not one in fifty was a master of the processes of logic or of the concepts of philosophy and the basic sciences.

As a consequence of these conditions the teachers colleges of the entire country became trade schools. The formula, "what to do and how to do it," dominated the lectures of the professors and the study of the students. Their intellectual climate was marked by a contempt for theory as well as a distaste for it. The basic principle that theory must precede design, as design is prior to construction and operation, was rarely grasped. Thus neither professors nor "graduate" students gave themselves to the true task of workers in centers of intellectual inquiry — namely, the study of ideas. The new professors believed that the route to salvation was the technique of instrumental observation, precise measurement, and the statistical organization of facts. The teachers colleges — even the massive "graduate" ones — and the schools of education of the universities became technical institutes — true replicas of the technological enterprise of the nation. Living in such a vigorous Thing society and trained in the new laboratory techniques, the professors of education, after 1900, inevitably would commit themselves to making efficiency studies, to establishing bureaus of research, to counting and tabulating and measuring in order to "know the facts."

THUS THE PROFESSORS OF EDUCATION WERE DOMINATED BY THE THING PHILOSOPHY OF OUR SENSATE CULTURE

Likewise they could not escape the mechanistic explanations that they learned from the physical and natural scientists. In the earlier chapters of this book we have seen the molding influence of the mechanical explanations that even the best of our men of science gave for the phenomena of the universe and of living creatures. From Galileo and Newton to the middle of the nineteenth century most of the thoughtful men of philosophy, psychology, and the physical and biological sciences were Thing People. The deep dichotomy that has been drawn between the Thing People and the Force People does not exaggerate this influence.

It is not to be wondered at, therefore, that for a generation after
have taken part in a couple of hundred doctoral examinations; I can count on the fingers of one hand the number of candidates who were competent to become critical leaders of thought.

1890 our research pioneers who carried the scientific method over into education also acted like Thing People. They set up their researches, selected their problems, set their experimental stages, adopted techniques and interpreted experimental phenomena and data with assumptions and points of view characteristic of mechanism. They did this even though their studies dealt with the subjective human life — with feeling, body-response, thought, emotion, personality.

If we are to understand the work of the first men of scientific method in education, therefore, we must bear clearly in mind the sharp differences between the postulates and assumptions in these two sharply distinguished worlds of mechanism and organism.

CONTRASTING POSTULATES IN THE REALMS
OF MECHANISM AND ORGANISM

In the Realm of Mechanism

Mechanisms — any modern machines or mechanical contrivances in our technology — are assemblies of parts. In order to be efficient, machines are designed so that every part can be precisely duplicated. The spectacular success of mid-twentieth-century technology was made possible by the standardization and interchangeability of parts, as every pioneer of the first industrial revolution from Cyrus McCormick to Henry Ford had to learn by himself. Both the quantity production of goods and the democratization of their sale were founded on these concepts and the contributing technique of precise measurement and the use of giant precision machine tools. In the entire realm of mechanism the whole is actually equal to the sum of all its parts.

Experimental concepts must also fit in with other mechanical concepts — for example, constancy, approximate stability, lack of change. For practical purposes, in dealing with mechanisms, any part can be held constant, other parts can be changed in accordance with experimental design, the resulting phenomena measured with great accuracy and their relationships computed by the mathematics of probability and correlation.

Moreover, in conducting experiments in the world of mechanism, the reports of the separate senses can be relied upon to provide the data of observation — the data of physical dimensions from the visual sense; tone, pitch, vibration from the auditory sense; similarly with other phenomena and senses. Thus in the world of mechanism scientific data concerning assembled things can properly be presented in profiles of the measured characteristics.

In the Realm of Organism

But in the world of organism the concepts are of a very different order. In any population the whole is not equal to the sum of all its parts. There is always something unique over and above and beyond the assembly of parts — namely, the unique whole itself, for every whole is a new entity. Hence, in the world of organism nothing is uniform, nothing is constant; everything changes, becomes a new integration in each succeeding moment. The concepts that are indispensable for mechanisms, such as constancy and standardization, are useless in dealing with organisms.

This has an important bearing upon the use of scientific method in education, for education is of the world of organism. To cite a single example — all instruments of observation must have the power of observing, measuring, and recording the total response of the organism. No report of a single sense can provide enough of the organism's total reaction to produce a valid record of observation. A visual report of the organism's movement, an auditory report of its speech, a kinesthetic report of its space-time locus — each of these will give a hint of the status of the organism at any moment. But each such observation and report is only a partial record of the interdependence of its many intimately related phases. Organisms cannot be broken up into parts as can mechanisms, with any expectation that the parts will remain constant during the experimental procedure. Mechanical measurement of the dimensions of the separate parts — no matter how precise — and the statistical determination of their interrelationships will serve no valid purpose, for no part will stay put while other parts are being observed. Hence *in the world of organism we can measure only by means of instruments which will report the total behavior of the organism at any moment.*¹

Summing up, therefore, we see that the postulates and concepts of the Thing People have no standing or function in the realm of organism, which is the realm of education and the human sciences upon which it is grounded. Here only the concepts and postulates of the Force People will be valid.

¹ This principle receives its greatest application in dealing with the problem of measuring the products of the creative and appreciative acts, later in this chapter.

*The Assumptions and Postulates
of the Educationalists*

I have dealt at some length with these points because the validity of the educationalist's use of the scientific method is determined by the appropriateness of his assumptions and his philosophic orientation. The key to our problem lies in the fact that the human beings educated, the problems studied, and the materials and processes involved are integrative, not additive, in nature. Only the concepts of organism and the orientation of the Force People are appropriate and valid. In spite of this profound truth the educationalists' use of the scientific method for most of the past half-century has markedly reflected the concepts and attitudes of mechanism. By and large the students of education have been Thing People. We have to plead guilty to the charge that in our study and practice of administration, curriculum development, and teaching, we have

- defined the world in terms of things instead of functions — that is, the relations between things.
- viewed the human beings in schools and colleges as additive mechanisms, not as integrated organisms.
- done our thinking about individuals by comparing them with averages of groups instead of studies of the integration of forces in actual situations.
- evaluated the capacities, performances, achievements of human beings in terms of rank-order of size instead of comparing them with estimates of their potential achievements.
- tended to ignore the critical task of founding education upon the basic sciences of psychology, sociology, esthetics, and ethics; so far as we have developed these we have created them in mechanistic terms.
- expressed our views of life representatively in terms of surface likeness and photographically reproduced the surface shapes and contours of things instead of stating forces, tensions, pushes, and pulls which express the relationships between things. Thus technique and intellect instead of feeling and body-response have been the chief concerns.

IN A COMPETITIVE SOCIETY EVALUATION TENDS TO BE BY RANK-ORDER

The basic concept of our measuring movement in education was also the product of the forces of our culture. This is the concept of rank-order — that is, evaluation of one thing by comparing it with a frequency-distribution of others. But this was characteristic of our social order. It is difficult to see how education in our time could have avoided it, because every aspect in our competitive society forced it into that mold. Every institution was ruled by the spirit and technique of competition — the rewards of business, political office, the classic marking system of schools, the prizes of the creative arts, personal prestige in the community.

It was natural, therefore, that the “man-to-man” scale, or the “school-to-school” scale, should be the first method of standardizing evaluation. When a school system was surveyed and evaluated by the novitiates in educational expertness, they appraised its efficiency by comparing it with that of twenty or thirty other “comparable” school systems. The intelligence of a ten-year-old pupil was measured by comparing his mental performances with those of other ten-year-olds . . . a girl’s performance in sixth-grade arithmetic compared to a frequency-distribution of her mates’ performances in the sixth grade . . . one sixth-grade’s performance with that of another . . . one football team’s with those of others. Thus in a competitive Thing society the climate of opinion forces all educational evaluation into the rank-order mold: How many are taller or shorter than X? How many know more? How many can run faster? Jump higher? Spell more difficult words? Work more difficult problems? Create better poems or paintings? Organize, lead, and administer better?

It was to be expected, therefore, that the first application of the scientific method in education would be statistical. The frequency-distribution-quantities arranged in rank-order of size — with averages and average-deviations from the average — and correlation coefficients expressing parallelism (if not true relationship) were the summary measures of status. Thus the measuring movement, especially during its first quarter-century, tended to judge educational practice against statistical norms. How well a human being lived was measured against how well others lived, not against his capacity for the good life.

When Rank-Order Concepts Are Appropriate

This does not mean to say that there are no proper functions in our lives for measurement by rank-order. There are actually two important needs for evaluation, and one can be met only by rank-order concepts. First: in all the administrative functions in which *greatest competence* is the criterion, then the competitive principle is valid. We want the *best* leader we can find to administer the Atomic Energy Commission; so we pick one who promises by his past performances in the TVA and in atomic studies to be the best. In the long run the leaders in business, industry, medicine, law, engineering, and other economic enterprises pick themselves by the competitive method. Sometimes — especially in our adolescent political system — “politics” interferes with the smooth working of the principle. But, by and large, the principle of competence operates and “the best man gets the job.” Thus, there can be no question of the validity of rank-order evaluations in all administrative situations.

Growth Cannot Be Measured by Rank-Order Methods

But evaluation of growth cannot properly be made on competitive rank-order concepts. The statistical practices of our time have tended to ignore the newer educational conceptions and practices — namely, growth, purpose, uniqueness, the Person. The progressives were concerned with evaluating how far their educational practices had developed the individual toward his capacity for living. They were studying growth; hence their tendency was to measure and compare the individual's performances with their best measure of his potential ability. How a child compared with others mattered little; how well he was doing compared to his own previous performances and compared to what he *could* do under favorable conditions mattered much. Thus, while statistical frequency-distributions and group averages served as prods to most school and college administrators, they contributed little or nothing to the improvement of the educational process itself.

The Problem of “Norms” and “Standards”

Moreover, the statistical tendency of educational evaluation confused as well as clarified the problem of standards. The classic goal of formal education was in every generation perfection of product; a “high standard” was set for every task. When the measuring movement came into education and statistical rank-order concepts were

FIFTY YEARS OF SCIENTIFIC METHOD

employed, the average of comparable groups — not the best product that could be turned out — became the new standard. But, as the clearer students among the measurers began to see in the 1930's, this was to confuse standards with norms. Average attainments of comparable groups were norms, not standards. A standard is an agreed-upon objective or goal, and a standard for any individual is his best achievement under favorable conditions. But under this definition we see again that rank-order measures — norms — have only a limited use at best. There is one use — namely, the possibility of computing (1) the individual's deviation from his group's norm; (2) the extent to which this deviation is consistent with his potentiality as determined by some other instrument; (3) and the extent to which he maintains consistent deviation from the norm as he grows from year to year.

SCIENCE AND THE SCIENTIFIC METHOD

In order to appraise our success in using the scientific method in education, we must know exactly what this body of concepts and techniques was that the educationalists have tried to apply. We must analyze the scientific method itself, answering two specific questions:

First: What constitutes a science?

Second: What are the elements of the scientific method?

What Constitutes a Science?

Since much has been said of science and the scientific method in the earlier chapters of this book, I shall do no more here than state what seems to me to be the consensus of thought among students of science. My statement takes the form of an enumeration of the characteristics of any body of knowledge and inquiry that properly assumes the name of science.

First: A Science

is a body of knowledge founded upon primary concepts of clear and universally accepted meaning, which are unique to it alone. While it makes use of the concepts of another science, its concepts are primary and peculiar to it as a body of knowledge. For example:

— the science of physics is founded upon such primary concepts as energy, motion, the field, the first and second laws of thermodynamics.

THE EDUCATIONAL FRONTIER: 1890's-1940's

- the science of biology is built on such primary concepts as growth, evolution, integration, genes, individual differences.
- the science of psychology rests upon such primary concepts as experience, the self, the problem, personality, the operational interpretation of meaning, the stereotype.
- the science of culture is being built on such primary concepts as democracy, freedom, control, equality, culture-pattern, socialization, the culture, the dominant culture-pattern, the community, class-structure, sovereignty, the sustained-yield.
- the science of esthetics is developing upon such concepts as the expressional act, felt-movements, movement, form.

Second: A Science

has evolved a body of measuring scales made up of equal units, universally understood and accepted, with which it can establish, gather, classify, and interpret "facts." The concept of precise measurement, with constant reduction of error, is crucial; in general the quantitateness is crucial because it defines the basic meanings upon which theory, design, and constructional practice are carried on.

Third: A Science

has evolved a body of primary theory upon which its inquiries are conducted. This is necessary because theory must precede design and design in turn must precede construction ("the know how"). Within the sciences structures are designed in imagined conception; this shows how "the thing" will work in

KEY SOURCES FOR THE STUDY OF THE CONCEPTS OF SCIENCE AND THE ELEMENTS OF THE SCIENTIFIC METHOD

Bell, Eric: *The Search for Truth*

Dantzig, Tobias: *Number the Language of Science*

Einstein, A., and Infeld, Leopold: *The Evolution of Physics*

Hogben, L.: *Mathematics for the Millions . . . Science for the Citizen*

Jones, Bassett: *Debt and Production*

Levy, Hyman: *Modern Science*

Loeb, Leonard B., and Adams, Arthur S.: *Development of Physical Thought*

Needham, Joseph: *Time the Refreshing River*

Smith, B. Othanel: *Logical Aspects of Educational Measurement*

Sullivan, J. W. N.: *The Limitations of Science*

Westaway, F. W.: *Scientific Method: Its Philosophical Basis and Its Mode of Application*

anticipation of construction and operation. The term "hypothesis" is used to describe the theoretical design which is the basis of all inquiry.

It should be added that *several of the sciences, perhaps all of them, are founded upon a few super-primary concepts which provide the great foundation for all of them.* Consider, for example, what is sometimes expressed as the field-energy-force concept; there is increasing evidence for believing that its operation underlies all phenomena of the universe, the earth, and living creatures, including man, his nature, his behavior, his society, culture, expression, and morals.

There is strong reason also for believing that *the principle of organization* is also central to all our worlds. We are also coming to see that throughout all the human sciences several basic concepts appear to determine the structure and interpretation of each: for example — functionality, movement, feeling, growth, organism, the interrelation of the Individual and the Group (I and We), design, sustained-yield.

These are the criteria for a science, and in all attempts to answer the question, have we now or can we build a science of education, we must apply them rigorously.

What Is the Scientific Method?

We can be equally rigorous in making our yardstick for the scientific method because Western students have devoted lifetimes of study to its analysis. Much of Dewey's writing,¹ for example, and that of his followers, reduces to this. His half-century-long study of the act with its concentration upon the psychology of the problem can properly be labeled as the study of the scientific method of inquiry; the latter is essentially synonymous with his famous analysis of problem-solving thinking. This is the philosophy of experience working at the level of conscious analysis and generalization.

In what follows hereafter I shall mean by scientific, a method of inquiry and work that

- confronts a problem directly as the focus of its inquiry.
- works in the tentative (hypothetical, suspended judgment) frame of mind.

¹*How We Think*, parts of *Democracy and Education*, *Human Nature and Conduct*, *Experience and Nature*, *Philosophy and Civilization*, *The Quest for Certainty*, others.

THE EDUCATIONAL FRONTIER: 1890's-1940's

- attacks its problem with an awareness and a statement of its specific hypotheses and assumptions.
- draws its hypotheses from a sufficient sample of the scientific world's known data — with special care that the data of other sciences have also been scrutinized.
- observes and collects its data with the aid of physical instruments of observation and measurement.
- “measures” with full and frank reservations concerning implied assumptions and possible sources of invalidity and unreliability.
- organizes its data, wherever they are quantitative, in statistical rank-order frequency.
- treats quantitative data with mathematical and statistical methods, presenting its findings via measures of average, dispersion, correlation, validity, and reliability.
- finally, in the light of the foregoing, draws new generalizations from these organized-in-relationship data, these standing as new hypotheses.
- on rare occasions, when such generalizations have been confirmed by recurring experiments and investigations, announces them as “scientific law”; such statements of law are, however, emphatically regarded as nothing more than “hypotheses” — the best generalizations that can be drawn at the moment by scientific study from the best known data.

“Scientific Study” Synonymous with “Research”

We pause a moment to connect two frequently used terms — namely, “scientific study” and “research.”¹ In most instances, in this book, I have chosen to use the terms “scientific study,” or “the scientific method of inquiry and work,” instead of the term “research.” The two, however, mean the same thing. Both mean careful inquiry or investigation with the aid of the best-known technical instruments and methods. General practice, however, in departments and bureaus of educational investigation has made extensive use of the term “research”; note the frequent title Bureau of Educational Research . . . Bureau of Reference and Research . . . Bureau of Efficiency and Research. I shall, therefore, use the terms interchangeably, meaning in

¹ Pronounced, according to all standard dictionaries, *re-search'*; there is no technical support for the almost universal practice of educationalists of putting the accent on the first syllable!

each case: "research into the problems of education by scientific methods of inquiry and work."

The Role of Instruments of Observation

When the quantitatively-minded students of education started their work in 1900, they had almost no instruments of observation or of measurement, no mathematical methods, indeed almost no understanding of the scientific method itself. They started from scratch, but they had the advantage of establishing the rudiments of their new technology of education from the lessons that the older scientists had learned in three centuries.

The first thing that they learned, perhaps, was the technique of increasing the precision of observation. This came about

- by more rigorous attitudes in stating problems, being alert to implied assumptions and postulates.
- by increasing the number of the sensory channels of observation and devising instruments with which to aid the acuity of the senses.
- by improving objective measurement through the devising of scales of determined validity and reliability.
- by increasing the precision with which the error implicit in observations was perceived.
- by improving the techniques of expressing and measuring relationships.

THE CENTRAL ROLE OF MEASUREMENT

The single factor that stands out above all the others in the half-century of educational measurement is the quantitative one — namely, that whatever exists exists in some amount, and to understand it and to cope with it man must measure it. And thus we come to the educationalists' use of the key concept in the modern attempt to improve observation and to extend man's knowledge — namely, measurement.

When Thorndike and Judd began their work, the concept of measurement and its subsidiary idea — the scale of equal units — were not only recognized as central in the use of the scientific method; in addition, their meaning had already been thoroughly standardized. The pioneers of the new laboratory psychology were convinced with Max Planck that "whatever can be measured is real," with Sir Francis Galton that "until the phenomenon of any branch of knowledge has

been subjected to measurement and number, it cannot assume the status and dignity of a science." It was natural, therefore, that the educational pioneers in scientific study should insist that to know human nature and behavior "thoroughly involves knowing its quantity as well as its quality."

Measurement: A More Acute Form of Evaluation

In the moment-by-moment life of every human being the objects of the environment — things, persons, human behavior, whatnot — are constantly being evaluated. Every act is a generalization, and many are forms of appraisal. Most of this ongoing evaluation is subjective — the product of personal experience as it has been molded by the stereotypes of the culture and the personal predispositions of the individuals; much of it is naïve, below the threshold of awareness. Because human nature and experience vary so greatly in any population, it is characteristic of evaluation that any series of judgments of ability, performance, physical objects, or human events — even simultaneous ones made by a group of trained observers — will show little agreement. A library of researches documents their utter unreliability.¹ For a half-century the science of psychology has confirmed common observation that subjective observation and evaluation are grossly unreliable. It was inevitable, therefore, that as they began to apply more exact methods of observation, the educationalists would see that a first step was to supplant subject evaluation with more objective measurement in as many situations as possible.

The Concept of the Reduction of Error

Implicitly in the countless examples of measurement in everyday life is the assumption that "a true fact" exists and in the corresponding assumption that there is always error in human evaluation, even when measurement is aided by carefully standardized instruments. Max Planck warned that "every number obtained by physical measurements is liable to a certain possible error," and Bertrand Russell characterized all science "as a succession of approximations." In his opening lecture to the graduate Thayer School of Civil Engineering at Dartmouth, my revered Professor Fletcher of engineering fame used

¹ Witness such well-known documents as (1) F. van Langenhove's *The Growth of a Legend*, pages 120-122; (2) Münsterberg's *On the Witness Stand*, in which many similar instances of the unreliability of legal testimony are assembled from eyewitness reporters.

to say: "Young gentlemen, your constant purpose in life will be to reduce error. In the practically observed world there is no such thing as 'truth.' There is only approximation to truth which we call 'fact.' Hence you will measure and remeasure the same object many times, using all the technical aids at your command; and you will use statistical aids to correct your records of measurement. If you persist, you will achieve approximations to the fact near enough for practical purposes, but you will never actually reach the fact except by chance alone."

Modern technology is based upon this concept of the reduction of error, and a century and a half of instrument making and theory and techniques of the mathematics of probability has carried us far along toward Professor Fletcher's goal. In the engineering realm we have "cut down the error" miraculously. As a result of the vast advances in perfecting instruments and machine tools and in the critical discussion of the theory and practice of measurement, the sources of error which we now confront stand out clearly. They are fourfold:

- the lack of measuring instruments and norms established by scales of agreed-upon units.
- physical imperfections in the measuring instruments.
- errors in the use of instruments.
- errors in the methods of correcting the reports of the senses.

Moreover, errors in the instruments themselves have been steadily reduced by

- the mechanical improvement in the materials, the design and operation of instruments, and the increasing precision of machines and machine tools.
- the improvement in the human techniques of using the instruments.
- the invention and widespread use of statistical, mathematical corrections for errors due to "human equations."
- the introduction of statistical methods of correction by prediction of standard errors.

The Scale: Its Twofold Nature

Modern measuring instruments are twofold in nature. First, they are constructed of materials appropriate to the functions to be measured: in the physical world, of approximately permanent materials; in the psychological world, of correspondingly appropriate materials. In the second place, its dimensions consist of a series of equal units arranged in numerical rank-order from a zero point. It is necessary that the intervals be equal units irrespective of their position on

the measuring unit; one unit of linear or circular measure, weight, electrical resistance, barometric pressure, or handwriting must be equal to another unit; for example, on a Handwriting Scale sample 80 must be as much better handwriting than sample 70, as sample 20 is better than sample 10.

MATHEMATICAL AND STATISTICAL METHODS
OF IMPROVING OBSERVATION

Western man's success in perfecting measuring instruments accelerated the process of observation of the world and accumulated such large bodies of data that observers were unable to sort them out into understandable order. At the very beginning of the modern scientific movement far-seeing men of thought saw that quantitative methods would have to be devised for treating the data. Thus, in the seventeenth century began three hundred years of creative production of mathematical instruments. During the nineteenth century the important role of the theory of probability led to the perfection of mathematical methods, of treating the laws of chance and deriving the basic equation of the "normal" probability curve. Several other statistical concepts were perfected near the close of the nineteenth century, particularly under the leadership of the British school of statisticians — Karl Pearson, G. Udney Yule, Arthur L. Bowley, and others: the frequency rank-order distribution, a table of equal intervals numbered in serial order . . . the average — not merely the arithmetic mean and the median, but also the geometric mean, the harmonic mean and others; measures of dispersion — the standard deviation — and such

SELECTED SOURCES: STATISTICAL AND GRAPHICAL
METHODS AND THEIR APPLICATIONS TO EDUCATION

- American Society of Mechanical Engineers: *Time-Series Charts*. New York (1938). 68 pages
- Garrett, H. E.: *Statistics in Psychology and Education*. New York: Longmans, Green & Co. (1937). 493 pages
- Gray, C. T., and Votaw, David F.: *Statistics Applied to Education and Psychology*. New York: Ronald Press (1939). 278 pages
- Holzinger, Karl J.: *Statistical Methods for Students in Education*. Boston: Ginn & Company (1928). 372 pages
- Karsten, Rafael: *Charts and Graphs*. New York: Prentice-Hall, Inc. (1925). 734 pages
- Kelley, Truman L.: *Statistical Method*

FIFTY YEARS OF SCIENTIFIC METHOD

measures of correlation as Pearson's "product-moment r ." It was these, resting upon the concept of the equation, that made it possible to sort out the miscellany of observations of the physical world into systematic order. Thus, when Edward Thorndike and the educational measurers began their work, the basic concepts of science and the scientific method had been brought to their modern form, ready to be applied in the human sciences.

FIFTY YEARS OF MEASUREMENT

WHICH OUTCOMES HAVE WE SUCCEEDED IN MEASURING —
SKILL? THOUGHT? EXPRESSION?

This brief study of the outlook, concepts, and assumptions of science orients us to the ideas that gripped the students of mental measurement. The Thing philosophy of our sensate culture, the competitive climate of society, and the lack of philosophic and scientific equipment led the new professors of education to adopt mechanical and additive concepts which were invalid in the obvious phases of organic life and expression. It brought about an overwhelming absorption in the measurement of the skill outcomes of education. They measured skill with marked success, but thought and understanding baffled them. The grip of Mechanism led the educationalists to carry the Thing concepts over into the realm of appreciation and the creative act, making their efforts there largely abortive. Their philosophy and psychology could not account for the esthetic life, and their assumptions were false.

Those readers who have moved steadily with me through the evidence and the logic of this book have been led to expect just this ultra

SELECTED SOURCES — *Continued*

- Modley, Rudolph: *How to Use Pictorial Statistics*. New York: Harper & Brothers (1937). 170 pages
- Otis, Arthur S.: *Statistical Method in Educational Measurement*. Yonkers: World Book Company (1925)
- Rugg, Harold: *Statistical Methods Applied to Education*. Boston: Houghton Mifflin Company (1917) ... *A Primer of Graphics and Statistics*. Boston: Houghton Mifflin Company (1925)
- Thorndike, E. L.: *Manual of Mental Measurement*. (First Edition, 1903; Second Edition, 1913.) New York: Teachers College
- Williams, J. H.: *Graphic Methods in Education*. Boston: Houghton Mifflin Company (1924). 319 pages

THE EDUCATIONAL FRONTIER: 1890's-1940's

consumption of technique. Our psychological studies have pointed definitely to three types of human act, and our curriculum studies have focused on three corresponding bodies of subject matter:

- Acts of Habit and the skills of the school: the Things-to-Do of life and education.
- Acts of Thought and the sciences: the Things-I-Know, the knowledge of man.
- Acts of Expressional Feeling and the products of Appreciation and the Creative Act: What Do I Feel? What must I say, my way?

The scales and tests turned out during the first twenty years were designed rather effectively to measure the mastery of habits and facts. During the same quarter-century the measurement of the thinking outcomes of construction was done with little effectiveness, and there was little attempt to measure the products of the creative and appreciative acts. Mechanism was in the saddle and rode the infant art of education. Most of the measurers assumed that a human being could be broken up into a profile of specific traits and abilities, some of these kept constant while others were abstracted and measured. This conception did not do undue violence in the fields of the specific skills; witness the scales and tests in spelling, arithmetic, handwriting, word knowledge and comprehension in reading, and the tests of linguistic abilities such as those devised under the endowment of the American Council on Education. But the case for the measurement of thinking ability is far less good; little effort was devoted to the direct measurement of thinking in actual human social situations, reliance being placed on described-word problems.

OUR FAILURE IN MEASURING THE PRODUCTS OF EXPRESSION

But it is shocking to find that the students of mental measurement could have lived through the fifty years of one of the great expressional ages of world history and not made use of it in education. Yet that very thing has happened. A candid appraisal reveals the measurers working in the midst of our creative artists blinded by a myopia which has led them to regard the arts as esoteric, hyper-individualistic, and aloof from the central concerns of the American social scene. It is not difficult to understand why this happened. Our measurers reflected the prevailing intellectual and psychological climate of opinion

in the schools and the colleges in which, with the exception of a few progressive schools, there was no creative or appreciative mood. So far as the measurers had a psychology, they gave lip service to the Dewey experimentalism; so far as they explored beyond the realm of habit, they devoted themselves to the scientific method and problem-solving thinking. In the rare moments when they paid any attention to esthetics they "thought" about it (they had had little or no experience of the esthetic act, hence could only "think about" it) with scientific concepts. Thus they missed the true distinction between the methods of science and art.¹

*The Scientific and Esthetic
Methods Sharply Distinguished*

Careful comparative study of the psychology of problem-solving thinking and of the esthetic act shows that they are different in both the "problem" which orients the work and in the methods of work. Consider their respective "problems." The conditions of the scientist's problem are "given" by the world outside — the distance between specified points, the elements which comprise a chemical unknown, the power which an engine must generate, the maximum load which a column must support. The scientist's problem is *set for* him, set with sharp definiteness, and thinking can take place only when the orienting attitude is focused precisely on the given external conditions.

But in the creative act the artist sets his own problem, which is to express with objective material his personal view of some excerpt of life. At first the orienting attitude is vague, an undefined inner urge to express his personal feelings. The improvising character of his statement gradually takes on definiteness of form. But the "problem" is internally created, the product of his need to make his personal statement.

These differences are magnified by a comparison of the ongoing work of the two persons. Analysis is involved in both cases, but the norms against which suggested solutions are appraised are sharply distinguished. In problem-solving thought the act consists of the appraisal of hypotheses that have been drawn from externally given facts; the hypotheses must fit the facts of the external world precisely — facts that have been assembled, classified, and treated quantitatively with scales of equal units.

But in the creative act "the facts" are self-determined, welling up

¹ See the discussion at the close of Chapter XIV.

out of the recesses of the artist's own experience as suggestions for modifying his esthetic product. They are measured against the artist's critical vision and statement, not against documented facts of the external world. Man-as-Artist asks: "Have I expressed what I feel, see, believe, intend? Is this product a replica of my feeling, idea, mood? Does my product correspond with my inner vision?" Thus, while the experiences of the scientist are checked, moment-by-moment, against known norms of the world, the experiences of the artist are completely subjective; no meanings, lines, colors, words, movements, can be given him to fit externally known-in-advance conditions. This is not to imply that the artist's way of work and the achievement of the solution of his problem lack rigor in comparison to those of the scientist. Both are marked by rigor, but they are of distinctly different kinds.

These contrasts are convincingly confirmed by similar comparison of the definiteness of the goal which guides the two acts. In problem-solving the goal is an "answer" — a single answer that will "solve the problem," and any two competent individuals using sound methods can and must arrive at it. A scientific problem is solved only when the one and only answer that will fit the case is found. The very essence of the scientific method is the possibility and the necessity of verification. Any two competent problem-solvers — irrespective of habitat, nationality, racial culture, sex, belief, whatnot, must bring to light precise relationships which exist between known external factors that change together.

Exactly the opposite is true of the expressional act. There is no single "answer" to the artist's problem which can be confirmed by another artist. The goal is the greatest possible clarification of the artist's personal vision and the production of a correspondingly objective statement of it. Throughout the process the artist struggles to feel and see more clearly and to make his product an increasingly perfect replica of his feeling and vision. The process is tentative and hesitant; it changes constantly; it is marked by a continual attitude of discontent with both lack of clarity of vision and imperfection of objective statement. Thus, while the scientist mirrors his work against the standard of verification by another, the artist must be adamant in insisting that his product is unique because he as Artist-as-Person is unique. *But the measure of his work — meeting the three criteria of form — is as rigorous as the necessity that the scientist's solution must be verifiable.*

It is the failure of the measurers to recognize these fundamental

differences between the scientific and the esthetic ways of working that have led them astray in measuring the products of the esthetic act. Trained only in scientific and technical methods, they view and appraise the artist's statement with the concepts of their Thing world. They have learned that science documents by the precise processes of representation, of photographic reproduction. Gripped by the scientific concepts of uniformity and verification, they have carried them over into esthetics, insisting that art also shall document by precise representation.

One final distinction: Science measures by analyzing wholes into parts and employing a hierarchy of scaled measurements and known relations; similarly technology becomes efficient by exact duplication. In this realm of mechanism, as we said, "the whole is equal to the sum of all its parts." Hence the scientist documents his hypotheses through the reports of the separate senses.

But to the artist, governed completely by the concepts of organism, yet seeking a principle of measurement, the whole is not equal to any aggregation of parts. The artist documents his hypotheses fundamentally through the reports of the total organism; he knows, as we said on an earlier page, that he can measure only "by means of instruments which will report the total behavior of the organism." But this means that the only competent measuring instrument is another human organism, another man-behaving-as-artist.

The Role of Competent Judgments in Esthetic Measurement

This means that the products of Man-as-Artist are measured by the judgments of his peers. Judgments are avowedly subjective, and it is of the utmost importance that the question of the competence of the judges be adequately resolved. To guarantee validity in the measuring instruments — the judgment of a human being — the principle of competence must be satisfied. Who, then, is a competent judge? All that has been said in Chapters XIII and XIV proclaims a single answer: In any age of expression only the judgment of an expressional artist can be competent. The only exception is the representational one in the field of the "commercial artist"; his stock-in-trade is pictorial reproduction, representativeness. But if the judges are expressional artists, they will judge any product on a common expressional and critical frame of reference.

To assert this is to insist that it is the progressive minority that

sets the norm of excellence for the practice of the next generation. Against this, it is the chronic tendency of the community to repress its expressive minority – its creative artists – and hence to prevent the prevalence of the creative act in the school. In scale building in the expressive arts, if we wish to guarantee educational progress, judges of esthetic excellence must be chosen from the expressive minority. If the Principle of Unanimity is to be applied, it must be the unanimity of expressive artists; otherwise it will fail to recognize the mutant, repress variation, ignore individuality, and standardize the mediocre.

This insistence that the only valid measuring instruments are the judgments of competent expressional artists does not mean that there are no recognized “standards” by which the community can measure esthetic work. There are generally accepted technical standards of craftsmanship. There are conceptual standards and vigorous measures of form; for example, the principles of organization, economy, and functionality.

PROBLEMS OF DESIGN

As we consider the results of forty years of mental measurement we shall confront basic questions of design:

1. What do we measure: Capacity? Ability? Performance?
2. What can we measure today?
3. What are our methods of measurement?
4. How valid are our measuring instruments?
5. How reliable are they?
6. What is the significance of (1) Maturity (Mental Age) ...
(2) Rate of Growth as measures of behavior?
7. The “Deviation IQ” vs. the “Ratio IQ.”

1. WHAT DO WE MEASURE: PERFORMANCE? ABILITY? CAPACITY?

The study of mental and educational tests and what they measure – clarified by a generation of achievement testing – has served to distinguish three aspects of human nature and behavior – performance, ability, and capacity. In any mental measurement every individual is conceived of theoretically as being measured on three different scales:

- a scale of performance
- a scale of ability
- a scale of capacity

Actually, on any test, we measure the individual's performance. How many or how difficult problems does he solve correctly? How many and which words does he spell, which facts does he know? Each of these records is a direct measure of his performance, and successive performances on the same test will almost always show small variations in achievement.

Taken together, these records of his specific performances will generally occupy a definitely marked-out section of the total scatter distribution of the responses made by all his comparable fellows. From these records *we can infer a measure of the individual's ability*. This we can do by locating a representative central tendency of the specific and varying performances — perhaps the arithmetic mean or the median. Under proper conditions this will be a reliable measure of *ability* — but it is not measured directly, it is inferred.

But neither of these is a measure of the individual's "capacity": the history of measurement leads us to believe that the presence of such factors as (1) a less than perfect environment, (2) complicating internal conditions of the individual at the time of the test, (3) failure of home, school, and community environment in the past, and (4) invalidity and unreliability of the test itself. Our estimate of capacity, even more than ability, is a derived estimate. We never measure intellectual capacity with an intelligence test. We measure a large number of specific performances and infer intellectual ability from them. From the central tendency of recurring measures of performance and inferences of ability we can make an estimate, perhaps,

SELECTED SOURCES: APPRAISALS OF THE USE OF
RESEARCH AND SCIENTIFIC METHODS IN EDUCATION

- American Educational Research Association. (Monthly) *Review of Educational Research*. See especially: December, 1942 . . .
- Brueckner, L. J., and Others: *Educational Diagnosis*. The National Society for the Study of Education, *Thirty-fourth Yearbook* (1935)
- The Cooperative Study of Secondary School Standards: *Evaluation of Secondary Schools* (1940). General Report. See Briefer Report (1940)
- Freeman, F. N., and Others: The National Society for the Study of Education, *Thirty-seventh Yearbook*, Part II, "The Scientific Movement in Education" (1938). University of Chicago Press. 529 pages
- Good, C. V.; Barr, A. S.; and Scates, D. E.: *The Methodology of Educational Research*
- Ross, C. C.: *Measurement in Today's Schools*
- Smith, E. R., and Tyler, Ralph W.: *Appraising and Recording Student Progress*. New York: Harper & Brothers (1942). 573 pages

of capacity. In all kinds of mental measurement this is the only safe position to take.

2. AFTER FIFTY YEARS — *WHAT CAN WE MEASURE?*

One answer to this question is summed up in outline form on the adjacent chart. I have arranged its captions in what seems to me to be the order of importance. The reader will note, however, that I present merely the chart-outline in this section; the fuller details are discussed later, following the presentation of the several problems of design. For example, the concept of the whole person, of personality and its raw materials and character, are central; I present them first.

The discovery of aptitudes is a basic task of home and school; I present it second.

The profound role of attitudes in orienting, propelling, and guiding human behavior is beginning to be recognized. I present it third.

Fourth is the evaluation of attainments which have been brought about by school education. Here are the measures of knowledge, skill, and interpretation of problems and situations and power of expression and appreciation.

One caution, however: the items in my chart are not arranged in any order determined by our success in objective measurement. Personality and aptitudes, teaching efficiency, and the whole school have been put first because they seem to me to be of key importance in life and education. Actually the reliability and validity of measurement are greater in the case of mental ability and the products of schooling than with any of the other items. On the other hand, the half-century of work on the appraisal of teaching efficiency and of the work of the school as a whole is least valid and reliable of all.

3. A QUARTER-CENTURY OF INCREASING TECHNICAL COMPETENCE IN THE DESIGN OF MEASURING INSTRUMENTS

This brings us to our fourth and fifth questions of design — those that deal with the validity and reliability of mental measures. Exactly a generation has passed since Lewis Terman adapted and standardized the Stanford-Binet *individual* test and his doctoral student, Arthur S. Otis, designed the first *group* test of mental ability (1916). The United States entered the war the following spring; Dr. Terman became the leader in developing psychological measurement in the army and Dr. Otis one of his associates, the Otis test being an important stimulus

AFTER FIFTY YEARS: EVALUATION AND MEASUREMENT

We distinguish Evaluation from Measurement:

1. We can *measure* today:
— the raw materials of personality, aptitudes, attitudes, and some of the products of education.
2. We resort to general *evaluating* methods (judgment) in dealing with the Personality of the Whole Person, the Efficiency of the Teacher, and of the School-as-a-Whole.

A. EVALUATION

I. THE WHOLE PERSON . . . PERSONALITY

A Half-Century of Evaluation: Fifty methods of studying personality.

1. Psychoanalysis and Psychiatry: the leadership of Freud, Jung, Adler, Rank, *et al.*
2. The Use of Questionnaires, Interest Inventories, Personal History Records, Standardized Interviews, etc.
3. The Rorschach Technique.
4. The Rating Scale: Man-to-Man, Self-Rating.

II. EVALUATING THE TEACHER AND TEACHING EFFICIENCY

Rating Scales: Man-to-man . . . Self-rating.

III. EVALUATING THE SCHOOL, OR SYSTEM: GENERAL LEVEL, PLANT, FINANCING, CURRICULUM

Score Cards and Rating Scales.

B. MEASUREMENT

IV. MEASURING THE RAW MATERIALS OF PERSONALITY

1. Measuring Physique; Varieties . . . Relation to Aptitude.
Cannon, Kretschmer, Cattell, Whipple, Sheldon, Hoskins, Hull, *et al.*
2. Measuring Temperament; Varieties . . . Relation to Aptitude.
Cannon, Kretschmer, Sheldon, Hoskins, Hull, *et al.*
3. Measuring Intelligence; Relation to Aptitude, Vocations, etc.
Forty Years of Investigation . . . huge library of measurement, experimental and statistical data; such names as Binet, Terman, Thorndike, Otis, Kuhlmann, Stoddard.

V. MEASURING APTITUDES

1. Pioneering by Galton, Cattell.
2. Psychological laboratory tests for specific forms of sensory, motor, and mental efficiency.

(Continued on page 748)

3. Aptitude Testing stimulated by Psychological Division of U. S. Army in World War I ... vast and successful program of Army Air Forces in World War II.
4. Tests for "General" vs. "Specific" Factors: A generation of controversial study - Spearman, Kelley, Thurstone, Thorndike, Thomson, Hull, *et al.*
5. Trade tests stimulated greatly by the two World Wars.
 - For Novices, Apprentices, Journeymen, Experts.
 - Pencil-and-paper tests.
 - Verbal ... Picture ... Performance.
 - General Mechanical Aptitude.
 - Miniature vs. Abstract Tests.
 - Apparatus Tests.
6. General Mental Ability Tests: for example, Binet, Terman-McNemar, Otis, National, American Council.
7. Tests in Expressive Arts; for example, Seashore tests for musical talent.

VI. MEASURING ATTITUDES - RACIAL, SOCIAL DISTANCE, ECONOMIC, POLITICAL, RELIGIOUS, AND ETHICAL

Rating Scales of Social-Economic-Political Opinions ... Case Histories ... Verbal Tests of Attitude ... Questionnaires on Attitudes ... Attitude Interviews ... the Bogardus Social Distance Scale ... the Keeny Experience-Description tests ... Occupation Rating Scales ... Scales of Ethical Judgments ... tests for Clusters of Attitudes (General Traits) ... Emotional Characteristics tests ... tests for Stereotypes ... Information and Opinions on Current Issues.

VII. MEASURING CHARACTER

1. The Lewin measurements of psychic tensions.
2. Tests of character: honesty, will-temperament, will-power, moral-standard, motor inhibitions, etc.

VIII. MEASURING THE PRODUCTS OF EDUCATION

1. General Achievement Batteries: Stanford, Metropolitan, Progressive.
2. Diagnostic and Speed Tests in reading (Durrell and others), comprehension, arithmetic, etc.
 - Pencil-and-paper Tests: Directions tests, Group tests, Arithmetic Tests, Best Answer, Synonym-Antonym, Disarranged Sentences, Analogies, General Information, Matching Proverbs, Sentence Completion, Cause and Effect, Related Words.
3. P.E.A. experiments in designing tests for organizing things and people, creative production, and appreciation.

AFTER FIFTY YEARS: TYPES OF INSTRUMENT

- I. The Questionnaire — systematic descriptions of characteristics, traits, opinions, interests.
- II. Word Descriptions of Personality, Traits, Physique, Temperament, Intelligence, Knowledge, Sensitivity.
- III. The Rating Scale . . . The Score Card.
 1. The numerical score card: for the School-as-a-Whole, curriculum, buildings, finance, etc.
 2. The Man-to-Man rating scale.
 3. The Self-rating scale.
- IV. The Essay Examination.
- V. The Standardized Scale for Measuring Educational Products.
 1. Handwriting scales, drawing scales, composition scales, lettering scales, etc.
- VI. Standardized Tests of Performance.
 1. General achievement . . . survey of class or school attainment.
 2. Specific skill tests.
 - a. Speed tests . . . ("hurdle race") . . . amount of work done per unit of time, or time required for stated work.
 3. Difficulty ("high jump") tests.
 - a. Tests of meaning, interpretation, reasoning, drawing conclusions, etc.
 4. Information, or knowledge tests, or combined information and thought tests.
 - a. Multiple-choice tests.
 - b. Matching tests.
 - Completion and true-false tests, much less used than formerly.

in the building of the much-discussed Army Alpha. In 1917 and 1918 hundreds of psychologists and personnel leaders were drawn into either the Psychological Division or the Committee on Classification of Personnel.

The impetus of the war experience to test design and construction was very great. The measuring movement caught the imagination of the new professors of education and swept across the country, creating a demand for workers in mental measurement that far exceeded the supply of trained personnel. Hundreds of masters and doctors were

turned out from the schools of education and teachers colleges, and many of these lacked the foundations in psychology, philosophy, curriculum, and statistical methods that were necessary for profound and competent technical work. These were the years, 1915-1925, when "statistics was arithmetic." As a consequence, most tests were group tests and the preponderance of those were rushed into press without careful validation and determination of reliability.

By the end of the 1920's, however, the more competent statistical workers of the first generation—I have in mind such persons as Truman L. Kelley, first at Stanford and now for many years at Harvard, of L. L. Thurstone and Karl J. Holzinger at Chicago, and Irving Lorge at Teachers College, Columbia, and the British Charles Spearman and Godfrey Thomson—slowly discovered and trained a young group of scientifically-minded workers who went to the various university departments of mental measurement, the United States Civil Service Commission, and other research agencies. By the middle of the 1930's an impressive small group of competent technical workers were engaged in mental measurement. These had joined together in new societies and had organized critical journals in which the theoretical aspects of their work could be carefully explored.¹

¹ Witness the establishment of the Psychometric Society, 1935, with the publishing of its monthly magazine *Psychometrika*, since that time under the leadership of such editors and officers as: Harold A. Edgerton, Albert K. Kurtz, Edward E. Cureton, Truman L. Kelley, L. L. Thurstone, Charles Spearman, Godfrey Thomson, Clark L. Hull, Henry E. Garrett, K. J. Holzinger, M. W. Richardson, J. W. Dunlap, Harold Gulliksen, Paul Horst. In addition the Editorial Board includes:

H. S. Conrad	Alston S. Householder	William Stephenson
Elmer A. Culler	Irving Lorge	S. A. Stouffer
Max D. Engelhart	Quinn McNemar	Ledyard Tucker
J. P. Guilford	Nicholas Rashevsky	S. S. Wilks
Charles I. Mosier	P. J. Rulon	Herbert Woodrow
Charles M. Harsh		

The longer-established journals tended to publish more and more substantial theoretical and statistical material—such as the *Journal of Educational Psychology*, the *Journal of Educational Research*, and the *Review of Educational Research*. In 1940 Frederic Kuder, associated with M. W. Richardson and Dorothy C. Adkins of the United States Civil Service Commission, F. A. Kingsbury of the University of Chicago, and Fred McKinney of the University of Missouri, launched the quarterly magazine *Educational and Psychological Measurement*, with an editorial board including several of the board of *Psychometrika*, and, in addition, such leaders in measurement as E. F. Lindquist of the State University of Iowa, Ben D. Wood of Columbia, and H. A. Toops of Ohio State University.

FIFTY YEARS OF SCIENTIFIC METHOD

Another impetus was given to the development of a more critical and responsible attitude about the design of mental-measuring instruments by the publication of the annual *Mental Measurements Yearbooks* of Dr. Oscar Buros and his associates. These *Yearbooks*, beginning in 1938, undertook the onerous task of publishing annual criticisms by reviewers who were themselves engaged in either the theoretical or practical aspects of educational measurement. The enterprise, while approved by many workers in the field, created considerable controversy, especially because of the difficulty of securing enough competent and unprejudiced reviews of any one measuring instrument. It should be said also that while the Buros *Yearbooks* have served as an important annual source record as well as a check and a prod, better practices in the validation and determination of reliability had already been rather well established.¹

This was the situation in 1941 when the United States entered World War II and the younger generation of mental measurers quickly built up the conspicuously competent Aviation Psychology Program of the Army Air Forces. Before the end of the war the technical staff numbered over 1000 workers who had had professional training in psychology, 500 of whom had engaged in graduate study beyond the bachelor's degree. The rigorous standards to which their mental-measurement program was subjected in selecting aviation personnel was a real impetus to the development of theoretical and technical competence in their civilian work today.² In the two years that have passed since the end of World War II, military and civilian publications by psychological officers now returned to civilian life reveal a

¹ I am informed that as early as 1929 the Stanford Achievement Test published probable errors of measurement as well as reliability coefficients; since 1935 every test published by World Book Company — by far the largest producer and distributor of mental-measurement material — has reported reliability coefficients and probable errors of measurement. Since their original publication in the early 1930's, the Cooperative Test Service tests have also reported reliability coefficients.

² I have in mind, for example, such publications as the *Research Reports of the Army Air Forces Aviation Psychology Program*. As I write, *Research Problems and Techniques, Report No. 3*, edited by Robert L. Thorndike (his father, Edward L. Thorndike, was chairman of the Committee on Personnel in the Army in World War I, and I had the good fortune to be associated with him). These *Reports* are being prepared under the direction of the very men who now are taking the lead in the critical discussion of mental measurements in the schools — Colonels J. C. Flanagan and J. P. Guilford, Lieutenant Colonels A. P. Horst and M. P. Crawford, and Major Robert L. Thorndike.

markedly high level of critical and technical competence in the design and construction of measuring instruments.

The Interrelationship of the Two Problems – Validity and Reliability

With this brief background in place we come to the fourth and fifth questions of design: How valid are our measuring instruments and how reliable are they? It is very evident that our measurers have learned to distinguish carefully between these two problems.

By validity is meant: What does the test measure? In the early years of measurement the usual way to express the question was: Does the test measure what it is "supposed" to measure? It was soon seen that the problem of validity was a problem in psychology, curriculum, and job and personal analysis, and even beyond these a problem in philosophy and logic. It was not primarily a problem in statistics.

By reliability is meant: Will repeated uses of the test be consistent? Will conclusions concerning the people tested be stable and consistent with repeated use of the test? In distinction from the problem of validity, these questions of reliability are dealt with definitely by statistical and experimental methods and are concerned much less with problems of psychology, curriculum, and philosophy.

SELECTED RECENT TECHNICAL SOURCES DEALING WITH PROBLEMS OF VALIDITY AND RELIABILITY

1. Cronbach, L. J.: "A Case Study of the Split-Half Reliability Coefficient," *Journal of Educational Psychology*, in press
2. Cronbach, L. J.: "On Estimates of Test Reliability," *Journal of Educational Psychology*, 1943, 34, 485-494
3. Cronbach, L. J.: "Test 'Reliability': Its Meaning and Determination," *Psychometrika*, Vol. 12, No. 1, March 1947, page 1
4. Guilford, J. P.: "New Standards for Test Evaluation," *Educational and Psychological Measurement*, Vol. 6, No. 4, Winter 1946, page 427
5. Guttman, L.: "A Basis for Analyzing Test-Retest Reliability," *Psychometrika*, 1945, 10, 255-282
6. Holzinger, K. J., and Harman, H.: "Factor Analysis." Chicago: University of Chicago Press, 1941
7. Jackson, R. W. B., and Ferguson, G. A.: "Studies on the Reliability of Tests." Toronto: *Department of Educational Research*, Bulletin No. 12, 1941
8. Jenkins, J. G.: "Validity for What?" *Journal Consulting Psychology*, 1946, 10, 93-98
9. Kelley, T. L.: "The Reliability Coefficient," *Psychometrika*, 1942, 7, 75-83

For fifteen years the technical literature has carried a vigorous debate on the interrelationships and relative importance of the problems of validity and reliability. One school of thought has insisted throughout that the validation of a test is prior, that it is by far the most important problem, and that its reliability has little or nothing to do with its validity.¹ The opposed school of thought—largely, I think, that of the educational statisticians and the textbook authors in measurement (about whom the practical workers seem to vent a good deal of spleen)—maintains that every bit of improvement in reliability makes a measuring instrument that much more valid. Obviously both validity and reliability are important, and each must be determined on its own criteria, even though they are interrelated at certain points. I am very much persuaded by the point of view represented by Guilford's recent statement that "validity will increase only when improved reliability means an increase in variance contributed by factors that the test has in common with the criterion." He gives an example—the use of an arithmetic test involving both reasoning and computation to be used in selecting a supervisor of clerks, reminding us that if we increase the reasoning factor variance we would improve the validity of the test for the job, and vice versa. "It is the amount of variance in valid factors in a test that counts." Denying the common view that "a test cannot be valid unless it has a sub-

¹ See references by J. P. Guilford in the accompanying list for a vigorous defense of this point of view.

SELECTED RECENT TECHNICAL SOURCES — *Continued*

10. Kelley, T. L.: *Talents and Tasks—Their Conjunction in a Democracy for Wholesome Living and National Defense*. Graduate School of Education, Harvard University
11. Kuder, G. F., and Richardson, M. W.: "The Theory of the Estimation of Test Reliability," *Psychometrika*, 1937, 2, 151–160
12. Lindquist, E. F.: *A First Course in Statistics*. Boston: Houghton Mifflin Company; 1942
13. London, I. D.: "Some Consequences for History and Psychology of Langmuir's Concept of Convergence and Divergence of Phenomena," *Psychological Review*, 1946, 53, 170–188
14. Remmers, H. H., and Whisler, L.: "Test Reliability as a Function of Method of Computation," *Journal of Educational Psychology*, 1938, 29, 81–82
15. Davis, Frederick B.: *Item-Analysis Data—Their Computation, Interpretation, and Use in Test Construction*. Graduate School of Education, Harvard University

stantial degree of reliability; and . . . that by increasing the reliability of a test we automatically increase its validity," he reminds us that such tests as biographical data or general information correlate near 0 against a job criterion; he adds: "under certain favorable conditions of selection, validities as low as .2 and even .1 may prove to be of practical utility"; vice versa, validities as high as .6 or .7 may not indicate real value in a test. The measuring men today warn that reliability and validity must be considered only in relation to the actual life conditions in which the tests are going to be used; if they are being used to select candidates for jobs, reliability and validity must be studied in relation to "(1) a job situation in which without the use of tests most applicants would fail, and (2) a labor market such that many applicants can be rejected."

With this brief reference to the problem of the interrelationship of validity and reliability, we turn to their separate consideration.

4. THE PROBLEM OF VALIDITY

What does the test measure? Two kinds of validity are involved: (1) practical validity, (2) factorial validity. The question of practical validity raises the crucial question: *What shall be the practical criterion of vocational or personal adjustment against which content of the test is selected and the items are designed and standardized?*

Practical Validity and the Problem of the Criterion

This has long been recognized as the prior question, and the war experience in the Aviation Psychological Program greatly clarified it. In all instruments used in vocational or personal prognosis, the test must predict performance in a specified life situation. Three kinds of criterion are recognized: (1) the ultimate criterion, (2) an intermediate criterion, (3) an immediate criterion, quickly at hand. For example, in picking pilots, navigators, or bombardiers in the AAF the ultimate criterion was actual performance under combat conditions. At first this was impossible to get, and so such intermediate and immediate criteria were taken as success in the preliminary training courses of the AAF.¹ Here the recommendation is "validation by in-

¹ See the report entitled *Stanines: Selection and Classification for Air Crew Duty*; reported by the Aviation Psychology Program, office of the Air Surgeon Headquarters, Army Air Forces. All skeptics about the predictive value of mental-

spection," devising a "job sample" test "that mimics fairly clearly the central task of a job or some crucial constituent part of a job. Such tests have a fair probability of being valid" for that particular intermediate criterion; for example, actual success in operating and navigating a plane and hitting a target.

Similarly for civilian and scholastic prognosis, the criterion in the case of a test for motorman is efficiency in running a car, for typists the number of words written accurately in a given unit of time, accuracy (and to a limited extent, speed) in specified types of arithmetical computation and problem solving, reading, etc.

In dealing with practical validity the test makers and critics have learned to distinguish between the precise clinical evaluation of the traits and aptitudes of a single individual and the administrative selection or classification of large groups of people. The former is the chief problem of the guidance officers in education, but the latter has become such a demanding problem that much of the energy of the mental measurers is going into the design and use of group tests. Guilford sums up the current view concerning the practical validation of group tests: "in the practical use of tests there can be no absolute standards for either reliability or validity. In this connection one must be a confirmed relativist."

Factorial Validity

Guilford's flat pronouncement can be taken to introduce the second kind of validity. More important than practical validity is "the factorial composition of the test. I predict a time when a test author will be expected to present information regarding the factor composition of his tests." The discussion of this point moves us into the study of one of the major psychological controversies of our times — the existence and role of general, group, and specific factors in mental abilities.

measuring instruments today should read this report. The AAF Qualifying Examination, a paper-and-pencil test, used with 1,000,000 young men, proved to be an excellent screen for predicting competence in the aviation services. In one experimental group of approximately 1000, of 405 who failed the examination, only 11 per cent were graduated; of 598 who passed it, 34.8 per cent were graduated from the primary training course. Aptitude scores called "Stanines" were plotted against actual successes of pilots, navigators, and bombardiers. Of 185,367 who went through primary pilot training, 96 per cent of those who had achieved Stanine 9 stayed through the course; only 23 per cent of Stanine 1 stayed, and the progression of percentages from Stanines 9 to 1 increased in a steady ratio.

The Controversy over General vs. Specific Traits

Throughout forty years of work the issue that brought about two scores of statistical studies of "formal discipline" also directly affected the design of prognosis tests. This was the deep-seated controversy over the role of general and specific traits. For forty years Charles Spearman, the English psychologist, defended the theory that a General Intelligence Factor which he called "g" dominated human behavior. Specific factors ("s") played a part in what he called his "two-factor" theory, but "g" was central in the human act.

Thorndike (as would be expected from our discussion of Chapter V) opposed this view, insisting on the uniqueness and specificness of behavior. His view can be best illustrated by his group test for intellect, called CAVD.¹

After the World War I experience the problem attracted distinguished statisticians and laboratory psychologists on both sides of the Atlantic, notably the Scottish Godfrey Thomson and the Americans Clark L. Hull, L. L. Thurstone, and Gordon Allport. From recurring experiments and studies these men, while denying Spearman's single "general factor," did show the operation of various "group" factors. Thomson, by means of clever experiments in probability statistics in dice throwing, showed that "hierarchies of correlation coefficients similar to those taken by Spearman as evidence for a general factor can be produced when a general or common factor is known not to be physically present." Hull approached the problem experimentally and statistically and showed the existence of "group factors" in the determination of aptitude. Hull concluded:

"a strict group factor theory of aptitude determination ... will permit of the possibility of finding tests which may correlate with

¹Thorndike measures intelligence with a fourfold set of tests which he calls CAVD: "(the symbol CAVD refers to the four series of tasks which constitute it — completions, arithmetical problems, vocabulary, and directions). The total series of tasks concerns four lines of ability:

C. To supply words so as to make a statement true and sensible.

A. To solve arithmetical problems.

V. To understand single words.

D. To understand connected discourse as in oral directions or paragraph reading.

"We shall sometimes use also Intellect CAVDI, which is constituted by including a fifth sort of task — to understand and answer questions which require information about such facts as are considered by the world today worthy of study in school and of record in encyclopedias; plus organization thereof and sagacious inference therefrom." — *The Measurement of Intelligence*, page 65.

aptitudes. But group factors possess the added theoretical advantage of the possibility that a test may correlate with one aptitude while not correlating at all with another. This is of great importance . . . the existence of group factors would permit the possibility of differentiating the potential aptitudes of an individual by means of tests.”¹

Further important data have been contributed to the issue of general and specific traits by the students of attitudes. Gordon Allport defends a “cluster or disposition” theory of attitudes, his investigations leading him to conclude that attitudes of radicalism and conservatism tend to function as general traits.² Vetter’s study, although not conclusive, gives some support to Allport’s position. Lundberg’s study throws some light on the interrelations of social attitudes but fails to show the persistent presence of chronic tendencies. Harper’s study of 2900 educators (sampled from each of the 48 states) shows that high liberalism scores are closely related to consistency of position, and vice versa. “Conservatism seems to be related with lack of experience with the problems in hand. Such lack of experience resulted in great inconsistency from one question to another. The relation was striking.” George’s evidence gives more support to the Allport view, showing a correlation of .55 between liberalism on domestic issues and liberalism on international issues. Various attempts have been made to discover the factors contributing to liberalism and conservatism by correlating scores on intelligence tests (such as Army Alpha) with scores on the Watson fairmindedness test, the Pressey X-O test for idiosyncrasy, and the George liberalism test. All the correlations are very low, occasional ones between intelligence and liberalism being as high as .3 to .4. Certainly we need much more investigation of this problem.

Allport’s, Lundberg’s, and George’s studies reveal an important search for the role of emotional characteristics in the psychology of liberalism, but the data seem too sparse as yet to draw clear conclusions. I am inclined to agree with the Murphys’ conclusion “that data so confusing as these fail to carry us very far.” The position at the present moment is far from clear. While Allport is inclined to view the radical and conservative positions as due to the operation of gen-

¹ Clark L. Hull: *Aptitude Testing*, pages 205–206.

² See his *Personality, A Psychological Interpretation*; especially his chapter on “The Functional Autonomy of Motives.” This book presents impressive evidence for the “disposition” theory.

eral traits, Gardner and Lois Murphy think that "to look for the general characteristics of a radical . . . seems therefore to us to be probably a wild-goose chase."

Out of the years of investigation and vigorous controversial discussion the views of the generalists and the specificists have come to stand much closer together. There is a fair consensus of agreement today against the operation of Spearman's single general factor, but in favor of the presence of group factors. Incidentally, the controversy has thrown light on the problem of aptitude levels, although this is still in the realm of hypothesis and debate.

/ / /

To return to the problem of factorial validity. After thirty years of the measuring movement the test makers and critics make that their crucial problem. Guilford's statement of position is perhaps the most recent:

"It is one of the definite convictions of the writer that factorial conceptions of tests give us the most illuminating and useful basis for drawing conclusions regarding the issues involved in test practice. This conviction goes so far as to maintain that the most meaningful, economical, and controllable type of test battery is one that is composed of factorially pure or unique tests."¹

As for the process itself, I quote a personal statement to me from one of the leaders in test making and criticism, Dr. Walter N. Durost:

"In the initial stages of the factor analysis study, tests are selected for inclusion in the program which have some face validity; i.e., tests which seem to measure aspects of mental ability which are worth further investigation. The subsequent statistical analysis of the intercorrelations of these measures determines those which go together and also determines the relative contribution of each test to the total variance. After the factor analysis has been completed, the tests which have been shown to measure aspects of the same ability are examined subjectively in an attempt to name the ability that has just been isolated. By using this approach, Dr. Thurstone has presumed to identify seven major aspects of mental ability which are relatively independent of each other. These seven aspects of mental ability, including such things as the verbal facility, number facility, spatial ability,

¹ J. P. Guilford: "New Standards for Test Evaluation," *Educational Psychological Measurement* (Winter, 1946), page 429.

memory, inductive reasoning, deductive reasoning, etc., could have been discovered independently of the individual group test of mental ability. They are in no way dependent upon the individual test for their validity.

"I do not feel that there is any consensus on the so-called primary mental abilities as outlined by Dr. Thurstone. Other investigators have located and identified different primary mental abilities, and not long ago Dr. John Flanagan made the statement that the Army Air Forces studies indicated that there were *many more relatively independent mental abilities than Thurstone's studies had indicated. He stated that the number might conceivably be as many as fifty.*¹

"It may appear that in taking this approach to the problem of validating intelligence tests, one must abandon the concept of a G or general factor of intelligence. Frankly, I am not sufficiently versed in this field to know whether this is true or not. However, the evidence would seem to be conclusive that if there is a G factor, it is not measured by the Stanford Revision of the Binet or any other similar composite individual test of mental ability."

Back of the factorial validity emphasis is the conception of human personality of "rich variability"—a complex of *many* group factors (perhaps fifty, as Flanagan says) integrated with an infinitely large number of specific abilities. The trend in viewpoint about the design and construction of the tests is that final group test batteries should be made up of as large a number of "pure," or unique, factors as can be shown to be involved in the "general ability" under measurement. This school of thought encourages the test designers to keep on adding tests to their batteries that have "unique validity variance" and "to increase the saturations of tests already in a battery with valid factor variances." Naturally one cannot succeed at this without scholarship and great patience in factor analysis. The recommendations that come out of the Army Air Force experience agree, urging that the test designers "seek a battery of maximally independent factorially pure tests, each with a unique contribution to make"; and the added caution that the intercorrelations should be as low as possible. "The best way to satisfy the aim of the multiple regression principles is to maximize the purity of each test and to maximize the saturation in its one factor. This should be accompanied by a factorial study of the job criterion in order to determine what factors should be covered and how important each one is."²

¹ My italics.

² *Op. cit.*, J. P. Guilford, page 436.

The Curriculum and the Content of the Test

Questions of validity of educational achievement tests raise a new problem — that of the curriculum. A valid spelling test must be constructed from a representative sample of the spelling curriculum; the content of arithmetic, reading, algebra, science, and other subject tests must be adequate samples of the respective courses of study. But the problem of determining the content of the curriculum must be sharply distinguished from that of determining the content of the test. The curriculum is determined by those professionally competent to do so, as we have indicated in Chapters XX-XXII. The test designer measures the results of using this curriculum; he is not a curriculum maker and should not be held responsible. It is of the greatest importance, however, that the mental measurers shall be alert to the slightest changes in the curriculum, and achievement tests must be continuously revised to keep pace with every step in curriculum development. The chief reason is the notorious habit of public school teachers of teaching the skills and kinds of information that they had been led to anticipate would be measured by the administrators.

In some instances, notably in spelling, reading, and arithmetic, during the period 1915-1925, the social use investigations of curriculum content were completed and discussed so promptly by the educational profession that the design of the new tests and workbooks was based upon the new content. This was particularly true in the case of spelling (witness the work of Horn), arithmetic, and reading (notably the work of Thorndike).¹ Thus in the case of the standard skills and of the biological and physical sciences one can conclude that the best current achievement tests are based generally on a sampling of content that has been validated by social and learning investigations.

But in the social sciences and in the creative arts the situation is otherwise. Here, as has been shown earlier in this book, the content lags far behind the changing society. Instruction in the social sciences both in the elementary and secondary school vastly ignored the tabooed areas to which I referred in Chapter XXI. Most of the tests in the

¹ His *Psychology of Arithmetic* and his *New Methods in Arithmetic* (1921) exerted a nation-wide influence almost immediately after publication in the early 1920's, and brought about a sharp revision of the arithmetic curriculum; see also the *Teacher's Word Book*. After its publication reading tests as well as other instructional materials involving reading were increasingly designed in terms of the frequency counts and word priorities reported from his investigations.

social studies cannot be regarded as adequate measures of the knowledge, understanding, and social attitudes that young Americans should have on leaving school.¹

When dealing with the processes of reasoning, problem solving, organizing people or material and the like in the social studies, the schools called progressive are much closer to the truth. Since this problem has been discussed in Chapter XVIII, I shall say no more about it here,² except to emphasize the point that to validate a test requires the most critical consideration of all of the foundations of education.

In the foregoing discussion of measurement in the field of expression, I have already dealt with the problem of validation.

5. THE PROBLEM OF RELIABILITY

The technical ideal of all persons concerned with measurement is the standard set by the physical scientist who has reduced his errors to a minimum. He measures the reliability of his observations by the mean of the squared deviations of the observations about the obtained mean. This is called the "error variance," and the mental measurers are ambitious to carry the concept over into their work. But psychological conditions differ sharply from those in physical measurement in two respects. The physicist assumes that the entity being measured does not change and that his measurements are independent, but the psychologist cannot make these two assumptions. He measures the performances of a human being, and they change from moment to moment. Moreover, his measurements are rarely ever independent; the act of measurement itself may change the entity being measured.

In the years before World War II, there was a tendency to assume that one absolute reliability coefficient could be found that would be characteristic of a given test; that high reliability was the only acceptable goal; "that a test cannot be valid unless it has a substantial degree of reliability"; and "that by increasing the reliability of a test we automatically increase its validity."

¹ I am proud to record that that was not true of the Workbooks Dr. Mendenhall and I designed to accompany the various volumes of *Man and His Changing Society*. (See Chapter XVII.)

² See Smith and Tyler: *Appraising and Recording Student Progress*, one of the five volumes of reports of the *Eight-Year Study*.

Thus reliability meant consistency — the “degree to which the test agreed with itself,” and that was determined statistically. Two or more forms of a test were given to the same large number of human beings at approximately the same time and the coefficient of correlation computed between the standings of the subjects on the two forms. This was the “coefficient of reliability”; if it stood near .90, the reliability was regarded as acceptable.

Reliability was also computed by (1) “Test-retest”: obtaining the correlation of standings on a form with a repetition of the same form at a later time; or (2) “split-half”: dividing the test into halves (even-numbered and odd-numbered items) and computing the correlation between standings on the two halves of the test. These methods of determining reliability were used and controversial discussion raged about them for years. Some defenders of the reliability of mental measurements insisted that they were as reliable as typical physical tests — for example, tests of blood pressure or metabolism of which the reliabilities range from 0.6 to 0.9. In the midst of the controversy Kelley¹ set minimum coefficients for the members of a single school grade and these were followed by many testers for some years:

“.50 for determining the status of a group in some subject or group of subjects.

“.90 for differentiating the achievement of a group in two or more scholastic lines.

“.94 for differentiating the status of individuals in the same subject or group of subjects.

“.98 for differentiating individuals in two or more scholastic lines.”

Out of the years of experiment, statistical development, and critical discussion a very different point of view is emerging today. The reliability of a mental-measuring instrument is a very complex concept, and no single coefficient will suffice. The tendency today is toward careful specification of the measurement assumptions, recognizing that these “lead to different types of coefficients, which are not estimates of each other.” As Cronbach says in a current article: the contemporary view is that

“an estimate of the stability of a test score is not at all the same as an estimate of the accuracy of measurement of behavior at any one instant . . . The measuring technique may be extremely accu-

¹Truman Lee Kelley: *Interpretation of Educational Measurements*, pages 28-29.

rate in reporting a biological instant in the life of an individual but not measure a stable characteristic of the individual."¹

Day-by-day variability in an individual's performance is also an important factor, and the test makers strove to get coefficients that will express the correlation between the same form of a test repeated after a specified period of time; this is especially important in the measurement of the stability of interests and other personality traits. I am reminded also that such a coefficient can be compared with the split-half reliability coefficient in which the day-by-day variability is absent.

Ten years ago Messrs. Kuder and Richardson started a new phase of criticism of the reliability of mental measurement with their "Theory of the Estimation of Test Reliability"² and proposed new alternative formulas to be used in computing reliability coefficients. At first there was a tendency to adopt them, but in the past few years a more cautious attitude has developed. The work of Guttman followed, calling in question the long-standing Spearman-Brown formula and proposing that his own replace it. Jackson and Ferguson argued for the greater detailed specification of reliability coefficients and defined reliability by means of a coefficient of equivalence. The war experience led the measurers greatly to revise the Kelley pronouncement. Guilford³ reported that 74 of the AAF selection and classification tests showed a mean reliability of .8, and they ranged from .1 to .97; "many a test whose reliability was below .8 was useful in a battery or could be useful." He gives three dramatic instances:

"One test on judgments of lengths of lines, a very short test, had a reliability of .25 and a validity for pilot selection of .23. This validity represented an almost unique contribution. A biographical-data test, scored for navigator selection, had a reliability of .35 and a validity of .23, much of which was a unique contribution. A 15-item test of practical judgment had a reliability of .36 and a validity for pilot selection of .36. All of these statistics were based upon large samples and so are rather stable. In order to achieve a reliability of .94, according to the Spearman-Brown principle, the judgment test would have to be lengthened to include about 400 items and would require about seven hours testing time."

¹ Lee J. Cronbach: "Test 'Reliability': Its Meaning and Determination," *Psychometrika*, Volume 12, No. 1, March, 1947.

² *Psychometrika*, 1937, 2, pages 151-160.

³ *Ibid.*, page 430.

As I write, Cronbach, in a current article in *Psychometrika*,¹ sums up the present trend of thought. Building on the work of the past ten years, he presents a summary of statistical equations and formulae from which a critical determination of "error variance" of psychological measurements may be made and arrives at four distinct formulae and coefficients which he says should take the place of the former crude "coefficient of reliability."

- The coefficient of stability - "the degree to which the test score indicates unchanging individual differences in any traits."
- The coefficient of stability and equivalence - "the degree to which the test score indicates unchanging individual differences in the general and group factors defined by the test."
- The coefficient of equivalence - "the degree to which the test score indicates the status of the individual at the present instant in the general and group factors defined by the test."
- Hypothetical self-correlation - "the degree to which the test score indicates individual differences in any traits at the present moment."

6. TWO EARLY MEASURES OF BEHAVIOR:

(a) MATURITY . . . (b) RATE OF GROWTH

The first attempts to measure human intellect led to the widespread use of two concepts and measures:

- The Age Index, as a measure of the *maturity* of the individual.
- The Quotient, as a measure of his rate of growth.

These two original ideas and methods of measurement were the work of the makers of intelligence scales, but conclusions about them applied equally to achievement measures.

a. *Maturity as Measured by Mental "Age"*

For some years educationalists attempted to describe the status of a child by quantitative measures of several kinds of age:

- Chronological Age (CA), the number of years lived - the base of all the others.
- Mental Age (MA), scaled and labeled in terms of level of difficulty of tasks successfully performed by 50 to 75 per cent of persons of a given chronological age.
- Physiological Age (PA), scaled by objective physiological measurements - bone ossification, etc.

¹ March, 1947.

FIFTY YEARS OF SCIENTIFIC METHOD

- Educational Age (EA), determined by rank-order standing on various scales and tests of educational achievement; it is the age for which a given score on a composite measure of educational achievement or “on a test of a given subject” is the average.
- Sometimes broken down into Reading Age, Arithmetic Age, Language Age, etc.
- There is a tendency today to avoid composite achievement ages and to employ “subject ages.”¹

The Base in the determination of each of these kinds of age was Chronological Age. Binet and Simon used it in standardizing their intelligence scale. They asked: How does the mental behavior of any individual compare with that of a random sampling of human beings of the same chronological ages? The criterion was the facts known and tasks that can be managed by 50 per cent of the sample of a given age that were tested. For the ten-year-olds a mental age of 10 means that the sum of the individual's successes equals the median score of a representative sample of children chronologically ten years old. Mental Age is, in Terman's words, the age “possessed by the average child of corresponding chronological age”; as a measure of mental maturity it “indicates the level of development which a child has reached at a given time.” Like all the others, it is a rank-order concept. The maturity of any child is determined by comparing his performances with those of a sample of his age-population. The basic population groups used in the standardization of the tests must be random, and statistically significant, samplings of the whole population with which comparisons are to be made.

A quarter-century of use and revision of the intelligence scales has produced scoring techniques by which successes on single items of the test add a given number of months of age. Thus, on the Stanford-Binet, a child has a Mental Age of ten if the total score from all of the items successfully passed on the test equals one hundred and twenty months; a total score of one hundred and twenty-eight months gives a Mental Age of 10 years–8 months. Experience with the test has revealed wide individual differences in specific abilities in any age group; for example, with the ten-year-olds, successes on the separate items scat-

¹ Note also that the concept of “ageness” is not useful beyond the point where growth becomes negligible. Hence, as Dr. Durost reminds me, “the age dimension becomes only a convenient index for locating a score, preferably a scaled or standard score, from which the deviation of the individual can be determined.”

ter from the seventh to the twelfth grades inclusive. The Mental Age of the child, therefore, is determined by the sum of the months of credit obtained by successfully passing items on any year of the test.

b. The Quotient — a Measure of Rate of Growth, or "Brightness"

No psychological concept has proved to be of more critical value in educational reconstruction from infancy to post-adolescence than that of *growth*. The pioneers in mental measurement — notably Alfred Binet and Lewis Terman — saw its importance and devised the first crude measure of it. This was The Quotient:

- in the case of intelligence, the Intelligence Quotient (IQ)
- in the case of educational growth, the Educational Quotient (EQ)
- in growth in attainment or achievement, the Achievement Quotient (AQ)
- similarly other quotients to measure rate of growths in any trait

These were computed by dividing the appropriate age measure by the chronological age. Thus the IQ equals the MA divided by the CA (times 100); the EQ equals the EA divided by CA, etc. Here is a simple and apparently effective measure. IQ, being the measure of the rate of growth, is called also a measure of "Brightness." Rapidly maturing individuals are bright; slowly maturing individuals are dull. Another advantage of using the quotient as a measure of rate of growth in a given trait is that it enables us to compare individuals of the same IQ's in rates of educational growth. Achievement scores can be compared with mental-level scores.

What Does a Stanford-Binet IQ Mean?

What is the significance of any given Stanford-Binet IQ?¹ A child whose chronological age is ten has a mental age of ten; his IQ is 100. Another ten-year-old child has a mental age of 15; his IQ is 150. A third has a mental age of seven years and six months — his IQ is 75. What do these numbers mean?

¹ Note particularly that one cannot speak of an IQ in the abstract; one should always report the name of the test — as, Stanford-Binet IQ, Otis IQ, Terman-McNemar IQ, etc. As Dr. Durost reminds me, the factorial compositions of the tests of different authors are not the same, the mechanics of standardizing the tests are not the same, giving different standard deviations.

FIFTY YEARS OF SCIENTIFIC METHOD

The mental measurers have resorted to the rank-order method again, arbitrarily calling the average IQ of a large sampling of young people, 100. Thus the IQ's of half of the children, or adults, or of any group measured are smaller than 100 and half of them are larger than 100. An IQ of 100 means, then, let us say, "average intelligence." As an absolute measure an IQ of 150, or of any other amount, means nothing; to determine its relative meaning we arbitrarily attach descriptive terms to the whole scale of IQ's from zero to 200. This has been done, and with a good deal of statistical competence and investigational evidence. The logic and statistical method are quickly summed up:

First: From a century of measurement of anthropometrical and other human traits (since the publication of Quételet's *L'Homme Moyen*) scientific workers have assumed that the distribution of human traits fits the normal probability curve closely enough for practical purposes. Karl Pearson and later biometricians and statisticians have made probability tables available to students of mental measurement.

Second: The area between the normal probability distribution and its base line is assumed to be equal to the distribution of the traits of human beings who have been reliably measured.

Third: The base line of the normal probability curve is assumed to represent the scale under design — intelligence, reading difficulty, or whatever.

Fourth: Any given test item can be assigned to a point on this scale (thereby given a numerical value) by making the percentage of the pupils who passed it equal to the area included between the zero point over to the ordinate erected at that point on the scale; 0 is set arbitrarily, generally either at 2.5 or 3.0 sigma.

There is, therefore, no mystery about the "normality" of the distribution of human traits or of its nearly symmetrical nature. The statistical methods and assumptions employed make this form of curve inevitable. Following Binet, Terman and Merrill in the latest revision (1937) of the Stanford-Binet scale and other scale makers set the average IQ of the American children at 100 and distributed the scores on a normal curve.

To give practical social meaning to these numbers, psychologists have arbitrarily assigned descriptive terms to various levels of IQ, from

"feeble-mindedness" to "genius." Although much discussion of this labeling of grades of intelligence has taken place, we are far from an interpretative consensus.

7. THE RATIO IQ VS. THE DEVIATION IQ

The crudity of measurement in the early years is illustrated by the fact that total raw scores were first used to interpret test results. The devising of the Mental Age and the IQ marked a step in advance, but only a limited one. A quarter-century later the disadvantages of both were very evident. Mental Age was applicable only over a very short range of ages, and values above and below the age range had to be determined by the arbitrary extension of the line of relation between test score and age. In most cases adequate data were not available to estimate the average scores of extreme high and low ages, and for the majority of these extreme scores on the tests mental ages were assigned by extrapolation.¹ Moreover, the units of various parts of the scale measured by Mental Ages are not comparable; we still lack information concerning the shape of the growth curve during adolescent and post-adolescent ages.

The ratio IQ also has marked disadvantages. Controversy has raged for a generation over the constancy of the IQ, but it is clear that it can remain constant only under conditions which rarely obtain in practice. Mental power does not increase at a constant rate with chronological age; human beings mature between sixteen and twenty years of age mentally as they do physically. Moreover, IQ's vary from one test to another as the content varies; those obtained from different tests are not comparable unless the correlation of the scores with chronological ages is the same. Actually the correlation of test score with chronological age differs from one test to another.

Years ago Dr. Arthur S. Otis perceived the defects in the ratio IQ as a measure of brightness. During his years as Director of Research and Test Service at World Book Company he replaced it with the deviation IQ. As a consequence this publication agency has gone to the extreme length of recommending four different ways of interpreting the scores on their group tests of mental ability.² These are:

¹ I have been greatly aided in this discussion by the Division of Research and Test Service, World Book Company; Dr. Walter N. Durost, Director.

² The Terman-McNemar test (the revision of the former Terman Group Test of Mental Ability).

1. Normalized standard scores
2. Mental ages
3. Deviation IQ's (which they recommend in place of ratio IQ's)
4. Percentile ranks corresponding to deviation IQ's

To understand the importance of this problem and of the use of deviation IQ's instead of ratio IQ's, first, a brief reference to the Standard Score Scale. This illustrates the great gains that have been made in the competence of mental measurement. All raw scores are transmuted around a single¹ origin into the standard deviation of the scores of the origin group. Thus on the standard score scale units are comparable throughout all regions of the scale.

The term "deviation IQ" arises from the technique of computing it — namely, the "difference between the obtained standard score and the average standard score of other individuals of the same age." IQ's and the Normalized Standard Scores are both distributed normally and for ages 13, 14, and 15; the relation between IQ and standard score is on a 1 to 1 basis. Thus the IQ for any individual between the ages of 13-0 and 15-11 can be found by adding or subtracting his deviation-of-score-from-the-norm to or from 100.

The Deviation IQ is now used as the Index of Brightness in the measurement of millions of American children each year.² It is to be hoped, therefore, that there will be an increasing amount of consideration of the deviation IQ as a measure of brightness. It assumes that brightness is normally distributed in any large unselected population, and has been shown to have a large measure of constancy.

/ / /

Other Scores

Dr. Otis's contribution was also revealed in his early use of the percentile score. This gives, as the name suggests, the percentage of

¹ The origin in the case of the Terman-McNemar is the median of the fourteen-year age group of the national population on which the test was standardized; the basic unit of the scale is the standard deviation of the scores of the fourteen-year age group.

² Those who take such tests as the Terman Group Test or the Terman-McNemar Test of Mental Ability agree with the sentiment expressed in a personal communication from Dr. Walter N. Durost concerning this problem: "Unfortunately the deviation IQ and its advantages have not received the wider publicity which they deserve . . . possibly two thirds of all the group tests of intelligence now being used in the public schools of America involved the computation of deviation IQ's."

individuals in the total population whose scores fall below the score of the individual in question. A percentile score of 90 means that only 10 per cent of the population make a higher score, 1 of 20 means that 80 per cent make a higher score.

Another "derived score" is the Heinis Personal Constant (PC). In his Instruction Manual for the Kuhlmann-Anderson Intelligence Test (1933), Kuhlmann recommends the Heinis Personal Constant instead of the ratio IQ. Some comparative work which has been done on the Heinis PC shows that it is more constant at some levels of IQ and less constant at others. Much more work needs to be done in this field before clear-cut conclusions and recommendations for practice can be drawn.

/ / /

This must constitute our review of problems of design which have confronted our students of mental measurement.

We turn now to an appraisal of the four chief types of measurement: personality, aptitudes, attitudes, and achievement. We shall consider them in that order.

SELECTED SOURCES

- On Measuring the Whole Person . . . Personality
See bibliography in Chapter VI
- On the Rorschach Technique
Klopfer, Bruno, and Kelley, Douglas McG.: *The Rorschach Technique (With 1946 Supplement)*
- On Analyzing Personality
Allport, G. W.: *Personality, A Psychological Interpretation*
Symonds, Percival: *Diagnosing Personality and Conduct*
- On Aptitude Testing
Hull, Clark L.: *Aptitude Testing*
- On Measuring the Raw Materials of Personality
Allport, G. W.: *Personality, A Psychological Interpretation*
Cannon, Walter B.: *The Wisdom of the Body*
Bodily Changes in Pain, Hunger, Fear and Rage (1920 Edition)
- Freeman, Frank N.: *Mental Tests: Their History, Principles and Applications*
- Hoskins, R. G.: *Endocrinology: The Glands and Their Functions* (a newer and reconstructed book based on his earlier *The Tides of Life*)
- Hull, Clark L.: *Aptitude Testing*, Chapter IV
- Kretschmer, E.: *Physique and Character*
- Sheldon, W. H.; Stevens, S. S.; and Tucker, W. B.: *The Varieties of Human Physique*

I. THE MEASUREMENT OF PERSONALITY

The chart on pages 747-749 is an impressive record; certainly the scientific students of man and his behavior have been very, very busy during the last fifty years. Every phase of man's nature and activity has been studied with the aid of measuring instruments — the whole Person, personality and its raw materials, character, aptitudes, achievement, sensory, motor and mental efficiency, the teacher and his efficiency, the whole school. The quantitative output is astounding. We have no complete statistical record of the scales and tests published or the number still in use, but the partial record runs into astronomical figures. Oscar Buros's 1938 *Mental Measurements Yearbook* lists 1181 instruments of mental-measurement scales, tests, questionnaires, personal history records, rating scales, score cards, and other objective instruments which were available that year, and 814 books, monographs, and bulletins dealing with the movement. The bibliography of Rorschach technique in 1946 numbered 642 items. Ross, in his *Measurement for Today's Schools*, lists 573 authors dealing with problems of educational measurement. Certainly the American consumption of quantity is vividly reflected in this statistical record.

SELECTED SOURCES — *Continued*

- Sheldon, W. H., and Stevens, S. S.: *The Varieties of Temperament*
 Terman, L. M., and Merrill, Maud A.: *Measuring Intelligence*
 Thorndike, E. L.: *The Measurement of Intelligence*
- On Educational Measurements
- Buros, O. K.: *The First 1938 Mental Measurements Yearbook* (1938)
The Second Mental Measurements Yearbook (1940)
 Hawkes, H. E.; Lindquist, E. F.; and Mann, C. R.: *The Construction and Use of Achievement Examinations* (1936)
 Odell, C. W.: *Traditional Examinations and New-Type Tests* (1928)
 Orleans, Jacob S.: *Measurement in Education* (1937)
 Ross, C. C.: *Measurement in Today's Schools* (1941)
 Smith, E. R., and Tyler, Ralph W.: *Appraising and Recording Student Progress* (1942)
 Tieg, E. W.: *Tests and Measurements in the Improvement of Learning* (1939)
 Tyler, Ralph W.: *Constructing Achievement Tests* (1934)
 Kelley, T. L.: *The Interpretation of Educational Measurements*
- On the Measurement of Teaching Efficiency
- Walker, Helen M. (Editor): *The Measurement of Teaching Efficiency* (1935)

The Goal: The Person . . . Personality . . . Character

I have designed the chart to give special emphasis to the current concern of the students in the whole Person. The trends launched by the Freudians fifty years ago, and ignored or denied by the mechanists for three decades, have become dominant today with a tremendous interest in the measurement of personality and character. The study of the Whole-Person-in-action has produced an impressive body of "standardized interviews," questionnaires, interest and attitude inventories and personal history records; to name only a few typical instruments — the Hildreth, Thomson, Terman-Miles, Woodworth, Mathews, Cady, Marston, and the work of the Nebraska group, the Character Research Institute and the Psychological Corporation. This whole trend, particularly the impetus given by the P.E.A.'s Eight-Year Study, has already led to the growing practice of individual cumulative personnel records which start with the pupil as he enters school and accompany him on his educational career through school and college.

Gordon Allport's summary chart¹ of 52 separate methods of building up an understanding of personality makes that very clear; there are no less than 14 major methods now in systematic use:

- | | |
|--------------------------------|------------------------------|
| 1. Studies of Cultural Setting | 8. Statistical Analysis |
| 2. Physical Records | 9. Miniature Life-situations |
| 3. Social Records | 10. Laboratory Experiments |
| 4. Personal Records | 11. Prediction |
| 5. Expressive Movement | 12. Depth-analysis |
| 6. Ratings | 13. Ideal Types |
| 7. Standardized Tests | 14. Synthetic Methods |

Most of these 52 methods are "segmental, dealing with one approach and one phase of personality," and do result in greater accuracy and reliability of description and interpretation. But those that center on the whole person — such as the "complete psychological interview," the case study and the life history — seem to me to be equally important. Certainly they provide a much better view of the total personality and a more adequate measure of what the individual can be expected to do as he confronts actual life situations.²

¹ In his *Personality*.

² My inclination is to urge the student to study very carefully the treatments of this problem by such workers as Allport, the Murphys, and G. B. Watson, such Rorschach workers as Klopfer, and the leaders of the Progressive Education Association's Eight-Year Study.

The Rorschach Method of Evaluating Personality

One of these more over-all methods is the Rorschach technique, now coming into wide use in psychiatry. It has grown in recent years from the small beginnings left by Hermann Rorschach in 1922, when he died at the age of thirty-seven, to the point of having its own organized Research Exchange and Journal. Rorschach left behind him only one small publication, the monograph entitled *Psychodiagnostik*. Although he regarded it only as a preliminary report, his followers claim for him "the sound empirical realism of a clinician with the speculative acumen of an intuitive thinker."¹

The primary aim of the Rorschach method is to throw light on the individual's "personality structure." This it does by recording and scoring the subject's reactions to ten ink-blot pictures printed on cards, five in color.² Although many students of psychology have sought to throw light on the "personality structure," most of the personality concepts have been founded on such traits as aggression-submission or optimism-pessimism. In contrast, Rorschach workers insist that such concepts are handled more effectively by the ink-blot technique. S. J. Beck points out that four factors of personality may be studied with it: form perception, organizing energy, affective drive, and creative activity. Klopfer and Kelley point to three structural aspects of personality:

- control — including the degree and the method of control exercised over spontaneous impulses by the subject.
- adjustment and maturity — the method centering "on the extent to which the subject seems to follow his natural inclinations, to possess tendencies to run away from himself, to fear his imagination, to shy away from his own ideas, to fear contact

¹ The authoritative source to which educationalists should turn is Bruno Klopfer and Douglas McGlashan Kelley: *The Rorschach Technique (With 1946 Supplement)*. Yonkers: World Book Company (1942, 1946). 487 pages. This book (together with its 1946 Supplement) lists a bibliography of 642 items.

² In 1857 a German by the name of Justinus Kerner described the first known use of ink blots in a monograph called *Kleksographien*. In the ninety years since that time public imagination and businessmen created on both sides of the Atlantic a succession of "blotto" fads. From time to time research students turned to the ink blots as material for the study of personality traits; witness Alfred Binet's use of them in 1895 and the publication of the first standard series by G. M. Whipple in 1910 in Chapter XI, Test 45, of his *Manual of Mental and Physical Tests*, pages 430-435.

with the outside world, or to display other signs of insecurity or anxiety."

— *Erlebnistyp* — the extent to which a subject is responsive to promptings from within or from without, the introversion-extroversion problem.

Thus the Rorschach technique provides a systematic set of (1) cues to the balanced personality structure and (2) symptoms of maladjustment and inadequate control. While the test reveals quantitative estimates of the general intellectual level, it qualitatively describes the subject's ability to choose and invent and this is interpreted by the Rorschach workers "as a reflection of the way in which he typically approaches everyday problems."

The psychoanalysts and psychiatrists have made use of the Rorschach method, and some of them regard it highly; witness Dr. Nolan D. C. Lewis, Director of the New York State Psychiatric Institute:

"The Rorschach method is remarkably effective in estimating the intellectual status of an individual; in revealing the richness or poverty of his psychic experience; in making known his present mood; and in showing the extent of his intuitive ability as well as in disclosing special talents and aptitudes.

"In psychiatry, the validity of the method as a diagnostic instrument has been established. It points the way to new understanding of mental disorders, and it has gained a reputation for its service in identifying borderline cases and in differentiating among psychoses, neuroses, and organic brain disorders."¹

The Rorschach technique was received with great skepticism by the academic psychologists, most of whom, indeed, have been skeptical of all novel approaches in our time. In recent years, through the work of such students as Drs. Klopfer and Davidson, new methods of "form-level rating" give more precise estimates of intellectual efficiency and of such form-qualities as accuracy, specification, and organization. Nevertheless, heed should be given to Gordon Allport's warning against the "one-sided and exaggerated claims" of all such tests. No one is the last word; "for some problems one method of attack is best, for others different methods."

¹ *Ibid.*, pages ix-x.

MEASURING THE RAW MATERIALS OF PERSONALITY

Gathering up our earlier discussions, it is evident that the half-century of research by the physiologists, the endocrinologists, and the "constitutional" psychologists is giving us a new evaluation of the relative roles of the three chief raw materials of personality — physique, temperament, and intelligence. As has been stressed in Chapter VI, most of the conventional psychologists — including the Dewey-pragmatic group — play up the role of intelligence in impelling and guiding human behavior. *The contributions of the physiologists and the new Sheldon "constitutional" psychologists confirm my emphasis on feeling via body-response as prior to intelligence.* They say emphatically that the factors of physique and temperament outweigh intelligence, a finding that will be vigorously denied by conventional psychologists and educators. Hoskins sums up the physiologists' position today:

"From the point of view of the biologist, the intelligence is mostly a device to secure for the individual maximal gratification of his instincts. In everyday use its chief function is to rationalize the things that we do because we instinctively want to do them . . . However important the intelligence may be as a factor in personality, it is determined in part by endocrine factors. . . .

"More important in the determination of the personality are the *instincts* and the *emotions*. The instincts may be roughly defined as the behavior trends that are determined by the constitutional make-up. The emotions represent the way the instincts-in-operation feel to the individual who has them. . . . The instinctual trends are determined in considerable measure by the hormones."¹

No member of the Dewey-pragmatic group would agree today that the chief function of the intelligence is "to rationalize the things that we do because we instinctively want to do them"; but I am convinced that the educational psychologists must listen carefully to the evidence that lies behind these generalizations. Clear it is that between the rival claims of physiologists and psychologist-philosophers of education, the educator today must tread a wary path. The cumulative evidence of two generations of research warns us that we must temper the philosophers' allegiance to the intelligence with the physiologists' data on the primary role of the "instinctual and emotional forces," and

¹ Hoskins, R. G.: *Endocrinology: The Glands and Their Functions*, page 388. New York: W. W. Norton & Co., Inc. (1941).

their conclusion that behavior trends appear to be "determined in considerable measure by the hormones."

An Emerging "Constitutional" Psychology

One of the most important research outcomes of recent years is the emergence of the faint outlines of a new "constitutional" psychology from the joint work of physiologists, endocrinologists, and psychologists. In this Dr. William H. Sheldon and his collaborators — Drs. S. S. Stevens and W. B. Tucker — of the Harvard group have led the way. They have built on the endocrinological pioneering of Dr. Walter B. Cannon and the most recent researches and interpretations of such workers as Dr. R. G. Hoskins. The new development is a personality psychology, Sheldon using the term "constitution" to refer to

"the whole pattern of elemental determinative or individualizing characteristics which lie behind personality . . . those aspects of the individual which are relatively more fixed and unchanging — morphology, physiology, endocrine function, etc. — and may be contrasted with those aspects which are relatively more labile and susceptible to modification by environmental pressures, i.e., habits, social attitudes, education, etc."¹

I. MEASURING PHYSIQUE

In a dozen years of research Dr. Sheldon and his associates have laid the groundwork for their "constitutional" foundation of our psychology by successfully identifying and measuring "the elementary or primary components of human variation." Their basic hypothesis is that personality is "*the product of the play of a complex pattern of environmental pressures upon a living organism that carries an innately determined constitutional patterning.*" By exact anthropometric measurements on 4000 photographs of men of college age — with a consequent discrimination of 76 different somatotypes — Dr. Sheldon has isolated and defined 18 anthropometric indices of physique and indices of 22 temperamental traits. With respect to physiques the studies have located three basic aspects of body morphology; three components of structure:

¹ Compare the findings on "constitutional" psychology with the similar point made in Chapter VII, discussing the relative roles of intuition, the primal awareness of the organism as a whole, with the intellectual documentation of the reports of the senses. The physiologists' evidence seems to me to support my data assembled in Chapter VII from the artists, philosophers, and scientists.

FIFTY YEARS OF SCIENTIFIC METHOD

- Endomorphy — relative predominance of soft roundness of body
- Mesomorphy — relative predominance of muscle, bone, and connective tissue
- Ectomorphy — relative predominance of linearity and fragility

A component of structure is "something which enters in different amounts into the making of a body." Sheldon concludes that the researches are cumulatively establishing "a clear relation between physique and behavior, and between organic constitution and the mental outlook."¹

2. MEASURING TEMPERAMENT

Paralleling the studies of physique were similar investigations of variations in temperament and the relations between constitutional and psychological patterns of behavior. The study of the anatomy and morphology of the individual and his behavior and the chemistry and physics of the body — nervous mechanisms, endocrine secretions, visceral reactions — are extended into the major problem of psychological motivation or temperament. On this level also the Sheldon group located three components of behavior by standardizing the descriptions of 60 temperamental traits; these were sifted from an original list of 650:

- Viscerotonica — characterized by general relaxation, love of comfort, sociability, conviviality, gluttony for food, for people, and for affection

¹ SHELDON'S THREE ORIGINAL CLUSTERS OF TRAITS

GROUP I	GROUP II	GROUP III
V-1 Relaxation	S-1 Assertive Posture	C-1 Restraint in Posture
V-2 Love of Comfort	S-3 Energetic Characteristics	C-3 Overly Fast Reactions
V-6 Pleasure in Digestion	S-4 Need of Exercise	C-8 Sociophobia
V-10 Greed for Affection and Approval	S-7 Directness of Manner	C-9 Inhibited Social Address
V-15 Deep Sleep	S-13 Unrestrained Voice	C-10 Resistance to Habit
V-19 Need of People When Troubled	S-16 Overmaturity of Appearance	C-13 Vocal Restraint
	S-19 Need of Action When Troubled	C-15 Poor Sleep Habits
		C-16 Youthful Intentness
		C-19 Need of Solitude When Troubled

THE EDUCATIONAL FRONTIER: 1890's-1940's

- Somatotonia - a predominance of muscular activity and vigorous bodily assertiveness
- Cerebrotonia - a predominance of restraint, inhibition, and the desire for concealing them

An elaborate statistical analysis revealed three distinct clusters of traits that showed consistently positive intercorrelations among themselves.

The Endocrine Glands and Somatico-Behavior Types

Meanwhile, on both sides of the Atlantic, other lines of research on physique and temperament and their relations to behavior were developed. Conspicuous among the European contributions was Ernst Kretschmer's isolation of three physical types - the asthenic, the athletic, and the pyknic - and his establishment of their definite relationship to mental and emotional behavior. In American centers, such as Clark Hull's psychological laboratory at the University of Wisconsin, the relation between physical and temperamental factors was cumulatively investigated. One result was the clearing away of ancient myths concerning the prediction of character traits from physiognomy and phrenology. Studies by such workers as Cogan, McCabe, Anderson, Patterson, Ludgate, Kenagy, and Evans on prediction of academic aptitude are summed up by Hull:

- "the results ... certainly look very bad for the judgment of character on the basis of photographs"
- studies of face-to-face judges of character when not based on extended acquaintance are shown to be almost valueless
- studies of convexity and concavity of face and dimensions of the head show little or no predictive value for character traits ...
- studies of hand-reading (chirognomy) and aptitude show almost no power of prediction ... the relationship between hand-writing and aptitude is zero
- there still is some presumption that certain head dimensions "when combined with other indicators of aptitude, such as samples of test behavior," may make contributions to aptitude prediction
- physiological and biochemical investigations of the urine have established "a negative relationship between social aggressiveness and leadership ... and acidity in the urine." ... "a definitely lethargic type of behavior shows a great overload of carbon dioxide in the blood"; but blood redness "is of no value as a sign of academic aptitude."

— Other studies have shown “that high heart rate and blood pressure may have considerable influence upon test performance.” Hull concludes: “it would not be surprising that aptitude tests of the future should include pulse rate and blood pressure as regular components.”

This brief reference to such studies of physique and behavior is intended merely to direct attention to the growing emphasis of researchers on the total personality traits of character. The studies of the raw materials of personality have served to emphasize greatly for students of education its organic, constitutional basis.

Moreover, impressive though they are, the studies of the constitutional foundations have been lost sight of largely because of the almost total absorption of research psychology in the measurement of the other raw material — intelligence.

3. MEASURING INTELLIGENCE, THE THIRD RAW MATERIAL OF PERSONALITY

That most attention has been given to the measurement of abstract, or verbal, intelligence does not astonish the students of the past sixty years of psychological thought. Although Peirce and James put the concept of intellect, “the problem,” problem-solving thinking, in a secondary place, it was the center of interest to the research leaders — Dewey, the Gestaltists, and most educational progressives, even Thorndike. Once the scientific approach was adopted, it was in the cards that the intelligence would be a focus of measurement research. The “intelligence” of millions of human beings has been “measured” in the past forty years, and millions of words have been written about it. Quantitatively reviewed, the record is inspiring.¹

Out of the massive contribution two types of scale have emerged:

— *The Individual Scale*

This is best typified by the revised Stanford-Binet (1937); a revision of the Stanford-Binet Scale of 1916. Other examples are: the Kuhlmann-Anderson Series, the Minnesota Pre-School Scale, the Detroit Tests of Learning Aptitude (age 4 through adulthood; 1935–1936) and the studies of David Wechsler.

¹ This discussion of intelligence measurement refers to abstract or verbal intelligence, not to such other types of the Thorndike triad as mechanical or social intelligence.

THE EDUCATIONAL FRONTIER: 1890's-1940's

- The Group Scale: For example –
 - The Thorndike Scale for Intellect CAVD
 - The Terman Group Test of Mental Ability
 - The American Council on Education Psychological Examinations (one for high school students, another for college freshmen, 1937)
 - The Kuhlmann-Anderson tests (Grades 1-12)

Since individual intelligence-scale building has been most profoundly influenced by the Binet-Simon scale, I shall refer to it as the basic example.

The Binet Verbal Intelligence Test

It is forty years since Alfred Binet, French psychologist of the 1890's and early 1900's, worked in schools and hospitals, and – in collaboration with a physician named Simon – produced the first intelligence scale. The Binet-Simon Scale appeared in three French editions – 1905, 1908, 1911 – and, in the next generation, in five American revisions:

- Terman's Stanford Revision, 1916
- Herring's Revision, 1922
- Kuhlmann's Revision, 1922
- The Stanford Revision, 1937
- Kuhlmann's Revision, 1939

The scale was constructed as a result of a commission from the Parisian school officials to devise a method for rating school children from which their success or failure could be predicted. Apparently Binet and Simon agreed with Thorndike's later dictum that "all the measurements of intellect are inventories," for the scale was a compendium of such varied kinds of content as:

- information, such as identifying, naming, and describing familiar parts of the everyday environment
- linguistic knowledge, such as defining and using words and sentences
- following directions
- knowledge of numbers and other material, counting and using money, etc.
- the informational material so organized as to measure judgment, reasoning, seeing relations, problem solving

By the middle 1920's the Terman-Stanford Binet was being widely

used in the schools of America and psychologists were locked in another phase of the nature-nurture controversy, now complicated by the unknown factor of the unreliability of the scale itself. When I went to the Lincoln School of Teachers College in 1920, as Educational Psychologist and Director of Research, I personally tested every child in the school with the Stanford-Binet (1916). In 1922 Miss Colloton and I reported our own study of the "Constancy of the IQ" and interpreted all the other published ones. Our general conclusion was that a tendency exists for the IQ to rise on second and later retests. The average increase was 6 points; one child in 20 showed an increase of about 10 points, only rarely an increase of 15 to 20 points. I find that the literature on the constancy of the IQ of the next twenty years did not change that conclusion materially. But the moot question of 1922 — How much of what is measured was Nature and how much was Nurture? — has not been quantitatively answered. The general tenor of opinion from the Nature-Nurture debate was stated in Chapter VI. As to how much of the change in IQ, on retest, is due to unreliability of the test we do not know. As to just *what* the Scale measures, a trend of judgment appears to agree on scholastic and other similar aptitudes. Some, but not most, insist it is scholastic experience. I agree that "differentials of schooling . . . will have an effect upon the scores, but schooling would not in itself account for the variations in ability that are found." The consensus seems to be that the test rates intelligent behavior "under school and clinical conditions, but it does not justify the expression 'the intelligence of the child is thus and so.'"

Dr. Frank N. Freeman presents the interpretation acceptable to most experienced psychologists:

"The aim of intelligence tests is, so far as possible, to choose the materials of which they are composed that the effect of differences in experience will be reduced to a minimum, and this aim has in a measure been attained. No one would claim, however, that the attempt has been completely successful."¹

What Freeman observes for group mental testing, namely that differences in scholastic experience may result in wide differences in test accomplishment, is true for individual Binet testing. I agree also that all this is a "chasing of the will-o'-the-wisp; it is beside the main point.

¹ Freeman, Frank N.: *Mental Tests: Their History, Principles and Applications*, page 256.

To throw out experience is to throw out a proper source of nourishment to a growing mentality."

Practical Usefulness of the Individual Intelligence Scales

At the risk of overgeneralization I shall attempt a summary statement of the consensus of judgment on the practical usefulness of scales. First, the individual scale — especially as shown by a generation of work with the Stanford-Binet. I am inclined to think that the following conclusions are justified:

- General diagnosis and prognosis: The average of three annual Stanford-Binet scores locates with fair accuracy the general mental level of the individual; I personally believe that it distinguishes him with reliability in a given decile of the IQ distribution.
- Great reliability in identifying the extreme levels — feeble-mindedness and marked mental superiority.
- In vocational counseling it is of general advisory assistance in helping young people choose school and college work, to determine fitness for college, and in predicting probable achievements in lines of work that are rather sharply distinguished.
- The recommendation can be made without reservation that every child entering the nursery, kindergarten, or elementary school should be given at least three annual Stanford-Binet (or Kuhlmann-Anderson, or another equally effective) tests; recurring throughout his educational career it should be repeated and such records accompany him as he advances through the various levels of his school and college career.
- Relation to college entrance: The mental-measurement movement has already constructively altered college entrance requirements and examinations. The use of the objective scholastic aptitude test is now becoming general practice. Correlations between school success and scores on intelligence tests generally have ranged between 0.3 and 0.6. Mental measurers have periodically urged that the entire school population, especially of the high schools, shall be recurringly measured with reliable intelligence scores and *that the American people through their government guarantee that all of those in the upper percentiles of intelligence should be aided in going to college.*

- The intelligence scales and adult education: A generation of adult mental measurement by Thorndike, Jones, Miles, and others has shown that mental powers continue to develop up to 30 years of age, that there is little decline after that, except in speed reactions, until senescence sets in. Adult adaptability and learning is an established fact.
- Sex differences and intelligence: The findings of a generation have failed to distinguish between males and females in any appreciable manner in the power of logical and abstract thought.
- Intelligence scales and delinquency: The mental-measurement movement has changed earlier convictions concerning delinquency and mental deficiency. Healy showed in 1922 that only about one fourteenth of large delinquent groups were feeble-minded. Many investigators have established the important role of the social environment in producing delinquency. Mental tests are of proved value in discriminating the feeble-minded, early in their development, in order to have them provided for appropriately. The mental test has been proved to be a distinct aid in distinguishing the dull-normal child in verbal intelligence who may be normal or higher in social and mechanical skills, and in finding appropriate curricula.
- Intelligence and racial or social differences: The use of mental tests has thrown objective light on this problem, emphasizing the relative equality of mental capacity and ability. The evidence supports the environmentalists' demand for the creation of equal economic and social conditions for all groups of people.

The Chief Functions of Mental Measurements

Two great purposes are served by the measurement of human nature and behavior—the prognosis and diagnosis of development, and the improved administration of human affairs. To the progressive forces in education the greater of these is the former. To explore the abilities of a human being and to diagnose the factors of his performance and growth are vital needs of all educational and occupational life. This is not to ignore the administrative functions of measurement—to classify pupils for educational work, to promote them through the school system, to award orders of merit, prizes, rewards,

and to select the most competent for special jobs in school and out. All these are of great practical importance. But *the supreme task in education is to enhance growth and to do so we must be able to diagnose abilities and disabilities of individual persons, to prescribe specific educational treatment, and to predict success and failure.* Hence my great emphasis on face-to-face individual measurement.

I. THE GROUP MENTAL ABILITY TEST

But to facilitate the tremendous administrative tasks of the school nothing can take the place of the group test. The Binet requires an hour for an individual person; hundreds of persons can be tested at once by the group test, and scoring techniques have been enormously expedited, with the use of perforated scoring cards, the International Test Scoring Machine, recording blanks and statistical transmutation tables.

The history of the group test is actually (in the case of achievement testing) longer than that of individual measurement. Following the initial work of Dr. Otis and the Psychological Division of the Army in World War I in developing the group mental test and using it on a large scale, much energy was devoted to its design and standardization. Between the two wars its manufacture and distribution became Big Business. The Terman Group Test of Mental Ability, devised in 1920, alone sold 11,000,000 copies between that year and 1941. Since it and its current revision, the Termann-McNemar, have been so widely used, I shall refer to it in this brief discussion of the principles and methods of design of the group test.

There was a period during and immediately after the First World War when the validation and reliability of the group test of mental ability was determined by correlating it with an individual test such as the Stanford-Binet. During the past fifteen years, however, the individual test has been given up as a criterion and the principles and techniques of design have been so greatly improved that in design of content, validity, and reliability the group test now stands on its own scientific foundations.

Content – Item Analysis

The present content of group mental ability tests has now stood the test of use, administrative application, critical study by scientific workers, statistical and technical critique for a full generation. The

items on the sub-tests as they now stand have passed through a ruthless screen of criticism. Each test is subjected to a critical examination by half a dozen or more competent persons. Marked improvements have come about in the discriminating power of the words and concepts selected, and similar improvements in administration and in scoring.

- The typical sub-tests used are (as in the Terman-McNemar) information, synonyms, logical selection, classification, analogies, opposites, and best-answer.
- The tendency is to eliminate such sub-tests as: arithmetic tests, sentence meaning, mixed sentences.
- The earlier tendency to use true-false and completion items have been given up for the more reliable multiple-choice type, using five alternatives.
- The generation of debate over group factor *vs.* specific ability has led to a more homogeneous content — illustrated, for example, by the elimination of such sub-tests as the arithmetical and number series. The result, as the authors of the Terman-McNemar say, is “that the scores of any two individuals are more nearly comparable qualitatively; i.e., they lie along the same continuum. This continuum may be characterized as that of general verbal intelligence.”
- Great progress has been made in discovering equivalent materials in alternate forms, and “within each sub-test the use of a word either as a stimulus or response more than once has been reduced to the vanishing point.”
- Methods of standardizing item difficulty and validity have been greatly improved. In one typical group test of mental ability no items are included that yield an average tetrachoric correlation of less than .3 — for each item with the total score based on three test forms and computed for each grade separately. In the construction of the tests, three such coefficients were computed for all items with an average coefficient for all items of .53. The final selection and arrangement of test items are determined by item difficulty and validity, alternate forms being made equivalent by means of difficulty and validity indices. Thus the group tests of mental ability are essentially power tests.
- Comparability of alternate forms is high because of special controlled rotated group experiments in which items are paired for

difficulty in terms of the average per cent passing each item. When new forms are made, the comparability of new and old forms is determined by similar large-scale controlled equating experiments. Care is taken to equalize for practice effect. Corrections are made for elimination of pupils of lower intelligence from the higher grades of the school, thus giving a normalized standard score.¹

Validity

All that we have said earlier about validity and the criterion applies here. The earlier practice of validating by correlating verbal intelligence test scores with teachers' marks has been given up because of the proved invalidity of teachers' judgments. Some of these mental ability (intelligence) tests have now been used for a quarter of a century, during all of which time the content of what is called intelligence has been under critical examination. This has led the authors of the Terman-McNemar to say:

"The best evidence of the validity of the Terman test is to be found in its successful use over the period of years since the test was first issued (1920). Many instances may be cited where the Terman test has been used with great success in guidance and administration. In some situations where the use of the Terman test with entering high school students has been made a standard practice, it has been found that year after year those students who have been graduated with honors were those who made scores in the highest range of the test."

Reliability

The latest practice in the group test, as employed in the Terman-McNemar test, is to use three methods of determining reliability:

- (1) the split-half reliability coefficient: obtained by scoring odd- and even-numbered items separately, dividing the test into two equal parts and distributing equally the effects of fatigue, practice, and boredom. These two scores are then correlated, the coefficient on the Terman-McNemar being .96.
- (2) the inter-form method, giving a coefficient of correlation between two equivalent forms used within intervals varying

¹These are the methods of such commercial houses as World Book Company, which from the earliest beginnings of this movement has carried a professionally and technically trained staff of statistical and psychological workers.

FIFTY YEARS OF SCIENTIFIC METHOD

from one day to a fortnight. Reliability coefficients of Terman-McNemar, .95.

- The third method, the Probable Error of Measurement, is obtained by computing .6745 times the Standard Error, which in turn "is an estimate of the standard deviation of a distribution of theoretical scores for a given individual." It is an attempt to predict how near to the individual's "true" score (which could be the average of an infinite number of repeated applications of the test) the actual score is, knowing of course that the true score can never be known.
- The Director of the Test Service says of it:

"one advantage of the Probable Error of Measurement is that it is independent of the range of talent upon which it is based, whereas the reliability coefficient is not . . . It makes it possible for us to estimate whether the difference between any two scores is a statistically reliable difference." The PEM of the Terman-McNemar is 2.2 standard score points for the entire age range covered by the test.

- A standard score scale is also built for the test by the methods already outlined.
- Norms for such group tests as the Terman-McNemar or the Metropolitan Achievement Tests are now based on very large numbers of testees (500,000 in the case of the Metropolitan) representing every type of community in the country. From such a sample of all the children in hundreds of communities in most of the states a large sample is used in establishing comprehensive standard scores and norms. Norms are determined by finding the "median standard score for successive age groups, plotting standard score against age, and drawing a smooth norm line through the plotted points." Care is taken to correct for elimination of pupils from school so as to make the corrected norm line representative of unselected age populations.

II. APTITUDE TESTING: THE PROGNOSTIC USE OF MENTAL MEASUREMENT

Long before the educational measuring movement had begun in America (in 1890), J. McKeen Cattell published ten tests for specific

mental performance. Three of these are still in common laboratory use — strength of grip, naming colors, memory span. As early as 1894 Cattell began to give tests to students in Columbia College. A decade later G. M. Whipple, in assembling his *Mental and Physical Tests, Simpler Processes*, gave elaborate batteries of specific tests for Sensory and Motor Efficiency, and twelve well-known laboratory examinations for Mental Efficiency. In a sense these were all “aptitude” tests, although not integrated in batteries and correlated definitely with specific educational or vocational enterprises.

Then, in 1917, America entered World War I and a mass problem of aptitude and proficiency test design was laid on the desks of the measurers. Overnight the “Trade Test” Division of the Committee on Personnel of the Army was created. Personnel managers from corporate industry and psychologists from the university laboratories gathered under Yerkes, Thorndike, Clothier, and Bingham. In the course of a few months a tremendous achievement took place.¹ A body of effective proficiency tests was designed and standardized for hundreds of occupations,² as well as aptitude tests for many trade skills. Four grades of proficiency were recognized — novices, apprentices, journeymen, and experts — and for each, three types of trade tests were standardized — verbal trade tests, picture trade tests, performance trade tests.

This large-scale design and construction of proficiency tests in the army speeded up the civilian measuring movement enormously. In the decade following the close of World War I scores of trade and proficiency tests were designed and standardized.³ Taken all together the trade tests contributed a valuable stimulus to the building of aptitude measuring materials. Although many classifications of these have been tried, they fall naturally into two major types:

- (1) Pencil-and-paper tests, or verbal tests
- (2) Apparatus tests

¹ I was a member of this group, Committee on Personnel in the Army, in Washington in 1918, and wish to record my admiration for the spectacular speed and intelligence with which this clever body of aptitude and proficiency tests was put together.

² Note that aptitude tests must be distinguished from achievement or proficiency tests. A proficiency test discovers the actual skill or motor-efficiency of the person in a specified trade or occupational activity. In industry these are called trade tests; in schools, achievement tests.

³ See Clark L. Hull, *Aptitude Testing*, for full details on these.

Pencil-and-Paper Tests

Since excellent annotated lists can be found in Hull and other standard sources, I shall merely enumerate them here:

- Directions tests
- “Best answer” or “common sense” tests
- Synonym-antonym tests
- Disarranged sentences
- Number series extension
- Analogies test
- General information
- Proverbs or matching tests
- Sentence completion
- Cause-and-Effect
- Most closely related words
- The Maze Test (Porteus)
- Mechanical Information (e.g., the Stenquist Test)

Apparatus Tests

The partial list of occupations for which non-academic aptitude tests have already been made illustrates the extent to which apparatus tests have been constructed. Some of these are conducted in laboratories in which the total trade skill can be measured directly. But in some instances (as in the test for streetcar motormen or bus drivers) where the test cannot be made under practical job conditions, “miniature tests” have been designed which duplicate key skills of the occupation; for example, the Wisconsin test for engine-lathe aptitude, or the Münsterberg test for motormen.

“Abstract” tests are also used in which specific sensory, motor, or mental efficiencies are measured by psychological laboratory tests. An example is the measurement of reaction time, to pick machine operators. The miniature tests are more expensive and require special apparatus but have much higher prognostic value.

Many psychological problems have been investigated in the course of studies of predicting aptitude; for example, the study of the use of speed and power tests. The work of such persons as Rueh and Koerth has shown that speed and power are positively and highly correlated — as much as .9. Yet, as Hull says, they are not identical, instances having been found where marked power is associated with slow deliberate-

ness of behavior; and the opposite is true. Studies have also distinguished the usefulness of tests built in terms of time limit (measuring the amount of work that can be done in a given amount of time) from work limit (measuring the amount of time required to do a certain amount of work).

III. ATTITUDES AND THEIR MEASUREMENT

In Chapter VII, in making a final interpretation of the psychology of the act, the attitude was shown to play a powerful formative role. That the history of mental measurement supports this view is shown by a vast amount of attitude scale and test construction. I give an illustrative list of the principal types of test, and the characteristic methods employed:

I. Scales and Tests:

- *Opinion scales*: "What-do-you-think-of-?" scales, tests, questionnaires, house-to-house interviews, illustrated by the five-point Porter Student Opinion Scale on War, the Thurstone Attitudes Scale of opinions and current issues; such scales differentiate individuals, and religious and other influences.
- The Thurstone Attitude Scale: test questions located at equal points on base-line of normal curve, using the Furlerton and Cattell "equally-often-noted-differences" method; assumes that differences are equal if they are equally-often-noted by competent judges; this is the method and criterion by which Thorndike and his students constructed handwriting, composition, and other scales.
- The Case History Test, or Written Accounts of Experiences: Stouffer's study of attitudes toward prohibition ... case histories rated on a scale of attitudes toward prohibition laws; average intercorrelation of judges over .8.
- The Attitude Questionnaire: Watson's Orient and Occident ... answered by many different social, economic, and political groups ... successfully distinguishes international and foreign policy attitudes ... positive correlation with information.
- Social Distance, or What-Would-I-Do? scales: the Bogardus Scale ... the subject states hypothetical range of situations, indicating in each one the relationship he should be willing

FIFTY YEARS OF SCIENTIFIC METHOD

to have with members of named races and nationalities . . . successfully differentiates attitudes.

- House-to-House or Face-to-Face Interviews; a “What-Would-I-Do?” test: Lapière’s study of racial attitudes among rural and urban groups in France and England . . . racial antagonisms learned after early childhood . . . method discriminates racial attitudes.
 - White’s study of prestige value of government employment.
- Verbal, or Pencil-and-Paper Tests: Neumann’s study of international attitudes discriminated between businessmen, Communist Party members, and international religious leaders; “not a single exception in test behavior to the predicted answers.”
 - Murphy, Porter, and others agree on general principle that “known relations exist between conduct and the verbal report of attitudes” . . .
- Sociological Studies of Attitudes: Willoughby’s correlation of relation of subscription to liberal press with economic well-being; Yoder, Lundberg – studies of economic groups and attitudes toward radical and conservative leaders . . . typical findings: radicalism related to soil and rainfall, to youth of the community, to immigrant population, to economic disadvantage.
- Ethical Judgment Scales: Brogan – subjects ranked various examples of behavior from best to worst; concluded that method did discriminate attitudes toward good and bad behavior.
 - Thurstone, White, checked and confirmed such studies. White with elaborate list of transgressions, shows about same order as Brogan’s and Thurstone’s.
- Multiple Choice Attitude Tests: Anderson-Dvorak . . . subject expresses his belief concerning types of standard that would govern his conduct: (1) right as opposed to wrong, (2) prudence or intelligent judgment, (3) public opinion, (4) esthetic standards; various social groups successfully distinguished on these criteria.
- Stereotype Studies: Rice, Lippmann, and others: “the stereotyping tendency to agree that a certain kind of picture goes with a certain appellation is perfectly clear cut.”

THE EDUCATIONAL FRONTIER: 1890's-1940's

- Scales of Belief, Desire, and Evidence: Lund and others. Correlations between belief and desire universally high — .76 to .80 ... correlation between belief and evidence lower, around .4.

II. Typical Findings from Attitude Studies:

- Studies of expressed attitudes in relation to action: Porter — pacifist leaders sharply distinguished from ROTC officers in attitudes toward war ... international attitudes correlated with membership in political, religious, vocational groups.
- Studies of Knowledge and Opinion: Diggins — relations shown between familiarity with racial groups and attitudes toward them ... other studies have not confirmed Diggins; in general, show that familiarity "has, as such, no clear implications for racial understanding or liking."
- Role of Innate Factors in Attitudes. Few studies, little success in locating such factors. Starbuck and Husband — a study in religion, H. T. Moore — a study in social opinions.
- Studies of Early Sources of Social Antagonisms: Lasker — "they usually begin in childhood experiences" ... depend much on attitude of parents ... Keeny's study of origins in three fourths of attitudes date back to preadolescence ... one fifth come from school or reading, one eighth from acquaintances or home.
- Studies of international attitudes: general trend from the Lynds, Neumann, and Frederick show great preponderance of school children with extreme nationalistic attitudes and prejudices toward certain other nationalities and racial groups.

SELECTED SOURCES: TESTS AND SCALES AND THE EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT

- Buros, O. K.: *The [First] 1938 Mental Measurements Yearbook*. New Brunswick, New Jersey: Rutgers University Press (1938). *The [Second] Mental Measurements Yearbook* (1940)
- Freeman, Frank N.: *Mental Tests: Their History, Principles and Applications*. Boston: Houghton Mifflin Company (1939)
- Hawkes, H. E.; Lindquist, E. F.; and Mann, C. R.: *The Construction and Use of Achievement Examinations*. Boston: Houghton Mifflin Company (1936)
- Hull, Clark L.: *Aptitude Testing*. Yonkers: World Book Company (1928). 535 pages
- Odell, C. W.: *Traditional Examinations and New-Type Tests*. New York: D. Appleton-Century Company, Inc. (1923)

FIFTY YEARS OF SCIENTIFIC METHOD

- Studies of religious and ethical attitudes: Shuttleworth — correlations low between religious, home, and childhood training and present religious interest and belief.

IV. MEASURING THE PRODUCT OF SCHOOLWORK

During the first two decades of the measuring movement the interest of educational workers was primarily in achievement scales and tests. There was a general agreement that personality, intelligence, and aptitude tests were useful also; but to know with objective finality how their pupils were doing — that was important.

Ten years before Terman adapted the first Binet test to American conditions, Thorndike and his students, Leonard Ayres, and other pioneers were making the first educational scales. This was fifty years after the Reverend George Fisher, an English schoolmaster, had suggested (1864) a *Scale Book* which was to be composed of “various standard specimens . . . arranged in order of merit.” Some of our measurement historians date the educational measuring movement from this event. Sir Francis Galton is also noted as a pioneer because of his invention of the questionnaire and other devices for reporting and appraising education more exactly. Still others date the movement from the work of Dr. J. M. Rice, “the real inventor of the comparative test.” In 1894, as editor of *The Forum*, he published a series of articles reporting the results of spelling tests which he had conducted with thousands of pupils in the public schools. His articles, which denounced “the futility of the spelling grind,” and other subject-matter grinds, caused great controversial discussion. Nevertheless, because there was no direct connection between Rice’s work and the unbroken

SELECTED SOURCES — *Continued*

- Orleans, Jacob S.: *Measurement in Education*. New York: Thomas Nelson and Sons (1937)
- Ross, C. C.: *Measurement in Today’s Schools* (1941)
- Smith, E. R., and Tyler, Ralph W.: *Appraising and Recording Student Progress* (1942). Harper & Brothers. 573 pages
- Terman, L. M., and Merrill, Maud A.: *Measuring Intelligence*. Boston: Houghton Mifflin Company (1937)
- Tiegs, E. W.: *Tests and Measurements in the Improvement of Learning*. Boston: Houghton Mifflin Company (1939)
- Tyler, Ralph W.: *Constructing Achievement Tests*. Columbus: Bureau of Educational Research, Ohio State University (1934). 110 pages

continuity of mental measurements launched by Thorndike, I prefer to date the achievement test movement from his first work. Not long after Thorndike produced his first scales, Leonard P. Ayres, director of the Division of Education of the Russell Sage Foundation, published his scales in handwriting and spelling.¹ These are important in the history of measurement because of Ayres' pioneer use of the assumptions and techniques of the normal probability distribution in determining the equality of units on a scale.²

By the time we entered World War I the measuring of educational products was well launched. The war experience expedited enormously the making of group tests for intelligence, aptitude, trade proficiency. At its close the measurers hurried home from the war and rushed scores of new scales and tests through the press. Many of these were published without the foundation of theory and careful design and without measures of validity and reliability. There ensued a hectic period of mass commercialization of scales and tests — "well-nigh a public scandal," some of the older critics said. Certainly I can agree with Ross's description that the period is one of "over confidence, uncritical acceptance of test results, naïve assumption that IQ's measured innate capacity and that achievement tests measured the outcomes of teaching." "Everybody" was "thinking up" tests, giving them to small groups, standardizing test items by percentages of correct pupil responses, and determining validity by such superficial methods as correlating test results with teachers' marks.

By the late 1920's this stage had run its course. The professors were moving into the theoretical fields of design and validation. The more soundly equipped ones were financed by grants from the foun-

¹ *A Scale for Measuring Handwriting . . . A Scale for Measuring Spelling Ability.*

² I wish to record here my admiration for Ayres' creative leadership and his fine personal contribution to the younger friends who had the good fortune to be associated closely with him, as I was in the second decade of our century. A full history of the scientific movement in education would give Dr. Ayres an important place for his original design of scales, his contribution to school administration, the survey movement, notably in the Cleveland Survey, and his development of the Statistical Division of the United States Army in the two World Wars. Following World War I, Colonel Ayres made the important decision to leave educational research for statistical and prognostic work in banking and business — as a vice-president of the Cleveland Trust Company. This was a real loss to educational research. It is especially to be regretted that no more than a limited success in predicting the course of the market and of periods of depression and prosperity has caused workers in our field to forget his early important contributions.

dations, notably Carnegie and Rockefeller, through the agency of the American Council on Education and of the leaders of the Progressive Education Association.¹ A period of more critical design set in, criteria of validity and reliability and assumptions were clarified, and principles for determining equality of unit on scales were worked out.

Thus the half-century that has passed since Rice's original testing of public school pupils constitutes, I feel, a single and preliminary stage in the movement for measuring educational products. Perhaps it would be more accurate to limit the initial period to the forty years from Rice to the publication of Oscar Buros's *1938 Mental Measurements Yearbook*. In the decade since that event we have been passing into a second and much more profound stage. Perhaps this present chapter of my book will serve as a sufficient witness to the nature of the new period on the threshold of which we now stand.

Stocktaking after Forty Years

Four decades of astonishingly vigorous work have produced instruments with which to measure the product of schoolwork in every aspect of the curriculum. We owe to Dr. Oscar Buros² and a score of professional reviewers of mental measurement the beginnings of a critical library of source material. To appraise this total library is beyond the proper scope and function of this book. It is proper, however, to point out the special contribution of a few groups and individuals. I have in mind particularly the leaders of the:

- Cooperative Test Service, developed through the progressive leadership of Dr. George Zook and the American Council on Education.
- The "Bureaus of Research" at various State Universities, notably the Bureau of Educational Research and Service of the State University of Iowa, and the University Experimental Schools; the Bureau of Educational Measurements at Kansas Teachers College at Emporia, Kansas; the Bureau of Educational Research at Ohio State University; the Bureau of Publications

¹ I discuss the work of the latter group in Chapter XVII.

² The *1938 Mental Measurements Yearbook* published by Rutgers University Press, and the succeeding volumes personally by Dr. Buros, are indispensable to educational workers generally as well as to students in this field. In these can be found complete and reliable source lists and the best single body of critical appraisal of the measuring instruments which are available in every aspect of educational work. Hats off to this job — well done!

THE EDUCATIONAL FRONTIER: 1890's-1940's

of Teachers College; the Division of Educational Reference at Purdue University.

- The Research departments of various publishing houses; notably of World Book Company (Dr. Arthur S. Otis, Dr. Walter N. Durost), of McGraw-Hill Book Company, Messrs. E. W. Tiegs and W. W. Clark of the California Test Bureau; the Psychological Corporation of New York; Science Research Associates, Chicago; Educational Test Bureau, Minneapolis.

The output of forty years puts the available instruments today into three groups:

I. General Achievement Tests:

Several moderately reliable and well-validated over-all instruments are available:

- Stanford Achievement Test (World Book Company).
- Cooperative General Achievement Test: for the social studies, the sciences, and mathematics. The work of the Cooperative Test Service, created by the American Council on Education.
- Iowa Every-Pupil Tests of Basic Skills: for reading, language, and arithmetic skills.
- Metropolitan Achievement Tests of World Book Company; tests for arithmetic, reading, English, and handwriting; available as separates.
- Progressive Achievement Tests of the California Test Bureau (Messrs. Tiegs and Clark), tests for reading, arithmetic, mathematics, and language; available as separates.

II. Tests in the School Subjects:

A careful survey of recommended instruments shows that a large percentage of the scales and tests in the school subjects have been developed through the agency of the American Council on Education and the Cooperative Test Service, and the named Bureaus of Educational Measurement. The Cooperative Test Service alone has produced well-validated and reliable tests in algebra, arithmetic, biology, chemistry, English language usage and grammar, English literature, French, geometry, German, history, Latin, mathematics, physics, the sciences, social studies, and Spanish.

III. Newer Curriculum Developments:

For many newer school subjects and curriculum fields tests are also available; for example, in health, hygiene, and physical education, home economics, industrial arts, public speaking, reading, the vocations. The changing curriculum has created a demand for tests for outcomes that are not the direct product of the school subjects and these are rapidly being made available; one can now find tests for Contemporary Affairs, Social Adjustment and Development, Comprehensive Individual History Record Forms, Diagnostic Child-Study Records, Study Habits and Skills, Guidance Tests and Inventory, Adult Profile, Occupational Interest Blanks, Interest Inventories, Vocational Interest Blanks, Vocational Interest Schedules.

What, Then, Have We Learned?

Summing Up

- Educational measurement has become an integral part of public education and teachers are incorporating it in their work.
- Tests are coming into widespread use for educational diagnosis and guidance.
- We are slowly becoming critical of the need for psychological and philosophical foundations as the basis of measurement, and are beginning to state explicitly the assumptions underlying our work.
- The students of mental measurement are carrying over from laboratory psychology and the older established sciences the concepts and assumptions and techniques of the scientific method; they now have a considerable body of statistical and critical experience in designing and standardizing educational scales and tests.
- The critical spirit is growing among them, with marked improvements in the validation of instruments and the determination of reliabilities.

EVALUATING THE WHOLE SCHOOL OR SCHOOL SYSTEM

Throughout much of this discussion of measurement we have been concerned with the "parts" of the educational enterprise. Now, at the end of our study, we must see it in over-all perspective — plant, administration, curriculum, teaching, the life and program of the whole school. Again and again we have encountered the concept of "the whole" in education — the whole man, the whole learning situation,

and now the most complex entity of all, the whole school. What have we learned about measuring that?

We can cut straight through to the single conclusion that stands out above all others: In spite of manifold attempts to substitute objective for subjective methods, our main reliance is still on human judgment. It is true that we now have instruments which definitely clarify and define the judging process, but measurement in this field is still thoroughly subjective. This was to be expected, for here we are governed by the same principles as in the appraisal of man's expressive and appreciative products and his values and objects of allegiance. The only possible instrument that can measure a total organism is *another* total organism. But — my generalizations are too important to leave them undocumented.

The Surveying of Schools

It was in the second decade of our century that Messrs. Strayer, Judd, Ayres, Cubberley, Kendall, and others gathered the new professors of education — many of them young and with much less experience than those who were being surveyed — to look over public school

SELECTED SOURCES

- "Appraising the Elementary-School Program," *The National Elementary Principal*, 16: 227-655 (July, 1937)
- Bruner, Herbert B.: "Criteria for Evaluating Course-of-Study Materials," *Teachers College Record*, 39: 107-120 (November, 1937)
- Evaluation of Secondary Schools: General Report*. Washington, D. C.: Cooperative Study of Secondary School Standards (1939). 526 pages
- Evaluative Criteria* (1940 Edition). Washington, D. C.: Cooperative Study of Secondary School Standards (1939). 176 pages
- How to Evaluate a Secondary School* (1940 Edition). Washington, D. C.: Cooperative Study of Secondary School Standards (1939). 139 pages
- Mort, Paul R., and Cornell, Francis G.: *A Guide for Self-Appraisal of School Systems*. New York: Bureau of Publications, Teachers College, Columbia University (1937). 59 pages
- North Central Association of Schools and Colleges: *The Evaluation of Higher Institutions*. University of Chicago Press; one of seven volumes (1934-1937)
- Rugg, Harold: *On the Rating of Human Character*. *Journal of Educational Psychology* (January, February, March, 1921)
- Walker, Helen M. (Editor): *The Measurement of Teaching Efficiency*, pages 73-141. New York: The Macmillan Company (1935)
- Zook, George F., and Haggerty, M. E.: *Principles of Accrediting Higher Institutions*. Chicago: University of Chicago Press (1934). 202 pages

systems and appraise them. They sat in the classrooms and judged the teachers. They scrutinized the printed courses of study. They appraised the financial and pupil accounting, records and reports, and the business management. On what yardstick did they appraise these? The yardstick of their own judgment was based partly on their own experience — which in some cases was decidedly lacking¹ — but mostly on their imaginations.

They called one other method to aid them in “objectifying” their judgments — the stock rank-order method of comparing a school or system with other “comparable” schools or systems. “Comparableness” they determined with a good deal of care on the basis of much discussion of criteria. But the same mistake was made here as in all other early forms of measurement. Instead of comparing the education a school was producing with the education it could produce — if it used its resources with wisdom and courage and vigor — they compared it with that of other schools. This method caused them to miss the chief opportunity to diagnose unused capacities and to lead the schools in taking advantage of them. Instead of doing that, they advised the schools to work harder and better to improve their position in the rank-order list of comparable systems! They prodded inert communities and complacent school systems, brought to them the use of measuring instruments and other new practices and standards, stimulated study, discussion, and self-appraisal, and the graduate study of teachers and the administrators in service. It cannot be doubted that the forty years of the survey movement has made a real contribution to American education; certainly one major outcome was achieved — in many progressive places the practice of the continuous inside self-survey was established.

Coöperative Studies of School Standards

By the beginning of the depression years this effect was conspicuously revealed in two important coöperative studies of standards which were conducted by two regional associations of schools and colleges:

¹ I can speak with authority here because, as a very young assistant professor of education at the University of Chicago in 1916, I surveyed school finance and business management in Grand Rapids, Michigan, and, incredible though it now seems, in St. Louis, and wrote the respective volumes of those two survey reports. At that moment I had never taught in an elementary or a secondary school nor served in any administrative capacity! We all marveled at the things that were done in those days in the name of “the scientific movement in education.”

THE EDUCATIONAL FRONTIER: 1890's-1940's

- (1) The Cooperative Study of Secondary School Standards, made by 198 schools during a period of six years in the 1930's and supported by an endowment of a quarter million dollars;
- (2) The report of the Committee on Revision of Standards, of the Commission on Higher Institutions of the North Central Association of Colleges and Secondary Schools; a five-year investigation, costing \$135,000, and resulting in seven monograph reports.

The Cooperative Study was a conspicuous example of using the rank-order method, the final report presenting graphic devices called "Educational Temperatures," by which any school could find its position in a ranked list of 198 schools. Employing 300,000 standard tests in the attempt to objectify the process of evaluating a school, it definitely confirmed the conclusion concerning subjective judgment and the use of tests to measure teaching efficiency.¹ But when the elaborate statistical rating was all done, competent judgments of a school — its plant, curriculum, teaching, educational program generally — were weighted 70 per cent of all, standard tests only 20 per cent. The final conclusion of the study was that standard tests were useful for diagnostic and guidance purposes but final reliance was to be placed on professional judgment aided by rating scales and score cards. Thus, in spite of the absorption of the new educationalists in objective measurement, the chief reliance of the surveyors always was competent human judgment.

CLARIFYING HUMAN JUDGMENTS:

RATING SCALES AND SCORE CARDS

The measuring movement made one further contribution to the process. It developed rating scales and score cards with which to clarify and define human judgments. The total process of education was a sensitive and complex process. The surveyors and the measurers saw that the process of judging it could be greatly improved if the complex total could be broken down, for the purpose of study, into clearly specified phases, aspects, characteristics, traits. Out of a

¹ Many quantitative studies have been made of the correlations between the performance of the teacher before the class and the measured achievement of his pupils. Almost uniformly these have been shown to be low, indeed almost zero. Perhaps the best single volume on the problem of measuring teaching efficiency is that edited by Helen M. Walker: *The Measurement of Teaching Efficiency*.

FIFTY YEARS OF SCIENTIFIC METHOD

quarter-century of work, greatly stimulated by the Army Man-to-Man Rating Scale, score cards and rating scales were developed.¹ I cite three examples:

- the Mort-Cornell *Guide for Self-Appraisal of School Systems*
- the Strayer-Engelhardt Score Card for Junior High School Building
- the Bruner Criteria for Evaluating Teaching and Learning Materials and Practices²

If we regard these as the typical output of forty years of work in improving the evaluation of the total educative process, the results seem small indeed. They constitute little more than suggestive leads for an extensive and heavily endowed program of research that should now be launched. Nevertheless, they have made definite improvements in the judgment of the work of a school or school system. I find six:

First: They break down the tangled complexity of the whole school or system into an organized array of detailed parts, pointing educational workers in many instances directly at hitherto neglected aspects of their work. This is done particularly well in such Guides as that of Mort and Cornell, in which the attention of educational workers is directed by very specific questions.

Second: They bring progressive practices to the attention of large numbers of children.

Third: They clarify the meaning of these details by the careful standardization of the respective items.

Fourth: They have stressed the important role of the philosophy of the school. The Cooperative Study specifically urges that a school shall be "studied expressly in terms of its own philosophy of education, its individually stated purposes and objectives, the nature of the pupils with whom it has to deal, the needs of the community which it serves, and the nature of the American democracy of which it is a part."

¹ I spent several months in 1918 appraising it as a member of the Committee on Personnel in the Army; the report was published in the *Journal of Educational Psychology*, January to March, 1921, under the general title, *The Rating of Human Character*.

² All three are published by the Bureau of Publications of Teachers College, Columbia University.

Fifth: They attempt to build a sounder perspective of the whole school, the whole plant, the whole curriculum, by assigning weights to major and minor phases of the work. They prod the teachers and administrators to ask: Which things are of major importance?

Sixth: Most of these attempts have employed quantitative measures, giving the weighted scores numerical values and providing for the computation of a total score; for example, on the Strayer-Engelhardt Building Score Card, the total maximum score of 1000 points gives one fourth of the weight to the classrooms and other special rooms, one tenth to the site, one sixth to the building, etc. All these attempts to use numerical rating schemes, however, are also little better than arbitrary in themselves. In my judgment their only value at the present moment is in serving as prods to more critical thought about the relative importance of the various aspects of a school system and of the jobs that have to be done. At this point we stand merely at the threshold of quantitative measure. Here I am convinced we need more philosophizing and less statistical method.

THE PROSPECTS FOR A SCIENCE OF EDUCATION

What, then, is the verdict?

— Is it learning how to use the scientific method?

— Yes — definitely.

— Is education becoming a science?

— No — for it lacks the chief requisite of being a science — a unique body of primary concepts.

We stated earlier the criteria by which the second question: Is education becoming a science? and its more important corollary: Can it become a science? can be answered. Succinctly restated, these are:

— a body of valid and reliable scales of measurement

— a body of primary theory and principles of design

— a body of *unique primary concepts*

If judged by the first criterion alone, one would be inclined to say — Yes, it seems possible that education may become a science. Judged by the second criterion, it shows vague possibilities of doing

so in another generation. But, appraised on the third criterion — a body of *unique primary* concepts — the answer is No — emphatically, it is not becoming a science, for it has no primary concepts which are unique to it alone. On the contrary, education is an art and a technology which employs the primary concepts of other bodies of subject matter which are established sciences:

- from physics: energy, the field . . .
- from biology: growth, integration, individual differences . . .
- from psychology: experience, the Self, the problem, personality, movement . . .
- from culture and society: democracy, freedom, control, equality, the sustained-yield . . .
- from esthetics: expressional act, felt-movements, form . . .

On these and other sciences the educationalists, working as technologists and artists, can now build a Great School. But shall they aspire also to create a Science of Education? No. To document my answer further would be merely to repeat whole sections of my book. But that the educational psychologists, and in a limited sense such educationalists as the curriculum leaders, have taken real strides at learning how to employ scientific methods is now established.

Fifty Years of Normative Research

One final point. There are two distinctive types of research which are basic to the scientific reconstruction of education: normative research and experimental research. Ninety-odd per cent of our energy has gone into the former. We have question-blanked every aspect of education — gathered the facts of administration, curriculum, buildings, finance, promotion through the system, elimination and retardation, educational products, the personality and other traits of the pupils and of the teachers, teaching efficiency, skills, and knowledge. We have thought up tests and given millions of them and averaged and correlated results. It is normative research that has consumed our time and energy — making surveys, finding the facts, rank-ordering everything in education. Norms galore — and not much theoretical criticism of them.

As for basic experimental research, during the past twenty years the controlled experiment has been conspicuous by its absence from the research scene in education. Following the first enthusiasm for the controlled experiment in the years before World War I, it has become

increasingly difficult to persuade either doctoral students or professors of education to take on this onerous chore.

Correspondingly, prior problems of theory that are fundamental to research have been neglected. While a small sector of the profession has continued research in educational philosophy, educational research itself has only rarely been based upon profound and prolonged theoretical considerations.

SCIENTIFIC CONCEPTS FOR A NEW EDUCATION

A half-century of research has produced an important body of concepts for the new education. Summing them up:

- the characteristics of science and the concepts of the scientific method are now an indispensable part of the reconstruction of education; some of its concepts will be taken from the separate foundations of biopsychology, sociology, esthetics, and ethics; basic to them all are such super-primary concepts as field-force-energy and the principle of organization.
- in building education in a thoroughly sensate culture we must distinguish the postulates of mechanism from those of organism; we are dealing with the world of organism.
- administrative functions, that can properly be evaluated by rank-order methods, must be distinguished from those in which the growth of the individual and the development of the Person are the aim; in the latter, rank-order methods have only limited applications at best.
- the special contribution of the quantitative movement has been the building of instruments with which to measure the raw materials of personality, aptitudes, attitudes, and the products of education.
- instruments of considerable validity and reliability are now available with which to measure acts of habit, the skills and knowledge outcomes of the school; the psychological groundwork has also been laid for building correspondingly efficient yardsticks for acts of thought (problem-solving thinking and the like).
- the efforts to measure the creative and appreciative acts have, to the present moment, been marked by little more than failure; the philosophic, psychological, and esthetic orientation of the

FIFTY YEARS OF SCIENTIFIC METHOD

- measurers is totally inadequate for the appraisal of human expression; here a completely new beginning must be made and this can be done only by a new expressional orientation.
- we must distinguish performance, ability, and capacity. We *measure* performance, *infer* ability from the average of measured performances, and *estimate capacity* from the cumulation of the latter.
 - basic principles for the design of mental-measuring instruments are emerging; in validation we see now that the *practical criterion* is of primary importance and that this resides in actual personal or vocational adjustment of the individual.
 - *factorial validity* is of equal importance; critical and experimental study of general *vs.* specific traits has established the rich variability of human personality, revealing it as a complex of many group factors, integrated with a welter of specific abilities.
 - similarly the concept of reliability has been clarified, the former single crude statistical coefficient of reliability being replaced by several more specific ones.
 - a cautious attitude has developed concerning the early tendency to measure maturity by means of age — mental, educational, etc.; the present tendency is to avoid composite “achievement ages” and to emphasize “subject ages.”
 - test construction and interpretation tend to emphasize the use of standard scores and of other variability measures; for example, the “Deviation IQ” is being offered as a more reliable measure of “brightness” than the Ratio IQ.
 - we now distinguish clearly between “evaluation” and “measurement”; a vast body of critical appraisal of the evaluation of personality is now available and good beginnings in measurement of its three raw materials — physique, temperament, and intelligence.
 - the group mental ability test can now be said to stand on its own scientific foundations of design principles, validity, and reliability.
 - marked success has been achieved in building aptitude tests — either trade, military, or scholastic; especially established by the achievement of the psychological profession during World War II.

A Call for the Artist-Teachers of America

I had long planned to close my book with a chapter: "The Best School We Can Make Today." Now that the time has come to write it, I find that I am not ready. I am half ready, perhaps more, because the theory and the basic skeleton have become known. But I still lack the living flesh and blood of the school, and only from their protoplasm can the true School of Living be created. This I can get only from the Artist-Teachers of America.

So, the last chapter of this book becomes a call to you, my readers, to help me find the great teachers of our country. Hundreds of Artist-Teachers are at work in our schools and colleges, but most of them are known only in their immediate neighborhoods. They are the stuff out of which America can create a great school. I need to find them, and to know them as they live and work with their young people. Perhaps in your neighborhood there is a lone Hughes Mearns quietly starting a creative revolution? A young Elsie Clapp building a true community school? A future Francis Parker administering a fine school? A philosopher-designer of education to carry on the work of John Dewey? America must know these Artist-Teachers . . . these masters of their own expression who are also sensitive to its development in other persons. In a hundred, perhaps a thousand, classrooms and schools they exist today.

To paint the exciting picture of the Great School of America I must tour the country again. For your help in making the itinerary, I shall be profoundly grateful . . . a letter . . . a personal conversation . . . some guiding hand of liaison. Help me plan my tour to include the great teachers of America.

✓ ✓ ✓

In the meantime *Foundations for American Education* presents the theory and the structural design of the great school we can now

make, and I can see no better way of bringing it to a close than to conclude as I began —

Enough Is Known

If the wealth of modern creative thought could be assembled and organized, man would command sufficient wisdom to guide the youth of the world. The School of Tomorrow could be brought to life today. Enough is known of man, his knowing and his behavior, to organize its teaching. Enough expressive experience has been lived to guarantee a high order of esthetics. Enough is known of the first principles of conduct to solve the problem of freedom and control. The four foundations of education — a Sociology, a Psychology, an Esthetics, and an Ethics — lie scattered in many places, the makings of a great education. The educators of America must now organize these in great state papers and focus them directly on the problems of man.

A New Yardstick on Which to Design and to Appraise a School¹

Another Function for the Four Foundations . .

The foundational concepts of education serve two functions: First, they provide the basis for the design of the School. Second, they constitute a yardstick on which to evaluate the life and the program of a school. I present them here in the form of *the key questions that should be asked about the foundations of any school or college or any system of public or private education.*

I. THE SCHOOL AS A WHOLE

A. ARE THE LIFE AND THE PROGRAM OF THE SCHOOL AS A WHOLE DESIGNED?

- Does their content reveal a sociology and an esthetics, their organization a psychology, their spirit and climate of opinion an ethics, comparable in each case to the norms set up in *Foundations for American Education*?
- Does the Community of the School show that it knows that all building that is to endure must first be designed?
- In general, is the school program really *functional in the lives of the young people*? Is it based on their own vital needs? Adapted to their developing abilities?
- Are the members of the school community treated as Persons?
 - Or merely as Individuals?
 - Or merely as pupils in a school population?
- Does the School reflect a generally happy mood, relaxed and free of tension?
 - Or is it geared to intense tempo, staccato rhythm, the children loquacious, even garrulous, nerve force ready to explode?
- Is the general relationship of students and teachers one of friendly comradeship, of mutual respect for others as Persons? One in which the teacher assumes the role of mature guide and the student the role of

¹Throughout this book I have distinguished between "School" and the larger all-embracing concept of "education," preferring the latter to the former. Nevertheless, for greater compactness and clarity and to expedite the usefulness of the yardstick, I use the term "School"; in each case it may be read to mean "institution of education."

learner, that is, of being guided by one who knows – the whole enterprise approached in the spirit of sincere, questioning inquiry?

- Do teachers say to students: “What do *you* think?”
 - Or is the regime one of command and obedience, of teachers giving orders and students carrying them out? Do the teachers say: “This is the truth, hence it is what you must think”?
- Which of the three different meanings of “Community” best fits this school and locality?
 - (1) The School as a Community – of young people, parents, teachers, and administration.
 - (2) The Community-Centered School.
 - (3) The Education-Centered Community.

B. DEMOCRACY AS A WAY OF LIFE IN THE “SCHOOL”

- How well has the School-as-a-Whole solved the problem of “I” and “We” – that is, of freedom and control?
- Does it recognize the Self as the individualistic raw materials of personality with which it must work – egocentric, aggressive, defensive, and competitive?
- Does it accept the task of building a balance between competition and cooperation as one of its major obligations?
 - Or does it close its eyes to the problem?
- How far does the School practice the concept of equality and the functional interpretation of freedom of thought and expression? How far provide maximum opportunity for all-round growth?
- Is the Bill of Rights (in thought and expression) accompanied by a Bill of Duties; i.e., *freedom* to think and speak paralleled by the *obligation* to do both?
- Who makes the fundamental educational decisions in the School Community? The Board? The Superintendent, Director, Principal? The Teachers? The Students? The Parents?
 - How far does each of these groups actually take part in designing and developing the life and program of the School?
 - Especially, what part do the young people take in designing and operating their School?
 - Are the older ones on the Board of Education or the Planning Council of the School?
 - Or ever included in its deliberations?

II. THE SOCIOLOGY OF THE STAFF

DOES THE SCHOOL HAVE A PHILOSOPHY OF SOCIETY?

- Are the Parents and Teachers and the Director building a theory of American culture, and of the industrialization of world society, upon which to design and build the life and program of the School?
 - Does this take the form of the study of contemporaneous social changes, controversial issues, and the historical trends that precipitated them?

A NEW YARDSTICK

- Do they choose activities, books, and other materials definitely in terms of it?
- Do they bring representatives of various points of view and sources of knowledge and thought into the School to help lead the young people in the study of such issues as property, employment, government, race, and religion?
- Or are these studied merely from books and other materials under the direction of the Staff?
- Or are they ignored?
- Is the program designed to build accumulatively, in the elementary as well as the higher years, an understanding that the American social system now has, in natural resources, technology, and personnel, all the makings for a technically efficient and abundant standard of living for all the people, and that these can come to fruition in our own times if the human blockages can be eliminated?
- Is it doing this by helping the young people to confront frankly its proved characteristics – as a Mixed and Expanding Economy:
 - that the production of abundance results recurrently in an impasse and a struggle for power among six factors – credit agencies, business and manufacturing enterprises, the farmers, labor, coöperatives, and government?
 - that each of these factors has a definite and unique function in a Mixed Economy and that the problem of the generation of our present youth is to find the optimum collaboration of these – especially of the unique role of government in the guaranteeing of the uninterrupted operation of the social system?
- Or does the School's program preach "back to the normalcy" of private enterprise and *laissez faire*?
- Or does it content itself with the study of platitudes and general principles?
- Or does it follow the line of least resistance and avoid the entire problem?
- In connection with the fact of American economic and political power and the democratic tradition does the School teach the implications of the interdependence of the peoples of the entire earth?
- Does it build the conviction that the United States must lead out vigorously in advance as well as coöperate with the United Nations of the earth in world organization for military and economic security and cultural development?
- Is the School confronting frankly its responsibility in the continuing Battle for Consent? Does it confront the young people with the current pitfalls in understanding social conditions and problems?
- Do the young people understand that "he that owns the things that men must have, owns the men that must have them"?
- Does the School build an understanding of the dangers of and trends toward monopoly of the agencies of communication, the organization and vigorous programs of powerful pressure-groups with the

A NEW YARDSTICK

- parallel ignorance, indifference, and lack of organization of the people generally?
- Does the program let youth understand the physical task of getting the facts to the people and the psychological task of organizing the facts so that they can be understood?
 - Does the program deal frankly and fully with the problems of propaganda and censorship?

THE SCHOOL AND THE LOCAL COMMUNITY

- In general, is the School tied vigorously into the life of the community, helping to appraise it and improve it?
 - Or does it merely study it?
 - Or does it avoid it?
- Do the students frankly ask the foregoing questions about their "home town"?
 - Are the specific local conditions named and confronted?
 - Or is the study merely confined to general principles?
 - Do they analyze the actual factors involved in such local controversies as those dealing with strikes, wages, prices, and the cost of living?
- Do they deal with actual local examples of racial discrimination and other problems of minority groups?
- Is the history, especially the recent "current" history, of these things studied?
- Do they study the operation of pressure-groups in their own town? the local newspapers? radio station? movies? the library and museums?
- Does the work stop with study? Does it include definite appraisal? Does it carry on into social action in the community?

III. THE PSYCHOLOGY OF THE STAFF

- Do the Teachers and the Director devote themselves to the continuous building of a better psychological understanding of human nature and behavior, learning, and development?
- What major concepts and attitudes does the organization of the life and program and teaching of the School reflect? Which of the following ones seem to dominate the minds of the Teachers and the Director?
 - The mastery of skill . . . the forming of habits.
 - Confronting personal and social problems with data and thought.
 - Personally initiated activities.
 - Maximum growth in all respects.
 - Creative expression.
 - Sensitive appreciation.
- What kind of balance of "I" and "We" - the Self and the Social Group - operates in the life and program of the School?
 - Do they understand that "I" and "We" is a psychological problem, a matter of desires and fears, of the search for security and even of the power and the glory?

A NEW YARDSTICK

- What appears to be the general "psychology" of behavior of the Staff?
 - That the human act is atomistic or organic?
 - Do they understand that all behavior is marked by integration? That knowing in all problem-situations is generalizing? That key concepts are of central importance in meaning and understanding?
 - Do they accept responsibility for building attitudes?
 - Is their psychology definitely intellectual?
 - Or does it reflect a grasp of the profound role of the body and its functions in every human response?
 - Is their psychology operational; that is, that what a thing means is really the testing of its consequences in action?
 - Are they "social psychologists," alert to the role of the stereotyping influences of family and group life and of self-conscious pressure-groups?

THE PERSONAL PROBLEMS OF THE YOUNG PEOPLE THEMSELVES

- Does the psychological study of the Staff focus definitely on the actual personal problems of the young people themselves?
- Has the modern psychology of personality gripped the Staff?
 - Are there personnel psychologists, Counselors, on the Staff?
 - What do they do:
 - Give tests?
 - How are the results used?
 - Do they explore in detail the personal problems, fears, frustrations, anxieties of the young people? their home conditions?
 - How do they do this? What use do they make of the findings?
- Are the teachers alert to the role of the Self - the egocentric nature of the Individual? to the building of inferiority attitudes? to the deep-running defensive mechanisms in much of human behavior? to the various "Self" and "Wish" psychologies?
- Are the teachers alert to the unique role and relative permanence of the temperamental traits, and the characteristic tempos and rhythms of response of individual students? Do they build educationally on the positive qualities, helping young people around and over the obstacles such temperamental qualities create?
- Do the teachers realistically and sympathetically confront the sex and home life problems of individual students?
 - Do they accept responsibility for sex education?
 - Do they strive definitely for coöperation between the School and the individual homes?

THE SOCIALLY USEFUL WORK PROGRAM

- What work, recognized by the students as socially useful, do they do? For what compensation?
 - Do they build, repair, or operate the buildings? Carry on the clerical work? the work of the dining rooms and kitchen? other maintenance work?
 - What other socially useful obligations do they regularly take on?

IV. THE ESTHETIC LIFE OF THE SCHOOL

- Are the Teachers and the Director definitely concerned with the development of an “Esthetics” upon which to design and build a vigorous expressive life and creative and appreciational program?
- Is this revealed by giving a marked proportion of the time of the school program to the expressive arts?
- Are the young people encouraged to state what they think and feel, *their way*?
- What is the level of the creative life? Is there a high order of expression throughout the School? Are many or few media of expression used?
- Are there outlets in all areas of the School’s program for vigorous original expression?
- Are standards of form definitely set?
 - How are they used?
 - With what success?

V. A PHILOSOPHY OF CONDUCT AND VALUE

- Are the Teachers and the Director working vigorously at the task of developing a philosophy of life and education upon which to design and build the life and program of the School?
- Does the general behavior of Students and Staff reveal a consciously developed ethics?
- What is the School’s theory of freedom and control? How far has it solved that problem?
- How is discipline obtained?
 - By imposing control?
 - By the young people themselves?
 - By teachers and administrators?
- How is the balance of discipline and freedom of initiative worked out?
- Does the emotional program of the School tend to build self-knowledge in individuals?
- Does the School in its higher reaches consciously strive to encourage students to build personal philosophies of life? Are there the makings of design in life?
 - Do the older ones show that they are building creative patterns of life, moving in a socially good direction?
 - Or are they drifting opportunistically from episode to episode?

SUBJECT INDEX

- Ability, grouping of pupils, 634
Abstract art, 464
Act, The: organic and integrative, 105-109; appreciative, 112; Rugg on psychology of, 206-234; psychology of - summing up, 207-209
Acts, types of, 111-112
Adaptation, Darwinian concept, 102
Administrative tinkering, fifty years of, 633-635
America, a class or classless society, 352-357
American Society, economic characteristics of, 319-321; a welter of interest-groups, 359-362
American traits, beliefs, and values, 335-339; unifying influence, 384
American way, what is it? 327, 334-339
Animal studies, Köhler, 150-153
Anthropology: new, 56; and studies of American community life, 327-347
Apparatus tests, 789
Aptitude testing, 787-790
Architecture, modern, 408-414
Associationism, 39
Attitude: and the cue concept, 226-229; and set, 227-229; and total gesture, 229-231; and its measurement, 790-793
Authoritarian: philosophy of colleges, 262-263; education, 605-649
Authority, philosophy of, 32-37
Ballet: American, 421-423; beginning of, 424; classic, 428
Basic personality structure, Kardiner, 327
Behavior, non-intellectual factors, 96-97
Behaviorist psychology, 123, 136-145
Binet Verbal Intelligence Test, 780-783
Biology, Darwinian, 102
Body, primary expressional instrument, 419
Body-movement, 169, 210, 444
Body-response: in esthetic appreciation, 212; and meaning, 215; of feeling - the dance, 422
Broad fields of knowledge, 710
Business cycles and unemployment, 295
Capitalism, Veblen's appraisal of, 268
Censorship and social danger, 377
Center-to-right vs. center-to-left on four major issues, 385, 386
Child-centered emphasis, 105, 562
Cities, studies of changing life, 332-334
Class: problem of, 347-364; definition, 351; Marxian analysis, 358
Class concept: meaning, 349; economic, social, and psychological factors, 350; concept and the polls, 352-353
Class consciousness in America, 357-362
Class society, 357
Climate of opinion: of the colleges, 261-263; molding concepts of, Rugg, 327
College entrance requirements, liberalizing of, 643
College Examining Boards, 632-633
Committee method of educational change, 629-635
Communication: physical machinery of, 372; property barriers, 373; and the public mind, 375
Community, education-centered, 683
"Community schools in action," 572
Competence: in design, 417; in building and operation, 418; problem of, 689
Competition: and security, 345; and conformity and hypocrisy, 489-490

SUBJECT INDEX

- Concepts, new economic, 286-287
 Conditioning of responses, 123, 139-140
 Configuration, principle of, 152-153
 Connectionist psychology, 122-145
 Consensus, Men of the, 27-31, 622-627
 Consent: social psychology of, 366-394;
 three principles, 366-368; Battle for,
 368, 680; problem of, 368-370
 "Constitutional" psychology, 776
 Contemporary civilization: 13; course
 in, 573
 Control: problem of, 44-46; two kinds
 of, 690
 Controversial issues of the social sys-
 tem, 674, 677-679
 Creative act: 112; Watson on, 141;
 Autobiographies on the, 222-224;
 chief characteristics of, 447-462; how
 the artist works, 462-463
 Cultural change, socializing compulsion
 of, 498
 Cultural confusion: 7-8; and progres-
 sive retreat, 1930's, 612-614; de-
 nounced, 620
 Cultural development, stages in, 400,
 404-435
 Cultural lag: in action, 249-252; Og-
 burn, 292; factors in, 293-294; social
 practice and moral codes, 490
 Cultural unity, principle of, 7-8
 Culture, The: 322-324; and society, pre-
 diction, 52-58; American patterns of
 and changes in, 1890's-1940's, 241-
 258; the study of industrial, 259-287;
 and the New History, 274-275; sci-
 ence of, foundations for, 288-321;
 gives child the concepts, 388-393
 Culture-pattern: 324-326; and dominant
 concerns of the people, 326-328; and
 World War II, 363-365
 Curriculum: core, 595, 714-716; sub-
 ject-centered, 605-649; individualiz-
 ing the, 634-635; of changing school
 and college, 638-642; new meaning
 of, 650-651; development, design in,
 651-653; designed from total culture,
 653-655; and the personal needs of
 the students, 654, 672; foundational
 concepts, 654-655; planned in ad-
 vance, 655-657; Who designs it?
 659; design group, 660; problems
 of, 661; and problem of philosophy,
 661-662; selection, a critical test of,
 664; satisfying the conditions for
 growth, 665; contrasted approaches,
 666; social-demands, or adult-needs,
 approach, 668; areas of human activ-
 ity and problems of life, 669; shunned
 and neglected areas, 674-697; total
 subject matter of, 690; organization of
 the, 698-718; conflicting theories
 and plans, 700; experience-centered
 plans, 702-707; design, criteria for,
 706-707; reorganization within the
 school subject, 708; summary of, 717-
 718
 Dance, modern, 419-430
 Defense mechanisms, 202
 Democracy, 43, 207
 Design: in education, lack of, 23-24;
 based on philosophy and sociology,
 412-414; and competence, 417; and
 sovereignty, 417; problems of, 744-
 805
 Distortion, technical problem of, 465
 Dominant concerns of the people, Hers-
 kovits, 327
 Dominant implicit ontology, Feibleman,
 327
 Economic changes, recent, 295
 Economic power secures political power,
 270-272, 276-277, 506
 Economists: and the psychological study
 of economic society, 280; conven-
 tional, their views, 296-300
 Economy in form, principle of, 459-460
 Economy of Time, Committees on, 606
 Education: liberal, 9-10; special, prob-
 lems of, 11-12; and temperament,
 177; great goal of, 203; subject-
 centered, characteristics of, 519-530; con-
 ceptions of, in 1890, 523-530; sub-
 ject-centered, fifty years of liberal arts,
 648; seven cardinal principles, 670

SUBJECT INDEX

- Educational change: consensus on, 3-31; two methods of, 629-637; and reconstruction, 635-637
- Educationalists, assumptions and postulates, 728
- Emotion, role of, 173
- Emotional reactions, unlearned, 138-139
- Empathy, Lipps's theory, 211
- Employment, full, social-economic problem No. 1, 282
- Endocrine glands and somatico-behavior types, 778
- "Escape" mechanisms, 201
- Essentialists, The: 1910's-1940's, 607-612; platform, 608, 610
- Esthetic Act: 111; and The Self, 450-451; and clear seeing, 452-454; abstraction, 463-464
- Esthetic concepts for education, 469-470
- Esthetic life in the school, 684
- Esthetics: psychology of, 124; esthetic frontier, 395-470; creative revolution, 397-435; the new, 437-470
- Ethical principles, how stated, 480-481; concepts for the new education, 512-513
- Ethics in a changing society, problem of, 473-514
- Evaluating the whole school or school system, 797-802
- Evolutionary biology, British, 88, 89
- Examination, comprehensive, types of, 644
- Experience: 102-207; philosophy of, 38-58; psychology of, 73-121
- Exploitive Tradition, 35-37, 43, 71, 165, 410, 415, 488-490
- Expression: and the creative act, 437-470; arts of, 692
- Expressional artist: and movement, 420, 422; great concept, 436-437, 440, 447-448
- Expressionist movement in Europe, 405
- Feeling: 84; role of, 440-441; and the esthetic act, 442; distinguished from emotion, 442
- Feeling-body-response psychology, 83-87
- Field-force-energy: 59; psychology of, 157-163
- "Field of force": 157; structure of the mind, 159, 208
- First Principles: demand for, 621; sources, 624-627
- Force people, 67, 69
- Forces - felt-movements - "feelings," 440-443
- Forces in culture and a sense of inferiority, 209
- Form: designed, 447; and the creative act, 455; three measures of, 457-462
- Freedom: and control, 193, 313-315; in charters of Liberty, 366-368; as absence of restraint, 473-474; and order: making the democratic idea work, 686-690; lack of a theory, 687
- Freudian psychoanalysis, 100
- Frontiers: five American, 24-26; in philosophy and religion, 25; of the expressive arts, 25
- Function concept: 101-102, 416, 460-461; Louis Sullivan and the, 408-410
- General education: 9-10, 595; colleges accept for all, 647
- General *vs.* specific traits, controversy over, 756-759
- Generalization: 210, 216-226; via the report of the separate senses, 216-226; via the report of the total organism, 218-226
- Genteel Tradition, 403
- Geographic factors, Turner and, 275-277
- Gestalt: psychology of, 100, 123; antecedents of, 145-147; as a field psychology, 145-163
- Government in the social system: how much? 313-318; education must teach increasing role of, 316-318
- Great Books, 615, 616, 622, 625
- Great Depression: 272, 300, 302, 360, 369; two opposed social philosophies, 295-321

SUBJECT INDEX

- Great Tradition, 8-9, 35-37, 43, 71, 165, 205, 400-404, 410
- Great Transition, 5-6, 25, 241-258, 408
- Group Mental Ability Test, 784-787
- Growth: concept of, 104; and the Person, 207; guiding principle of, Dewey, 548; conditions for, 549-551
- Growth process: 189-202; the nursery-school years, 191-192; childhood and the elementary school, 192; adolescence and youth, 194-195
- Habit: James on, 91; acts of, 111, 112-116
- Herbartianism, 39, 541
- Heredity *vs.* environment, 184-189
- History: the New, 273-275; human geography and, 277-278; economic interpretation of, 279
- I and We: 44-46, 189, 192-195, 199, 314, 484, 505; individual and the culture, freedom and control, 209; "I" factors, 311-312, 506
- Individual differences: 314; Thorndike on, 132
- Industrial designers, 414
- Inferiority: and the self-defensive mechanisms, 199, 200; and the intimate problems of personal living, 674; problem of, 676
- Insecurity, the role of feelings, 230-231
- Insight, 150, 152, 153
- Instincts, 138-139
- Intellectual Revolution, pioneers of, 38-40
- Intelligence: what is, 180-183; kinds of, 183; mechanical, 183; social, 183; verbal, 183
- Intuition: 2-18, 220, 225; psychology of, 124; Whitehead on, 222
- Intuitive act, 223
- Kinesthetic or space-distance sense, 217
- Knowing, act of: Dewey's description of, 105-109; role of body-movement, 210-216; and the organism, 216-226; and the separate senses, 216-226
- Knowledge, a feeling of relations, 93
- Laissez faire*: 263, 314; belief in, 342-343
- Learning, transfer of, 152
- Liberal arts: groups, 12-15; education, 605-649; tradition, 614; in college and secondary school, 627-635
- Living, school of, 573
- Loyalties, disappearing, 492
- Marking system, 634
- Mass action, integration and differentiation of, 170
- Mathematical and statistical methods, 738-739
- Meaning: and memory, Watson on, 142; and the cue concept, 226-229; field of, and attitude, 227-229
- Measurement: central role of, 735-744; fifty years of, 739-744; and evaluation, 747-750; types of instrument, 749
- Measuring: expressive products, 740-744; ability, 744; capacity, 744; intelligence, 779; the product of school-work, 793-796
- Mechanism: and Organism, contrasting postulates, 59-70, 726-728; last stand of, 122-163
- Mental "age," 764-766
- Mental measurements, chief functions of, 783
- Mixed economy, 416
- Moral climate of opinion, formation of, 478-480
- Moral-ethical problem: stated, 486-514; and an insecure world, 493; and the structure of power, 505-514
- Moral obstacles in the culture, 488-495
- Moral resources, 498-505
- Morals: and ethics, definition, 475-478; and self-interest, 496
- Morning assembly, Parker's, 532
- Movement: profound concept of, 96-97, 444-447; tendencies toward, 169-171; body-response in expressive painting, 213-214; designed, 419-430; in the theater, 428
- Movements: true, or primary, 422

SUBJECT INDEX

- Nature *vs.* nurture, 184-189
Needs, experimental studies of, 156-160
Nonobjective art, 464
Normative research, fifty years of, 803-804
Norms and standards, 730-731
- Ontological synthesis, need for, 334-335
Operational concept of meaning: 76-83, 135, 207; Bridgman rediscovers it, 83; Dewey accepts the, 107-109
"Organic capitalism," Wright on, 413
Organic idea: in the natural sciences, development of, 62-65; in the arts, 66-68
Organism-as-a-whole: 106; organization, wholeness, 208; primal awareness of, 218
Organismic laws, Wheeler, 162-163
Organization: principle of, 457-459; three psychological criteria, 699
- Parallel-track plans, 633
Pecuniary control, Veblen on, 269-272
Pencil-and-paper tests, 789
Perceived movement, Wertheimer on, 149-150
Person, The: 164-205, 400, 505; as "I," 203; characteristics of, 203; and a philosophy of living, 204; -as-part-of-"We," 204
"Personalism," 165
Personality: Watson on, 143; psychology of, 164-205; raw materials of, 169-189; depth psychology of, 195-202; permanence of new materials of, 208; measurement of, 771-787
Philosophy and psychology of experience, American, 30-31, 264
Physique, measuring, 776
Policy-making, who is competent? 417
Popular understanding and organization of the facts, 379-380
Population, problems of a changing, 244-248
Power: problem of, and three psychological factors, 507-508; struggle for, the stage set for, 508; legitimacy of, and problem of, 511; struggle for and property, 675, 678
Primal awareness, 221
Principles of Peirce, 81
Problem: and the act of thought, 110-116; and problem-solving thinking, 208
Problem solving via the Gestaltists, 153
Producing and consuming capacity of America, studies of, 304
Production: full, and employment, 304-321; -employment impasse, chief factors, 311-313
Professional curriculum students, work of, 639-642
Professors of education and the higher studies, 724-727
Progressive movement in education: child-centered, 541-570; What had we learned? 561-568; lack of theory, confusion in psychology, 564-566; summary of, 604; attacked in the Depression, 611-613
Progressives, The: Did they succeed in college? 600-602
Progressive schools revisited, 19-24
Propaganda: and censorship, 375; seven devices, 378
Psychic energies, experimental studies of, 156-160
Psychic tension, theory of, 155-160
Psychoanalysis, 123, 195-202
Psychological law: of effect, 130; of exercise, 130
Psychologies, nine minor ones, 122-123
Psychology: new, 46, 52, 71-234; of action, 91-92; self, 91-92; feeling-body-response, 92-95, 140-142; trail blazers in, 97-98, 120-121; behaviorism, Chicago Group, 99-121; functional, 101-102; social, beginnings of, 104-105; of the progressive schools, 123; Thorndike connectionist, 123; of the person, 123, 124; of skill, 130-132; conditioned-reflex, 136-145; reconstruction of, 165; operational, 546; of the act tested, 546-547

SUBJECT INDEX

- Psychopathology, French, 100
- Public opinion: Can the people get access to the facts? 372; control of, 680
- Quantitative methods in education, history of, 720-723
- Quotient — a measure of rate of growth or brightness, 766
- Race conflict: 675; social-economic problem No. 2, 282
- Races of mankind, new concepts, 281-285
- Racial and other social conflicts, 679
- Rank-order evaluation, 729-730
- Rating scales and score cards, 800-802
- Ratio IQ vs. Deviation IQ, 768-769
- Reasoning: 498-505; Thorndike on, 131
- Reflex-arc concept in psychology, 76, 106, 266
- Reflexes, unlearned, 170
- Relations as feelings, 94-95
- Reliability, problem of, 761-764
- Resonance, 172
- Response, nature of human, 133
- Rhythmic body-movement, 446
- Rights, corporate property, Jones's Study, 355-357
- Rorschach Method, 773-774
- Rural life, the study of changing, 329-332
- Rural social analysis, role of government, 331-332
- Scale, its twofold nature, 737-738
- Scholastics: theory, 616; sources *re* theories, 618-619; contributions to great foundations, 619-627; and the social order, 626-627
- School: nursery, 191; child-centered, 530-539, 558-559, 569-570; community-centered, 531-532, 552; general-education-centered, 596
- School program, varied activities of, 693-697
- School standards, coöperative studies of, 799-800
- Science: of man, 68; of society and culture, 68; and the scientific method, 731-735
- Scientific: method of thought, 217; and esthetic way of working, relation of, 466-467; method, fifty years of, 719-805; concepts for a new education, 804-805
- Self: central role of, 107; rise of the, 189-190; and Other, 189, 195, 229, 399; in expression, 207; and Society, 261, 487; makes its personal statement, 448-450
- Self-defense, psychological, 201
- Self-feelings, 93-94
- Self's expression, 147
- Sex, love, and home life, 674, 676
- Signs, role of, 116-120
- Social, The, concept of, 208
- Social change: 5-6; and American society, 237-258; problem of, 292-321
- Social control, and the development of the Person, 687
- Social demands or areas of living approach, 669
- Social heritage, 666
- Social occupations in the school, 553
- Social planning, confusion about, 343-344
- Social psychology, origin of, 265-266
- Social sciences, founding of, 52-58
- Social studies: beginnings of, 574-575; integrated materials, 575-576
- Social transformation, the intellectual roots of, 34-35
- Social use, concept of, 608-610, 669
- Social "We" factors, 506
- "Socialism," Holmes's, 483-484
- Society: psychology of, 124; American, 1890's-1940's, 256-257; study of five factors in, 263-264; and culture, third generation of students of, 288-290
- Society-centered: foundations, 571-604, 635-637; emphasis, 636
- Sociologists, new: the philosophy of experience, 300-321; what they believed, 302
- Sociology, social frontier, 235-393

SUBJECT INDEX

- Sovereignty, problem of, 688
S-R bond connectionist psychology, 124, 127
Stanford-Binet IQ, meaning, 766-768
Stanines, 754
Stereotype: 223; and climates of opinion, 383-393; law of, 391-392
Subject matter: of education, 12-15; problems of, 551-552; first problem, its selection, 661-673; second problem, its organization, 661, 698-718; meaning of the concept, 662-664; its two categories, 691; major divisions, 691; distinguished from school subject, 701; correlation, 709
Subject reorganization, four plans, 707-711
Subject *vs.* experience activity, three major differences, 701, 703-706
Surveying of schools, 798-799
Sustained-Yield, principle of, 415
- Technical efficiency, 251
Techniques of life, 692
Temperament: 171-178; and security, 174; and character, 174-176; and education, 176; measuring, 777-779
Tempo, 172
Tensions, study of, 154-163
Tests: scholastic achievement, 644; scholastic aptitude, 644, 645; content of the, and the curriculum, 760-761
Theater and designed expressional movement, 428-429
Theory, role of, 155
- Things and forces, great dichotomy, 438-440
Thinking: with the body, 44; problem-solving, 110-116; Watson on, 140-141, 211
Thought: the great shift in, 32-70; acts of, 111; defensive, 111; higher processes and body-response, 140-142
Topological: psychology, 157, 158, 161; concepts, 160
"Transfer" controversy, 134
Trends, social, and nature of our times, 308-310
TVA, cultivating the Great Valleys, 414-418
Types of men, 174-176
- Unemployment, mass, 252-254
- Validity: and reliability, the interrelationship of the two, 752-754; problem of, 754-755; factorial, 755
- Wishes, repressed, Freud on, 198
Work, personally and socially useful, 674, 675
Wundtian elementarism, 123
- Youth: and the high school, 1930's-1940's, 571; problem, 582-604; American, some critical facts, 583-584; needs of, 588-591; personal psychological problems of, 591-593; and the community, 596; work concept in thirty schools, 597

INDEX OF NAMES

- Ackerman, Frederick L., 267, 300
Adams, Charles Francis, Jr., 402, 537
Adams, Henry, 58, 407
Adams, John, 280
Adler, Alfred, 166, 195
Adler-Hutchins group, 7, 12
Adler, Mortimer J., 574, 613, 615, 619, 624
Aikin, Wilford M., 585, 593, 601
Alberty, Harold B., 565, 714
Allport, Floyd H., 170
Allport, Gordon W., 140, 156, 164, 166, 167, 174, 182, 219, 228, 327, 370, 756, 772
American Catholic Philosophic Association, 613
American Council on Education, 5, 582, 584
American Historical Association, 635
American Youth Commission, 4, 582, 584, 588
Angell, James Rowland, 90, 99
Aquinas, Thomas, 37, 623
Armory Show, 431
Arthurdale Community School, 572
Ayres, L. P., 328, 793, 794
Bagley, William Chandler, 575, 607, 610, 636
Baldwin, James Mark, 197, 259
Ballet Theater, 428
Bancroft, George, 57, 405
Barnes, Harry Elmer, 54, 273, 278
Barr, Stringfellow, 614, 619
Beard, Charles Austin, 74, 259, 273, 279, 580, 637
Beard, Charles and Mary, 348
Beatty, W. W., 561
Beiswanger, George, 426
Bell, Howard, 582
Bellamy, Edward, 264, 406
Benedict, Ruth, 326
Benedict and Weltfish, 248
Bennett, Hugh, 301, 415
Bergson, Henri, 219
Berle and Means, 356
Binet and Simon, 181, 765
Bingham, Alfred, 349, 580
Boas, Franz, 74, 100, 259, 266, 281-285
Bode, Boyd H., 110, 117, 118, 137, 218, 565
Bogardus, Emory, 291, 376
Bogoslovsky, Boris B., 166, 219
Bonser, Frederick, 572, 575, 636
Bowen, Catherine Drinker, 482, 485
Bowman, Isaiah, 278, 637
Brameld, Theodore, 30, 614
Breasted, James H., 273
Bridgman, P. W., 83
Brooks, Van Wyck, 204
Brown, J. F., 149, 155
Bruhnes, Jean, 277
Brunner, Edmund de S., 330, 578, 579
Bryce, James, 348
Buchanan, Scott, 574, 614, 615, 619
Burk, Frederic, 634
Burnham, Daniel, 402, 410
Buros, Oscar, 751, 771
Burt, Cyril, 181
Cannon, Walter B., 63, 171, 173, 200
Cantril, H., 370
Carmichael, Leonard, 185
Carr, William G., 643
Carr-Saunders, A. M., 244
Caswell, Hollis L., 639, 669, 715
Cattell, James McKeen, 42, 74, 125, 720, 787
Cézanne, Paul, 405

INDEX OF NAMES

- Charters, W. W., 370, 607
 Chase, Stuart, 116, 267, 300
 Cheney, Sheldon, 214, 436, 455
 Child, C. M., 565
 Childs, H. L., 370
 Childs, John L., 578, 579
 Clapp, Elsie, 572-573
 Clark, Harold F., 578, 579, 709
 Clark, John Roscoe, 94
 Clerk-Maxwell, James, 38
 Coghill, 63, 64, 170
 Cohen, Morris, 76, 82
 Coleman, Satis, 568
 College Entrance Examination Board, 632
 Collings, Ellsworth, 573
 Commission on Human Relations of the Progressive Education Association, 591, 593
 Commons, John R., 74, 286
 Comte, Auguste, 53-55
 Conant, James B., 643
 Cooke, Flora J., 19, 530
 Cooley, Charles Horton, 74, 190, 197, 260, 261
 Copland, Aaron, 427
 Corey, Lewis, 580
 Counts, George S., 577, 578, 579, 580, 637
 Curtis, Stuart A., 575, 608, 722
 Cowell, Henry, 427
 Craig, Edward Gordon, 406, 455
 Croce, B., 219
 Cronbach, Lee J., 762, 763
 Cubberley, E. P., 633
 Curti, Merle, 580, 637

 Danz, Louis, 214, 436, 445, 446, 455
 Darwin, Charles, 41-43, 100
 Davies, Arthur, 74, 431
 de la Blache, Paul Vidal, 277
 de Mille, Agnes, 428, 429
 Denishawn, 424
 Descartes, René, 59
 Dewey, Alice Chipman, 103
 Dewey, John, 74, 75, 76, 81, 84, 97, 99-121, 166, 197, 261, 266, 436, 541, 579, 580, 618, 622, 662, 715
 Dewey (John) Society for the Study of Education and Culture, 4, 578-579
 Dewey Laboratory School, 19, 23, 103-104, 543-557
 Dilthey, Wilhelm, 147
 Doob, Leonard W., 370, 375
 Dorfman, Joseph, 262, 265, 267
 Dostoevski, F. M., 406
 Drake, St. Clair, 329, 348
 Duchamp, M., 214
 Dunbar, H. Flanders, 166
 Duncan, Isadora, 74, 408, 420-423, 437, 444, 445, 455
 Dunham, Katherine, 429
 Durkheim, Emile, 56
 Durost, Walter N., 758

 Eddington, Arthur S., 83, 441
 Education for Freedom, Inc., 5, 614
 Edwards, Anna Camp, 77, 103, 118, 547
 Ehrenfels, Christian, 147
 Eight-Year Study, 594-595, 599-604
 Einstein, Albert, 60
 Eliot, C. W., 90
 Elliott, Edward, 721
 Emerson, Ralph Waldo, 401
 Erskine, John, 574, 613
 Eurich, Alvin, 587

 Fabian Society, 272, 406
 Faggi, Alfeo, 432
 Fairchild, H. P., 244, 580
 Faraday, Michael, 38, 60-61
 Farrand, Max, 637
 Fawcett, H. P., 709
 Fechner, Gustav Theodor, 47-48
 Federal Communications Commission, 301
 Feibleman, James K., 76, 81, 85
 Fisher, Dorothy Canfield, 584
 Fisher, George, 793
 Fiske, John, 79
 Flanagan, J. C., 751, 759
 Fowler, Burton, 593
 Frank, Waldo, 165, 166, 219, 224, 349, 622
 Frazer, James G., 56
 Freeman, F. N., 178, 781

INDEX OF NAMES

- Freeman, G. L., 188
 French, John, 19, 658
 Freud, Sigmund, 166, 195-202, 625
 Froebel, Friedrich Wilhelm, 540-542
Frontiers of Democracy, 581
 Frost, Robert, 407, 455
 Fry, C. C., 171, 172, 184
- Galileo, 223
 Galton, Francis, 41-43, 100, 125
 Garland, Hamlin, 406
 Gates, A. I., 170
 Gauguin, Paul, 405, 437
 George, Henry, 264, 406
 Gesell, Arnold, 179
 Gestalt, 145-163
 Giddings, Franklin H., 328, 329
 Gideonse, Harry D., 580, 618
 Giles, H. H., 585
 Ginsburg, B., 348
 Graham, Martha, 421, 424, 425-428, 437
 Grant, Madison, 248, 283
 Grossman, Mordecai, 579, 580
 Guilford, J. P., 751, 753, 755, 758
 Gutheim, Frederick, 411, 436
- Haggard, H. W., 171, 172, 184
 Haldane, J. B. S., 63, 64, 244, 248
 Hall, C. Stanley, 90, 199, 262
 Hand, Harold, 639, 669
 Hanna, Paul R., 579, 639, 669
 Hansen, Alvin, 300, 301
 Harap, Henry, 5, 639, 669
 Harris, William T., 542
 Hartmann, George W., 110, 128, 129, 146, 148, 149, 153, 155, 182, 229, 291, 580
 Hartshorne, Charles, 81
 Harvard Committee, 8, 4-13, 643
 Harvard Report, 628
 Hayakawa, S., 116
 Hayes, Edward Cary, 260
 Heffron, Ida, 530
 Helmholtz, Hermann von, 47-50
 Nelson, Harry, 149, 153
 Henri, Robert, 74, 431
- Herbart, Johann Friedrich, 39, 540, 542
 Hertz, Heinrich Rudolph, 38, 60-61
 Hinton, Carmelita, 19
 Hitler's *Mein Kampf*, 283
 Hobbes, Thomas, 39, 40
 Hobson, John A., 272, 406
 Hollingworth, Leta S., 186
 Holmes, Oliver Wendell, Jr., 74, 78, 264, 405, 481
 Holzinger, Karl J., 750
 Hook, Sidney, 579, 619
 Horn, Ernest, 575, 607, 668, 760
 Horst, A. P., 751
 Horst, Louis, 427
 Hoskins, R. G., 171, 775, 776
 Howells, William Dean, 264, 403
 Hull, Clark L., 756, 757, 778, 788
 Hullfish, H. Gordon, 565, 579
 Humphrey, Doris, 421, 424, 429
 Hutchins, Robert Maynard, 7, 613
 Hymes, James, 576, 580, 581
- Illinois Society for Child Study, 103
 Infeld, Leopold, 60
 Institute for Propaganda Analysis, 371
 Ives, Charles, 405
- James, Henry, 77, 403
 James, William, 74, 87, 88-97, 122, 174, 197, 481, 622, 625
 Jennings, H. S., 63, 178, 185
 Johnson, F. Ernest, 578, 579
 Jones, Alfred Winslow, 329, 348, 355
 Jones, Bassett, 245, 267, 290, 300, 305, 308
 Jones, Robert Edmond, 441
 Judd, Charles Hubbard, 19, 125, 134, 210, 326, 328, 544, 575, 607, 636, 720, 722
 Jung, C. G., 166, 171, 174, 195, 219
- Kandel, Isaac L., 607
 Kant, Immanuel, 39, 40
 Keliher, Alice V., 167, 565, 587, 591
 Kelley, Douglas McGlashan, 773
 Kelley, Truman L., 178, 724, 750, 762
 Kilpatrick, William Heard, 110, 218, 555, 565, 573, 575, 579, 580, 581, 636

INDEX OF NAMES

- Klineberg, Otto, 291
 Klopfer, Bruno, 773
 Koffka, Kurt, 110, 148, 152
 Köhler, Wolfgang, 135, 148, 150
 Kolnai, Aurel, 248, 253, 370
 Korzybski, Alfred, 116, 123
 Kretschmer, Ernst, 171, 174, 778
 Kuhlmann-Anderson, 770, 779, 780
- Laboratory School (Dewey), 104, 105, 543
 Ladd-Franklin, Christine, 81
 Lashley, K. S., 63, 129, 145, 170
 Laski, Harold, 272
 Lasswell, H. D., 174, 370, 371
 Lazarsfeld, P. F., 371
 Leigh, R. D., 576, 581
 Lewin, Kurt, 148, 154-163, 167, 168
 Lilienthal, David, 291, 301, 416
 Lindeman, Eduard C., 579, 580, 724
 Linton, Ralph, 290
 Lippmann, Walter, 371, 376
 Locke, John, 40, 59, 366
 Loeb, Harold, 300, 305, 306
 Loeb, Jacques, 63
 Loeb Committee, 290
 London School of Economics and Political Science, 272, 406
 Lynd, Robert S., 337, 637
 Lynd, Robert S. and Helen M., 329, 336, 348
- Mackenzie, Gordon, 5, 639, 669
 Marin, John, 213, 439, 440, 444
 Marshall, Leon C., 286, 637
 Martin, Everett Dean, 614
 Martin, John, 212-213, 421, 445
 Marx, Karl, 264, 265, 625
 Mayhew, Katherine Camp, 77, 103, 547
 Mayhew and Edwards, 117, 225, 543, 545
 McKeon, Richard, 614, 615
 McMaster, John Bach, 57
 McMurry, Charles and Frank, 541, 542
 Mead, George H., 100, 190, 261
 Mearns, Hughes, 567
 Melville, Herman, 405
Mental Measurements Yearbooks, 751
- Merriam, Charles E., 637
 Metaphysical Club, 73, 77-79, 481, 482
 "Middletown," 334, 336, 337, 354, 358
 Mill, James, 39, 59
 Mill, John Stuart, 39
 Miller, Clyde R., 375, 579
 Mitchell, Broadus, 580
 Morgan, Lewis H., 56, 301
 Morris, Charles W., 100, 116
 Mort-Cornell Guide, 801
 Moscow Art Theatre, 406
 Moulton, Harold G., 286, 305, 306
 Mumford, Lewis, 290, 580
 Murphy, Gardner, 166, 167, 291, 371, 758
- National Committee on Mathematical Requirements, 606
 National Education Association, 640;
 NEA's Educational Policies Commission, 642-643
 National Herbart Society, 103, 635
 National Resources Planning Board, 290, 292, 301, 346
 National Society for the Study of Education, 4, 103, 575, 635
 Needham, Joseph, 62, 63, 65
 New England Association of Schools and Colleges, 632
 Newlon, Jesse H., 578, 579, 637, 643
 North Central Association of Colleges and Secondary Schools, 4, 632
 Norton, John K., 643
 Nourse, E. G., 291, 305
- Odum, Howard, 637
 Ogburn, William Fielding, 290, 291, 292, 580
 Ogden, R. M., and Richards, I. A., 76, 116, 149, 219
 Otis, Arthur S., 746, 768, 769, 784
 Otis IQ, 766
 Overstreet, Harry A., 579, 580
- Parker, Carleton, 280-281
 Parker, Francis W., 532, 536-539, 541, 662, 669

INDEX OF NAMES

- Parker (F.W.) School, 19, 57, 530-539, 658
 Parker, J. Cecil, 5, 639
 Parrington, Vernon L., 74, 402
 Patten, Simon N., 74, 260, 265
 Pearl R., 244
 Peirce, Benjamin, 224
 Peirce, Charles Sanders, 73-89, 97, 116-117, 206, 223, 266, 481, 485, 622
 Perry, R. B., 77
 Pestalozzi, Johann Heinrich, 540-542
 Peterson, Houston, 614
 Pierce, Bessie Louise, 637
 Planck, Max, 83
 Poincaré, Henri, 224
 Pollock, Frederick, 483
 Pond, Irving K., 213
 Prescott, Daniel, 565
 Primus, Pearl, 425, 429
 Progressive Education Association, 4, 559-560, 563, 576-577; Eight-Year Study, 593-604, 672; Three Commissions, 602-604, 635, 714
Psychometrika, 750, 763
 Putney School, 19
- Rainey, Homer P., 584
 Rank, Otto, 167, 195
 Raths, Louis, 565
 Raup, Robert B., 578, 579
 Rautenstrauch, Walter, 300
 Read, Herbert, 436
 Redefeer, Frederick L., 561, 576, 577, 581
 Reeves, Floyd W., 310, 584
 Rice, J. M., 793
 Richards, I. A., 76
 Richardson, Henry H., 403
 Robbins, Jerome, 425, 429
 Robinson, James Harvey, 57, 74, 259, 262, 273, 580
 Roger Clark Ballard Memorial School, 572
 Roosevelt, Eleanor, 572
 Roosevelt, Franklin, 416
 Rorschach, Hermann, 773
 Rousseau, Henri, 405, 542
- Royce, Josiah, 90
 Rugg, Earle, 575
 Russell, Bertrand, 117
 Russell, William F., 584
 Ryan, W. Carson, 561, 576
 Ryder, Alfred, 431
- St. Denis, Ruth, 421, 423
 St. John's College, 12, 574, 614, 615, 616, 617
 Sandburg, Carl, 102, 407
 Santayana, George, 90, 403, 436
 Sax, Karl, 244, 245, 248
 Schlesinger, Arthur M., 279
 Scholastics, 622, 625; Chicago-St. John's, 613, 627
 Sears, Paul B., 565
 Semple, Ellen Churchill, 277, 278
 Shaler, Nathaniel Southgate, 275
 Shaw, George Bernard, 406
 Shawn, Ted, 421, 423
 Sheldon, William H., 170, 171, 776, 777
 Sherrington, Charles S., 64
 Smith, B. L., 371
 Sinclair, Upton, 407
 Smith, Eugene Randolph, 585, 597, 761
 Smith, J. Russell, 278
 Smith, T. V., 619
Social Frontier, 25, 301, 579, 639
 Social Frontier Group, 74, 300, 577, 581
 Sombart, Werner, 265
 Sorokin, Pitirim, 219, 220
 Spearman, Charles, 750, 756
 Spencer, Herbert, 53-55, 663
 Speyer School of Teachers College, 572
 Spinoza, Benedict, 219
 Spranger, Eduard, 171
 Stanford-Binet IQ, 766, 779
 Starr, Frederick, 100
 Stein, Leo, 436, 442
 Steinmetz, Charles R., 267
 Stern, William, 166, 167, 219
 Stevens, S. S., 776
 Stieglitz, Alfred, 74, 430-431, 437
 Stoddard, George D., 178, 180, 187
 Stoddard, Lothrop, 248
 Stone, Cliff, 721
 Stowe, Harriet Beecher, 405

INDEX OF NAMES

- Strayer-Engelhardt Score Card for
 Junior High School Building, 801
 Strayer, G. D., 721
 Studebaker, John W., 584
 Sullivan, Louis Henry, 74, 102, 403, 405,
 408-410, 437, 455, 622
 Tawney, R. H., 272
 Taylor, Katharine Whiteside, 19, 587
 Teachers College Discussion Group,
 578-579
 Terman, Lewis M., 178, 186, 746, 784,
 793
 Terman Group Test of Mental Ability,
 780, 784
 Terman-McNemar, 785, 786, 787; IQ,
 766; Test, 768
 Terman-Stanford Binet, 781
 Thayer, V. T., 579, 586
 Theatre Guild, 429
 Thomas, William Isaac, 100, 167, 174,
 197, 259, 266
 Thompson, W. S., 244, 245
 Thomson, Godfrey, 750, 756
 Thorndike, Edward Lee, 74, 110, 123-
 136, 178, 228, 608, 719, 720, 721,
 756, 760, 793
 Thorndike, Robert L., 751
 Thorndike Scale for Intellect, CAVD,
 780
 Thurstone, L. L., 750, 756, 758, 759
 Tolman, Richard, 267, 300
 Tucker, W. B., 776
 Tufts, James H., 100
 Turner, Frederick Jackson, 74, 260, 261,
 273, 275-277, 580
 Twain, Mark, 402, 403
 Tyler, Ralph W., 585, 598, 761
 Tylor, Edward B., 56
 Van Doren, Mark, 5, 574, 614, 625,
 626
 Veblen, Thorstein, 75, 100, 259, 261,
 264-272, 580, 622
 Ward, Lester Frank, 53-55
 Warner, W. Lloyd, 329, 347, 348, 357
 Washburne, Carleton, 561, 576, 581,
 634
 Watson, Goodwin, 166, 578, 579
 Watson, John Broadus, 110, 123, 136-
 145, 170, 187, 196, 211
 Webb, Sidney and Beatrice, 272, 406
 Weber, Ernst Heinrich, 47
 Weidman, Charles, 421, 424, 429
 Weiss, Paul, 81
 Wertheimer, Max, 148
 Wheeler, Raymond, 149, 161
 Wheeler and Perkins, 155, 162, 218
 Whipple, Cuy Montrose, 186, 607, 788
 Whitehead, Alfred North, 66, 219, 222,
 618, 622
 Whitman, Walt, 74, 401
 Wiener, Philip, 77, 79
 Wild, K. W., 218, 220, 222
 Wilson, Edmund, 349
 Wissler, Clark, 293
 Woelfel, Norman, 579, 580
 Woodworth, Robert S., 74, 134, 149,
 152, 167, 170
 Wright, Frank Lloyd, 74, 78, 79, 102,
 405, 408, 410-414, 437, 455, 481, 622
 Wundt, Wilhelm Max, 50-51, 210, 326,
 720
 Young, Ella Flagg, 118, 543
 Young, Kimball, 166, 182, 190, 375
 Zachry, Caroline, 191, 192, 199, 585,
 586, 588, 589, 591
 Zechiel, A. N., 585
 Zirbes, Laura, 565, 639, 669
 Zook, George F., 584, 795