

1963

The Education of the Whole Man

Ralph Borsodi

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Recommended Citation

Borsodi, Ralph. The Education of the Whole Man. Vallabh Vidyanagar, India: S.V. Vidyapeeth, 1963.

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BROOKVILLE—Mr. S. S. Chawla, assistant editor of The Tribune, in Ambala, India, is at the School of Living near Brookville assisting Ralph Borsodi, founder of the school, in editing books for publication in India.

Chawla interviewed Borsodi for his newspaper while the latter was lecturing in India in 1960.

Chawla says Borsodi is helping Indian leaders see "how they can modernize India without taking on mistakes of the western world."

He rates Borsodi's program as a "third way," neither Russian communism nor western capitalism.

For this reason he took leave from his paper to come here and help the author prepare a series of books for publication in India.

Borsodi's first book of the series was published in India last spring and is now a text in an Indian university.

The visitor is working with Mrs. Mildred Loomis, director of the School of Living at Loomis homestead, Lane's End, near Johnsville. Borsodi, of New Hampshire and former director of the Liberty Homestead project west of Dayton in the depression days, is supervising the work.



Chawla

Notes

Reprinting - The thesis in the first 200 pages of The Education of The Whole Man by Ralph Borsodi will be reprinted with some additions under the title, The Humanization of Humanity.

Errors - The Education of The Whole Man was written while the author was in India and published there after his return to America to recuperate from a serious illness. He was not able to read the galley proofs. This may account for errors in spelling and print. This he regrets, especially the misspelling of the names of Pitrim A. Sorokin and Dr. Robert M. Hutchins.

Corrections - to make the meaning clear would include:
Page 22 - 7th line from the bottom should read, "Appropriation and stealing are distinguishable, but are not morally different."
Page 24 - label, instead of laable
Page 44 - Problems in Belief
Page 73 - (top) should read, "Reasoning and intelligence are not used in..."
Page 125- facetious for factorious
Page 175- metric instead of material method.

THE EDUCATION OF THE WHOLE MAN

By
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FORMERLY CHANCELLOR
UNIVERSITY OF MELBOURNE
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U.S.A.

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"THE CHALLENGE OF ASIA"
"EDUCATION AND LIVING"
"THIS UGLY CIVILIZATION"



Published by
Sardar Vallabhbhai Vidyapeeth
VALLABH VIDYANAGAR
(Gujarat State, India)

Associate Publishers:
M. C. Kothari
Booksellers & Publishers
Raopura Road, Baroda
(Gujarat State, India)

Associate Publishers
&
Sole Agents
M. C. Kothari
Raopura Road, Baroda
(Gujarat State, India)

FOREWORD

In this book — *The Education of the Whole Man* — the well known educator of the United States, Mr. Ralph Borsodi, has asked us to take a fresh look at the problems of education. All systems of education aim at the education of the whole man though in practice they lay undue emphasis on physical efficiency or intellectual alertness or spiritual poise. These are not exclusive of each other. They are essential ingredients of a true system of education. The Upanisad tells us that we should aim at the play of life — *prānārāma*, the satisfaction of mind — *manaānanda* and the fullness of tranquility — *sānti samrhdha*. The sickness of our society can be traced to a one-sided development of education.

All knowledge is indivisible. Science and technology, literature and art, philosophy and religion are varied manifestations of the spirit of man. They do not contradict one another but complement one another. The spirit in man sits in judgment on nature, discovers its secrets and increases our knowledge of nature. In art and literature the same spirit deals with the moods and passions, the intense experiences of the human individual, specially his inner being. The same spirit probes into the mystery of the world, tries to understand a little of it. Science and technology are a dialogue of the human spirit with nature. Literature and art are a dialogue of the spirit with oneself. Philosophy and religion are a dialogue of the spirit with the Supreme Mystery which underlies the universe. When people speak of a conflict between science and religion, they do not appreciate the spiritual character of science and the rational character of religion. When properly understood, science and religion help each other.

In the name of science and rationalism many of our societies have broken off their connection with the past tradition. Their lives have become rootless. We have to grow our roots again.

Printed by:
N. Hernandez, S. J.
ANAND PRESS, ANAND
(Gujarat State, India.)

We have to combine ancient tradition with modern knowledge. If we wish to have an open society we should have open minds.

The human being through a balanced education should become a work of art capable of quality and beauty of its own apart from any practical purpose to which his skills and powers are put.

The development of the human individual makes for the uniqueness of the individual. This uniqueness contributes to the fellowship of human beings. It leads one to the creative realisation of the unity of mankind. There is no contradiction between seeing the truth in solitude and engaging in human affairs.

We are grateful to the Sardar Vallabhbhai Vidyapeeth for the publication of this important book.

Rashtrapati Bhavan

New Delhi

the 24th February 1963

S. RADHAKRISHNAN

P R E F A C E

I feel very happy in presenting to the educational world this very first publication of the Sardar Vallabhbhai Vidyapeeth on the subject of education viz. 'Education of the Whole Man' by Mr. Ralph Borsodi. Mr. Borsodi has been an eminent thinker and writer and after spending a life time in education he came to India after retirement. While this University was considering the question of the introduction of 'general education' in its courses, Mr. Borsodi was associated with that thinking. It was as a result of that fruitful association with the University that we could secure the manuscript of this book from Mr. Borsodi and I would like to convey the thanks of the Vidyapeeth to Mr. Borsodi for having accepted to permit the University to publish the book on a no-royalty basis so far as India is concerned. That indicates Mr. Borsodi's love for education in general and spread of general education in India in particular.

I need not dwell at length on the merits of the book and the deep thinking it represents because so eminent an educationist and savant as Dr. S. Radhakrishnan, President, Republic of India, has been kind enough to agree to write a 'foreword' to the book and as will be evident from the reading of the same, has appreciated the publication. We are extremely grateful to the President for undertaking to read the volume and write the 'Foreword' in this hour of national crisis when many urgent matters of national importance needed his attention. We feel that he, as Head of the nation considers education as a solvent of national crisis.

I would also like to thank Shri Arvindbhai Kothari of M/s. M. C. Kothari, Baroda, for associating himself in the publication of this book and thus relieve the University of the marketing as well as financial responsibilities of this publication.

I feel, I should also express our regret for the delay in the publication of this book but the same was due to several unavoidable factors and would crave Mr. Borsodi's indulgence for the same.

I should like to acknowledge with thanks the considerable amount of time and energy devoted to this work at all its stages including proof reading by Shri Ishwarbhai J. Patel, the Principal of the Secondary Teachers' Training College, but for whose devoted efforts this work would have been considerably delayed. In fact his absence from India for about six months when he was in United States of America and Great Britain on a study tour has been responsible for the holding up of the work for some time.

I am sure, the educational world will find this book both stimulating as well as useful. We shall appreciate any comments or remarks on the book by friendly readers.

Sardar Vallabhbhai Vidyapeeth
Vallabh Vidya Nagar
March 11, 1963

BABUBHAI J. PATEL
Vice-Chancellor

OMEGA ANTI ALPHA: A PREFACE TO THIS STUDY

We should expect little, for what we expect will not come to pass.

Revolutions, reformations—these vast movements into which heroes and saints have flung themselves in the belief that they were the dawn of the millenium—have not borne the fruit which they looked for.

—James Anthony Froude

This formidable undertaking, which requires for its full completion at least sixteen volumes, was really begun in 1944 when I began to write the two volumes which were published under the title of "Education and Living." This introduction to the whole undertaking is being finished seventeen years later in my two "hermitages" in India, my Summer hermitage in Simla and my Winter hermitage in Ahmedabad.

Those who read it will notice that it is addressed to "educators." I have been driven to use that word because there just is no other which more clearly connotes and denotes those to whom it is addressed. It is not, however, addressed to professional educators only. It is addressed to that minority of men and women who not only influence others — as of course all educators do — but who have four qualities which distinguish them from those to whom this work will be meaningless.

I have used the phrase, "men and women who influence others", advisedly. Such a man or woman may be a person whose work in life limits the influence exerted to a very few persons — at one end of the scale it may be a wife and mother who influences only the small circle represented by her own family; at the other it may be a writer whose influence may extend to millions who read what he writes. It may be a teacher who influences students in a school or college; it may be a preacher who influences the congregation of a church or temple; it may be a doctor who influences his patients, a lawyer who influences his clients, a professional man of any kind; it may be an artist or actor, a scholar or a scientist. We have no word in English which suggests precisely what the word *scholar* denoted to the ancient Chinese or the word *brahmin* to the ancient Indian. The word intellectual, which is sometimes

used for the purpose, has a kind of snobbish ring in our ears; the word elite, which I have sometimes used, labors under the same disadvantage.

Yet there is such a class of men and women in every nation, and this class I consider the salt of the Earth. They are, in the original Greek signification of the word, aristocrats.

1. They have four qualities which distinguish them. They are *thoughtful*. They have not only dipped into the accumulated knowledge and wisdom of mankind; they have not only had some minimum of formal education or a considerable reading of significant books, but they have really thought about what they have learnt.

2. They are *concerned*. They realize that this is an age of crisis; that the world is in a state of transition, and they are concerned about this; they care; they are emotionally involved in the problem of what they might do to deal with conditions which clearly show that man has fallen far short of creating a world which is predominantly just and predominantly decent.

3. And they are *courageous*. They have the courage of the pioneer opening up new territory, the courage of a missionary spreading a gospel, the courage of a nonconformist seeking the truth, the courage of a soldier fighting for a cause.

4. But they must also be *dedicated*. They must have a deep feeling that they should devote their lives to something more than the gratifications which the world now makes it possible for them to enjoy; that they must devote themselves to interests beyond the circle of their immediate personal and family interest; that they must devote themselves to the development of what is sometimes called "the social sense." They must be men like William Lloyd Garrison who, when he wrote the salutatory to the "Liberator" and risked his life in the struggle to abolish human slavery, said that he proposed not only "to tell the truth about slavery but *to be heard*." He was nearly lynched by a mob which did not wish to have him publish his paper; he paid no attention to their threats and went on about his work. Those to whom this study is addressed may have the first three of these qualities but if they lack intestinal fortitude, it is not really addressed to them.

For let there be no mistake about what it is that I am giving these last few years of my life to doing. I am not merely

•
writing a big book; a *magnus opus*; I am after a revolution. I want humanity to be humanized. And the only way that will be done, I am convinced now at the end of my life, is by this minority—by such a dedicated elite, if such men and women can be made to see *what needs to be done* and *how to go about doing it*.

For it will not be done by the politicians who think that they can legislate a better world into being. It will not be done by revolutionists with hate in their souls and blood on their hands. It cannot be done by enacting statutes or changing constitutions. It can be done in only one way, by the apparently slow process of right-education. It can be done by that saving minority whom, for the want of a better term I think of as the educators—and the true leaders—of mankind.

I have a few suggestions to make about how they should read this whole study. It is not, I know, all that it should be. In spite of the fact that as a whole I think I can be quite proud of it; I am well aware of the fact that in many places it provides very difficult reading.

But if in spite of these shortcomings such a minority as that to which this work is really addressed, will at least become aware of the significance of the basic problems of man and of society; if they can be moved to try to reach out across the barriers of language and race, of religion and nationality, to one another to join in the work of doing the only thing which is adequate about these problems—rightly-educating first themselves and then all those whom they can influence—the revolution for which I am pleading will begin.

There are five suggestions which I consider important to a proper reading of this work.

The first is this: Each volume is complete in itself. The order in which they are arranged is the one which seems to me the most logical. But there is no really good reason for reading them that way. There may be an actual advantage in beginning with some problem which is at the moment of most concern to the reader.

The second is this: Unless this introductory volume, which I have called "Education of the Whole Man," is read, the reading of the other volumes will not be nearly as meaningful as I believe they can be. This volume makes clear both my purpose in making the study, and the method which I pursued in making it.

Thirdly, I hope no one will form any judgment about it from the study of one of the basic problems only. The meaning and significance of the ideas involved only emerge after several of the problems with which it deals are considered.

Fourthly: Every chapter begins with one or more quotations. These have been carefully selected, not only because they represent the distilled wisdom of some of the greatest minds of all time, but because of the support which what they have said gives to the subject discussed in the chapter. They should therefore not merely be read; they should be articulated. They should be articulated slowly, not only to grasp the thought which each embodies, but to *feel* what each seeks to convey.

Finally: An all-important suggestion is to study the charts with which the work abounds. There are several reasons for emphasizing this. One is the fact that the whole structure of this study is based upon the observation of about eight thousand specific human actions. These observations are classified and summarized in the charts. (There is a detailed discussion of this in Chapter 8 of this volume). It is the fact that the whole programme here outlined is based upon the systematic analysis of the nature, the purposes, and the consequences of human actions, that makes the charts so important. It is utterly impossible to comment upon the significance of all the different kinds of actions listed in the charts without making the study of each problem take on encyclopedic proportion. Some day, I hope, such comprehensive studies will be made with regard to each subdivision of the basic problems of mankind. When that time arrives, the social sciences will begin to approach the physical sciences in their utility.

Only by careful study of the classification of the many different activities involved, is it possible to make intelligent plans and wise decisions about what to do with the relatively few years of which life is composed. Only by making such decisions rationally and wisely, can we live a genuinely good life, contribute to good living on the part of our families, our neighbours, and the whole society of which we are a part, and so contribute to the creation of a better life for everybody.

— Ralph Borsodi

THE EDUCATION OF THE WHOLE MAN

SECTION I

THE HUMANIZATION OF HUMANITY — AN INTRODUCTION TO THE STUDY OF THE FOURTEEN BASIC PROBLEMS OF MAN AND SOCIETY

OMEGA ANTI ALPHA: A PREFACE TO THIS STUDY

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THE EDUCATION OF THE WHOLE MAN

• SECTION II.

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I.

The longer I live, the more I am satisfied of two things: first, that the truest lives are those that are cut rose-diamond fashion, with many facets answering to the many-sided aspects about them. Secondly, that society is always trying in some way or other to grind us down to a single flat surface.

It is hard work to resist this grinding down action.

— Oliver Wendel Holmes

II.

Seven years of silent inquiry are needed for a man to learn the truth, but fourteen in order to learn how to make it known to his fellowmen.

— Plato

III.

Shame, Shame, Shame — that is the history of man.

— Friedrich Wilhelm Nietzsche,
in "Thus Spake Zarathustra."

IV.

That in some unknown world there may exist beings still worse than man is possible, but hardly conceivable.

— Anatole France, in "Penguin Island."

V.

... the history of mankind might be described by a cynic as a series of splendid expeditions towards no goal at all, led by men who have all the gifts of leadership except a sense of direction, and every endowment for achieving their ends except the knowledge of ends worth achieving.

— Sir Richard Livingstone, in "Education for a World Adrift."

CHAPTER I

THE CHALLENGE IN INDIA

I knock unbidden once at every gate. If sleeping, wake; if Feasting, rise before I turn away. It is the hour of fate.

— John J. Ingalls, "Opportunity."

My friends will naturally like to know, (and I cannot help but think of those who will read this study as friends), why in the seventies of my life, after complete retirement from the work in the field of education to which I have devoted my time since 1934 when the School of Living was organised in Suffern, N. Y., I accepted the invitation of an Indian university to remain and complete a study of education which I began twenty years ago.

I went to India in 1958 to visit some Indians who had become interested in my writings and with whom I had carried on a correspondence for many years. In October, while visiting one of them, a retired industrialist who had taken an active part in almost every reform movement throughout his life, Ranchoddas B. Lotvala of Bombay, I found that he had made speaking engagements for me at various universities, including one established not in a great metropolitan city but far out in a purely agricultural region. This university, he assured me, was dedicated not to the usual programme of training men and women for city careers and city life, but for an entirely opposite programme, training them for social renaissance through rural revival. It was dedicated to the task of training leaders for the eighty per cent of the Indian population which lives in its small villages, and makes its living by tilling the soil.

Mr. Lotvala told me that the founder, Bhailalbai D. Patel, a man of extraordinary vision, had built a whole community*, Vallabh Vidyanagar, with the university as a centre. Starting with a tract of farmland, without roads, without houses, without any of the amenities of even a small town in India, he had laid out the town, started the university, built hostels and all other facilities for the students and faculty, organised all sorts of

* The University, Sardar Vallabhbhai Vidyapeeth, is at Vallabh Vidyanagar, near Anand, in the State of Gujarat.

industries to furnish employment to the residents in the community, built roads, installed a modern water supply system, a drainage system, equipped it with power, and every other facility for a modern community. Mr. Patel, who was its first Vice-Chancellor, was determined to demonstrate what might be done by higher education to produce a cultural and economic revival in rural India.

At Mr. Lotvala's suggestion* Vice-Chancellor Patel, who was an old friend of his, invited me to be a guest of the university. I spent three days there.

In the course of an address to the staff of the university, I described what I thought was lacking in the system of a higher education of which we in America are so proud, and what I thought was missing generally in all systems of education patterned on those of the Western World.

I think I must have made a pretty strong statement to this meeting. I know that on this subject I am apt to do so. I feel strongly about the matter. I believe I am justified in that feeling. It is because of the almost complete indifference to what is missing in modern education that I believe the free world is succumbing to the onslaughts of a modernized barbarism, an onslaught from the outside under the leadership of the "dictatorships of the proletariat," and from the inside from the leadership of the urban barbarians. Industrialism is spawning. Mass-man, and the leaders of our mass-culture, are incapable of dealing with this threat to civilized life because they have been barbarized already.

As a result of that address, I received an invitation to return to the University after fulfilling some engagements I had in other parts of India, to prepare a syllabus, a text-book, or something which might be used to incorporate in the university curriculum what I said was missing in the universities of America with

* I made an address of substantially the same nature shortly after arriving in Bombay to the staff of Dr. K. M. Munshi, president of Bharatiya Vidya Bhavan, one of the universities in India which comes close to being in accord with the ideal of autonomy. As a result Dr. Munshi published the substance of what I said in the University's publication called "Bhavan's Journal." Dr. Munshi is one of those Indian writers, educators and scholars who is equally at home in both the Western and the Indian worlds of thought.

which I am familiar. This book is the end-result of that challenging invitation thanks to the fact that Bhailalbhai D. Patel's successor as Vice-Chancellor of Sardar Vallabhbhai Vidyapeeth, Mr. Babubhai J. Patel, took up the task thus initiated and arranged this publication. Nothing could have pleased me more than the interest and enthusiasm which both these unusual educators have shown, and nobody could have asked for better cooperation than I have received from them.

What these books represent is not only an attempt to provide for the general education now missing in our modern system of specialized education, but to substitute for the prevailing concept of general education what I have called problem-integrated education. Only a really adequate method of educating the whole man which is free from national, ideological and religious presuppositions, prejudgments and prejudices can make possible a rational and humane evaluation of conflicting alternative schools of thought about human problems; it alone can end the present drift into ever more confusing darkness; it alone can create a new elite among the engulfing barbarians and provide the inspiration to make its members resist every group and every movement which tries either to persuade people to accept or to forcibly impose upon them false and mistaken doctrines like those of limitless wealth and centralized power.

What was needed was eloquently expressed by a distinguished American educator. I know personally and have long admired Robert M. Hutchins, who was for a period of years the Chancellor of the University of Chicago. He is not only a scholar but also a man of vision. He tried vainly to give Chicago University a new direction. His failure nearly broke his spirit. The University of Chicago is a typical American university. It is split into dozens of special schools and departments, mainly devoted to science and business administration. With the help of Mortimer Adler, a professor of philosophy, Chancellor Hutchins introduced a general education programme based upon the study of the hundred greatest books of the Western world.

He tried to make the study of the great ideas of the greatest minds of the West, the central idea around which the whole university revolved. He felt it necessary to equip the students with the traditions of Greece and Rome, of Christianity and the Renaissance, and not only the data of modern science. He felt this was needed without delay. He considered conditions in America—and the whole of Western World—so bad, that he called for a crusade to procure nothing less than “a moral, intellectual and spiritual revolution throughout the world. The whole scale of values by which our society lives must be reversed.”

I believe the diagnosis of what is wrong with American education made by Chancellor Hutchins entirely correct. American colleges and universities were not facing up to the new world which should have been built when the World War II came to an end. Instead, they were turning out specialists in technology and the professions: men preoccupied in achieving personal success, but lacking in philosophy of life and often contemptuous of moral and spiritual values.

But while I agree with his diagnosis of what is missing in American education I do not agree with his prescription. The study of the great books of the West would certainly help students to a more rounded view of life, but the ideas of even the greatest thinkers of the Ancient World, of the Christian tradition, and of the Modern West is not enough.

I once told him that if he would make the study of the greatest books of the *whole* world—of the East and not only the West—a part of his curriculum, I would like his prescription better.

My own search for a remedy for this great defect in higher education, took a quite different direction.

As a result of what has become an incident which affected me as much as Newton was affected by the famous apple which led him to develop the law of gravitation, I finally started to develop a method of integrating all knowledge so that it could be effectively directed toward the solution of the actual problems with which every individual has to deal throughout his life.

Out of this has grown my own prescription for realizing the aims of general education: for helping the student through the confusion of modern specialization. This method I call problem-integrated education.

Specialization is essential in science. It is essential in the operation of an industrial civilization built upon science. But specialization ignores the necessity for educating the whole man.

If higher education is to equip students with an adequate general education, its most difficult problem is organization and integration of the vast quantities of specialized knowledge which now exists.

To produce a whole man and not a mere lop-sided specialist, some method must be used which gives him knowledge of that which he actually needs to know in order to deal rationally and humanely with the problems he has to face. Superficial knowledge of many subjects, and intense familiarity with one, is no answer to this problem.

Real integration of all knowledge around the basic problems of man and of society I believe is essential to the solution of this problem. Integration around these fundamental problems I have found one of the most enlivening and inspiring methods of dealing with the problem of educating the whole man. For in the final analysis every science and every field of knowledge can be used as a basis for the resolution of one of these basic problems. If the problem is clearly defined, the student is equipped with a method of fitting everything he learns—and every special field of knowledge—into its proper place in his philosophy of life.

This is what I call problem-integration. This kind of general education calls for a course of study in which the student is first required to clearly understand the nature of those universal and perpetual problems of mankind. And only after he has grasped the nature of each of the problems, is he asked to consider what the various arts and sciences: what theology, philosophy and ideology: what various theories and doctrines contribute to a rational and humane solution of his problems as a person, as a citizen, and as a member of the whole human race.

I suggested in the address I made in Vallabh Vidyanagar, the consideration by the University of two curricular innovations—one, that immediately after matriculation, before the students begin their regular and special courses of study for their degrees and professions, that they should all attend a series of seminars devoted to a survey of the whole field of human knowledge and wisdom. This introductory seminar, I suggested, should be an inspiring experience; it should be not only an intellectual but a deeply moving emotional event. It should aim at motivating them throughout the whole time they spent in college and university study. It should lead them to discover that learning—not politics, nor religion, and certainly not business and money making—is the answer to the problems with which they will have to deal in the new world which is now being born.

Secondly, I suggested that all students attend a similar seminar before they graduate: immediately after finishing their final examinations they should again attend a seminar on these fourteen basic problems. This concluding experience should make them feel how greatly they have been privileged by the opportunity of spending these years in study; should make them explore how their studies had deepened their understanding of life's problems; and make them feel that they are obligated to dedicate their lives to using the knowledge and the skills they have acquired not merely for their own personal profit but for the purpose of dealing effectively, rationally, and humanely with the problems of man and of society.

It is a rare privilege which the students who come to a university enjoy. The university endows them; their tuition never pays the cost of what they receive; their families, too, often make great sacrifices so that they may have these years of study away from all the ordinary affairs of life at an institution which is ideally above all the clash of conflicting political, religious, social, industrial and ideological movements. Such an introduction to learning as I suggested should give them a sense of dedication to the task of building a better world and a better life.

The universities of America have paid no attention to this call by Chancellor Hutchins, as they paid no attention to my

own plea made in a book I wrote many years before, which I entitled "This Ugly Civilization."

I expressed the hope that the universities of India would realize that it is their duty not merely to instruct in this or that special field of knowledge, but also to humanize and cultivate men and women who will be able to measure up to the challenge of our times.

There is a special reason why I believe the best kind of general education is needed in Indian colleges at this time.

Here in these colleges, the future leaders of India in all fields are being educated. These possible future leaders of India should be equipped with a clear and comprehensive understanding of what I have called the basic problems which they will have to face. They will fail to be properly equipped for the role they will be called upon to play unless they have a broad and deep world outlook toward the alternative, and often completely antagonistic, programmes about how life should be lived, and how society should be organised.

That India should produce such philosophically equipped leaders is not merely an Indian but a world necessity.

I believe that the centre of gravity of the world is shifting from the West to the East.

A new world is being born. In the dying world, Europe played the dominant role for centuries. Ever since the Age of Discovery when Europe became aware of the existence of the American continents and came into contact with the Orient, the Spanish Empire, the British Empire, the French Empire, the Dutch Empire and the Portuguese Empire were the instruments with which Europe dominated the world. That domination we all know is now coming to an end. We can say with almost absolute certainty that during the next century, Europe will no longer be the centre of the world.

But neither will America prove to be that centre.

In spite of America's immense wealth, in spite of its immense productivity, in spite of its immense military strength, I do not believe that its present dominance of the world will long continue.

At the end of the Second World War, the whole world turned to America for moral leadership.

Wendell Wilkie, a distinguished American lawyer, who was once a candidate for the Presidency, was sent by President Roosevelt as a sort of ambassador-at-large around the world to visit nearly every leading nation, including Soviet Russia. On his return he made a report to the American people in a book called "One World." A million copies of that book were sold in six months! The principal message in his report may be summed up as follows:

"America has won the friendship of all the nations I have visited. Even in Revolutionary Russia, the people were looking to America for moral leadership."

But America was utterly unprepared for that leadership. Destiny had thrust upon it a great challenge. But its leaders were morally, intellectually and ideologically unprepared for the role which they were called upon to play.

Their intentions were good. They freed the Philippines. They made, on the whole, friendly treaties with the new Governments of Germany and Japan. They have been showering billions of dollars in one form or another upon the nations ravaged by war or exploited and left undeveloped by the empires of Europe.

But good intentions are not enough. At a time when the whole world was sick to death of war, when people everywhere were tired of periodic depressions and widespread poverty, when the whole of mankind was looking for a better social order than that of Capitalism with its depressions and wars; when the peoples of Asia and Africa and the Middle East were ready for a social system which would abolish imperialism, the leaders of America had nothing better to offer which was adequate to the challenge of the times.

This I believe to be the historic truth. America was challenged, and its response was morally and ideologically inadequate.

Into this world-wide ideological vacuum, Marxism and Communism has been moving.

But if the American response has been inadequate, the response of the dictators of Soviet Russia was infinitely worse. They offered something apparently new to satisfy this world-wide hunger. They offered a new social order, it is true, but their response was immoral and inhuman both as to means and ends.

At a time when Europe was sunk in the barbarism of the Dark Ages, the Orient could boast of three great civilizations. There was the great Saracenic civilization which has left the splendour of its movements all the way from India to Spain. There was the civilization of China and Japan. And finally there was the great civilization of India, with its preoccupation with the meaning of life and the spirit of man.

These three civilizations were one after another subjugated by the West; conquered first by force, and then by technology.

The great and overpowering issue, which constitutes the crisis of our times, is not the conflict between Capitalism and Communism—important as that is—but the re-emergence and renaissance of the East. Two-thirds of the population and two-thirds of the natural resources of the world are represented by the regions of the world which are now throwing off the yoke of the West. In the very nature of the new conditions which this fact is creating, one of these great Eastern civilizations is destined to lead.

In this new world India, it seems to me, will be challenged in the same way that America was challenged after the Second World War. It emerges with a belief in non-violence. It is tragic that the Arab resurgence is a warlike one, and equally tragic that China, for so long a pacifist nation, is equally committed to militant revolution.

History seems to be setting the stage for a drama in which the leading role may be played by India.

The question which has an over-powering interest for me is, "What is Indian education doing to prepare its leaders for the role which destiny seems to be calling upon them to play? Will the colleges and universities of India produce leaders who will not prove as inadequate as have the present leaders of America?"

America may excuse itself by saying that it did not seek world leadership. America may truthfully say that it stumbled into the Second World War, and had world leadership thrust upon it. America may thus explain its inability to fill the ideological vacuum to which I have just referred.

The vacuum, however, remains. If India proves equally unprepared for dealing with it, the new barbarism which Communist Russia represents may fill it, and the hope, not merely of the people of India, but the whole World will be buried in a ruthless materialistic nightmare.

I hope that the colleges and universities of India will rise to the challenge which faces them. If they merely duplicate the forms of instruction which the institutions of higher learning in the West now use; if they devote themselves merely to training technicians and engineers and to preparing doctors, lawyers and other professional men for earning a living, they will produce specialists but they will not produce men and women with the vision for which the times are calling.

The situation calls for emphasis upon ethics and high ideals; it calls for equipment with the liberal arts and a deep love of the humanities; it calls for philosophy and not only technology; it calls for inspiring the rising generation with a vision above the consideration of purely personal gain; it calls for cultivating in them such devotion to humanity as a whole that they rise not only above the customary preoccupations of the day but all merely local, provincial and national interests.

If Indian education rises to this challenge, new leaders will emerge who will not make the mistakes which are now being committed in the West.

Whether the new world now being born will be a better world, or whether it will be that monstrous world which Aldous Huxley called "The Brave New World", depends upon what our universities do during the years immediately ahead of us. If they continue merely to turn out specialists trained to operate the industrial mechanism of the Modern World, we are doomed.

This was the substance of what I said in 1958 and 1959 wherever I spoke in India. The response usually came in the form of a challenge. As in the case of Sardar Vallabhbhai Vidyapeeth, it came in the form of "Let's do something about it." The response is this study on my part and on the University's part the initiation of a programme genuinely concerned with the education of the whole man and centering about general education organized around the basic problems of man and of society.

"*The Crisis of Our Times.*" I believe that the world in which we of this generation live, the world of which we of the West are so proud, and the world which the under developed nations of the rest of the world are so anxious to emulate, is mortally sick. I believe that it is suffering from a complication of fatal social pathologies. Yet such is the mis education of the generation to which we belong that we think many of these pathologies as symptoms of progress. I have been calling attention to this ever since I wrote a book I entitled "This Ugly Civilization" over thirty years ago.

But cries of crisis, all my cynical friends insist, are constant. I am, they insist, merely one of the successors of the boy in Aesop's fable who kept crying "Wolf!" when as a matter of fact there was no wolf to which realists should pay attention.

Perhaps I can be dismissed in this fashion. But I do not believe it possible to dismiss all those who are, and have been, crying "Wolf!" so cavalierly.

It is not possible, for instance, to dismiss Karl Marx and Friedrich Engels in this fashion. Yet they too cried "Havoc!" about the crisis with which we are today confronted.

When Marx and Engels wrote the "Communist Manifesto", the conditions of labour were so terrible that no pen has yet been able to do the subject justice. It is customary today to dismiss the crisis about which they cried out as merely a phase of our Industrial Revolution. But this is to make the same mistake which Marx and Engels made—to confuse a symptom of the crisis with the real and underlying crisis itself.

Let me however, prove my point by coming closer to our own times; by calling attention to the kind of men in this generation who have also been crying "Havoc!"

There is my friend Pitiim A. Sorokin, of Harvard, perhaps the outstanding sociologist of our times, from whose book on the subject I have borrowed the phrase "The Crisis of Our Times." In a monumental sociological study, he documented the evidence in four volumes, and no reasonable man can consider this evidence and dismiss those who cry "Havoc!" as unrealistic.

There was that great Spanish philosophic mind, Ortega y Gasset, whose book "The Revolt of the Masses" was a searching exposition of one aspect of the crisis. There was Max Planck, in Germany, one of the group of great scientists responsible for the revolution in our thinking about the physical world, who discussed the crisis in his book, "Where is Science Going?"

There was that great group of giants in the world of English literature, Gilbert Chesterton, George Bernard Shaw, and H. G. Wells in particular. Wells ended his long career by crying "Havoc!" and confessing "*mea culpa! mea culpa!*" because he has spent his life promoting Socialism and had found himself in effect rationalizing the horrors of the Communist Revolution. More recently, that extraordinary English novelist, Aldous Huxley, cried "Havoc!" in his novel "The Brave New World" and out of the depths of his despair wrote "Ends and Means."

I must include two educators who have both cried "Havoc!" one in America and the other in England. Sir Richard Livingstone described the crisis as he sought in his book "Education for a World Adrift," and Robert Maynard Hutchins, when Chancellor of the University of Chicago, called for a complete reversal of the values to which successful and prosperous America was devoting itself. For a very special reason I must also mention Ananda Coomaraswamy, because he too cried "Havoc!" and saw the tragedy toward which we are drifting as one saturated with the knowledge and wisdom not only of the West but of the Oriental World.

Finally, here in India, there have been plenty of outstanding leaders who too have cried "Havoc!" There was, of course,

Gandhi, to whom not only Communism and Capitalism but Industrialism itself was anathema, and there still remains Vinoba Bhave and Jaya Prakash Narayan, who call for such a radical reform as "Sarvodaya." Finally, there was M. N. Roy, who felt the crisis could only be met by such an ideological revolution as that which he described in his manifesto "The New Humanism."

My point in this enumeration is two-fold—to establish the fact that there is a real crisis; that we are part of a generation in a world in transition from what is, to what we can only barely envision, and which threatens to create a civilization infinitely worse than that which troubles mankind today, and secondly to call attention to the great variety of diagnosis of the crisis and prescriptions for dealing with it. Most of what these prophets of disaster have to tell us is true—as far as it goes—but my main point is that most of them deal not with the real crisis but with its symptoms. Only one great figure of the past century put his finger on the essential truth, and that was Nietzsche.

It is not true that this is a social crisis. There never was a time in the history of the world when the masses were less oppressed by the classes than today.

It is not true that this is an economic crisis, not even in the underdeveloped nations of the world; it is not true here in India where I am writing this, where poverty is appalling, particularly in the agricultural regions.*

It is not true that this is a political crisis. There never was a time when there were more nations independent and free than today, in spite of those which are still under the domination of Communist or Capitalist imperialistic states.

These are serious and critical problems, it is true, but they are symptoms and not the real and underlying crisis which is responsible for them.

It is much easier to see what is wrong in the world, than what is the cause of what is wrong.

* Those who think of the crisis in economic terms should read "Hunger in History," by E. Parmelee Prentice, and they will be forced to agree that however serious our economic problems today, they are in fact much less serious in terms of standards of living for both masses and classes than they were when famine was an annual fact in some part of every nation of the Earth.

To find the origin and the ultimate source of our crisis, we must go far back—much further back than most of those who are prescribing for the immediate difficulties of the world are willing to do. We must go clear back to the 15th Century—to Copernicus, to Galileo, to Bacon, to Newton. We must go back to the very beginning of the Scientific Revolution. And when we do this we find a curious and indubitable historical fact. None of the great pioneers in that revolution really realized what they were unleashing. They had no real conception of the nature of the force which their discoveries represented. They did not realize that they were the prophets of a revolution comparable only to that unrecorded revolution which took place over fifty thousand years ago, when *homo alalus* begat progeny which was able to speak, and *homo sapiens* took over dominion of the Earth.

During the whole of those fifty milleniums of time; during a period more than ten times as long as all recorded history; during the period when our forefathers, beginning as cannibals and cave-dwelling Sinanthropi in China and West Asia, as Pithecanthropi in Java and Southern Asia, and as Neanderthalensi in Europe, gradually transformed themselves into civilized man, able to read books like this, there was only one fundamental source of knowledge upon which every human being relied; there was only one final resource to which each turned for direction when faced with baffling problems, and that is what I think of as religious tradition.

Beginning fifty thousand years ago as an Animist, propitiating every thing and every force because he believed them spiritually more powerful than himself, and ending as a worshipping Hindu, Muslim, or Christian, in spite of the endless changes in the form in which religious tradition embodied itself, it was nevertheless always to this to which he turned as his ultimate source of authority.

The great pioneers of modern science had no inkling that they were engaged in undermining the hegemony of a God that dated back fifty thousand years. They were all themselves profoundly religious men. Isaac Newton, when he built the foundations and the frame work for the conception of a physical world totally different from the traditional one, thought he was

vindicating, not destroying, a great religious tradition. This was equally true of Bacon, of Galileo, of Copernicus.

The leaders of Christendom, then the hierarchy of the Catholic Church, were in this respect actually more far-seeing than these early scientists whose theories they condemned as heresies and whose work they were for centuries able to virtually suppress. They saw the threat to religion and to tradition, and they were ruthless in their efforts at stamping it out. And they succeeded remarkably well until that fateful day in 1859 when Charles Darwin finally published "The Origin of Species" and later "The Descent of Man."

I wish I had words moving enough to make every reader of this book realize the profound significance of what took place as a result of the publication of these two books.

I am reminded of what Charles Kingsley wrote in "Westward Ho!" when describing the death knell of the Pagan World and its replacement by Christendom. He wrote that a whisper when through the streets of Alexandria, then the intellectual center of the Pagan World; it spread to the streets even of imperial Rome itself, and from these centers into every villa in the whole Pagan World. And the whisper was this: "Pan is dead! Pan is dead! The Great God Pan is dead!"

So I believe that when Darwin's epoch making work appeared, a whisper passed through the whole of Christendom, and the whisper was this: "Tradition is dead! Tradition is dead! The Great God Tradition is dead!"

For that is precisely and exactly what had taken place. For it wasn't merely that orthodox Christianity was then done to death. It was a tradition—a form of ultimate knowledge—which had in one form or another reigned supreme over the minds and in the lives of mankind for fifty thousand years which was then done to death.

It is true that there have been many different kinds of traditions, but what happened during those many thousands of years was always the same—one tradition was simply replaced by another.

No one questioned the authority of tradition; they merely thought their tradition better than that of others. This is what took place when Pan died and the Pagan tradition was replaced by what we think of as Christian and Judaic tradition. For Christ was simply the last of the long line of Jewish prophets of whom Moses was the first, and he came, as Christ himself said, not to destroy but to fulfill the law which God himself had entrusted to his chosen people.

In 1859 the great god Tradition ended a reign of fifty thousand years, and a new god, Science, took his place.

But what a god the god who created Scientism proved to be. The world is still gaping at the miracles which his disciples are performing. They began by bringing into existence steam engines and railroads and steamships. They invented the dynamo and electrified the world. They girdled the globe with telephone and telegraphic cables. They freed us from the Earth and put us in the air. They amused us with the cinema and the radio and television. They horrified and terrified us with their release of atomic power. And now they are concentrating on developing missiles to take us into outer space.

And after thus demonstrating his might and his superiority to all other gods, he has told us to discard the superstitious and traditional values which date back to man's dark past, and to devote ourselves to the use of the powers and mechanisms which he has put at our disposal.

But much as the new priesthood of Science abhors all superstition, there is nevertheless a fetish for which it has a superstitious veneration—the fetish of objectivity. Nothing subjective, it insists, is Scientific; no sin against Scientism is greater than that of concerning oneself with values; according to one of the highest priests of modern science, Bertrand Russell, values are mere “exclamations”; they have no place in a world that is Scientific.

And yet I venture to make the positive assertion that the science of axiology is infinitely more important to the welfare of mankind than the sciences of physics, chemistry, mechanics and electronics combined.

As a result of this modern scientific antipathy to values, something so fantastic has happened that no novelist, no matter how imaginative, has envisioned anything like it.

Into this axiological and educational vacuum, a new venal and completely amoral priesthood—the devotees and votaries of the Advertising World—have marched. With the traditional superstition-laden priesthood which had taught us our values discredited, and the new scientific priesthood refusing to have anything to do with them, an advertising priesthood took advantage of what seemed to it a heaven-sent opportunity to become the creators of mankind's values. It is in this science-created vacuum that advertising men do their dervish dance of shaping human desires.

It was Nietzsche who said: “Around the creators of values revolveth the world; invisibly it revolveth.”

In a recent book dealing with the activities of advertising men, Vance Packard called them “The Hidden Persuaders.”*

It is around these “hidden” creators of values that our world of mass-production and mass-culture revolves.

It is the advertising men who tell us what to desire from day to day, and therefore to what we should devote our lives. They tell us what sort of food and fashions we should want; what sort of electrical appliances; what sort of automobiles; what sort of air-conditioned homes. They tell us what to read, what sort of music to like, what sort of drama to consider worth seeing. They tell us what sort of candidates for public office we should nominate, and whom we should elect. They motivate us. They have made a science of “motivational research.” But they motivate us not from a pulpit nor from a classroom, but through the newspapers and the billboards, the radio and the television. These are the kinds of “scriptures” they use, and we are the unconscious members of the “congregation” which they lead.

* Vance Packard is an American writer of a number of books which deal with various aspects of the effect of advertising, and of permitting advertising men to be the creators of values. In addition to “The Hidden Persuaders,” he has written “The Status Seekers” and “The Waste Makers.”

In place of traditional moral values, of values, which the Chinese called *li* or fraternity, and the Japanese *bushido* or loyalty, and the Hindus *dharma* or duty, they tell us to "eat, drink, and be merry." They tell us to spend our time not in temples but in cinema palaces, and as a result the millions who used to venerate priests and prophets now devote themselves to the idolatry of movie-queens. In place of patronizing arts and crafts, they tell us to patronize department stores. In all cases, they tell us, we are to revolt against everything that is old, and to value only the latest in fashion and the latest in thought. Not what is good or true or beautiful, but what is new and novel should be that to which we attach the highest value.

It is the destruction of age-old values and traditional philosophies of living by the new god Science and his indifference to the task of providing an adequate substitute for what he has destroyed, which has created the real crisis we face. What the triumph of Science, in its dominant physical and mechanical forms, has done has been to create a sociological gap, an ideological vacuum, an axiological chaos, into which Hedonism and Materialism have rushed. The economic crisis, (the crisis of poverty); the political crisis, (the crisis of Communism and Capitalism); the social crisis, (the crisis Gasset called the revolt of the masses), are all nothing but symptoms of a two-fold defect in the world into which Scientism has plunged us—the failure of Science to concern itself about developing a genuinely humane philosophy dealing with the problem of what man should do with his life individually and collectively, and the failure of education to devote itself to the task of dealing with this problem.

What this vacuum and this chaos in which Advertising Men now disport themselves plainly calls for is not the impossible task of putting together the shattered fragments of the god Tradition, and trying to breath the breath of life into him. What it calls for is an educational revolution. It calls upon the scientific world to stop its insensate preoccupation with the physical and to replace that with the study of what is human. It calls upon the Scientific World for the development of the neglected normative sciences, and upon the Educational World for an integrated curriculum based upon them.

This is the real and underlying crisis—the crisis in education. Let this crisis be adequately dealt with, and all that I have called the symptoms of the crisis will become for the first time solvable.

I do not want to end this analysis of the nature of the crisis of our times by leaving in the minds of those who read this, the idea that I have been the first to recognize the real nature of the problem with which we in this generation are confronted. One of the most extraordinary geniuses the world has produced recognized it eighty years ago, and the refusal of the world to pay any attention to his message helped to drive him into despairing madness.

In 1887 Friedrich Wilhelm Nietzsche published his "Genealogy of Morals." Nietzsche was the first to foresee the full meaning of the discovery of evolution; he recognized that it was the biology of Darwin and not the astronomy of Copernicus, the mechanics of Galileo, or the physics of Newton that signaled the final triumph of Science; he was the first to call attention to the fact that it was Darwin's linking of man with nature and his divorce of man from a mythical Creator which had completely destroyed the foundation of the values by which man had lived from time immemorial.

It was his exposition of this theme—the supreme part which values, and not economics, nor technology, nor politics, play in shaping the life of mankind—which is the true measure of his genius. He has in this theme a lesson which no educator can ignore without betraying the profession which he has embraced.

It is the failure of education to take the leadership in dealing with the problem which this breakdown in values has created which is the underlying cause of our social and economic and political difficulties. What the situation calls for is not an economic nor a political nor a social revolution, but an educational revolution. A new program of education is what the crisis of the times calls for.

That way alone lies hope.

Industrialism and Urbanism. The world which I said was dying, is dying from a complication of fatal social pathologies, many of them so serious that any one of them is sufficient to

ensure its death and dissolution. Two of the most terrible of them the Modern World does not recognize as pathologies at all. I think of one of them as Industrialism, the other Urbanism. Nothing in my opinion testifies more completely to the completeness of modern miseducation than the fact that the generation to which we belong considers them virtues, not diseases.

The germ responsible for infecting the Modern World with both these social diseases was the scientific mistake of substituting the idealization of wealth, for the idealization of salvation. As a result, the Modern World has accepted the idea that the acquisition of unlimited wealth through the industrialization of not only manufacturing and agriculture, but also education, should be the goal in life of both individual and society. Of course the leaders of the Modern World do not put it so crudely, but calling wealth "abundance" or "prosperity" or a "high standard of living" does not alter the reality of what is involved.

Industrialism and Urbanism are twins. The first is the ideology which prescribes the manner in which wealth is to be acquired; the second the manner in which it should be spent. For though most of the raw materials which make Industrialism possible, (and which make it possible to feed and clothe the masses who devote themselves to it), come from the country, though they are produced for the most part by farmers who till land, most of the wealth made out of their produce does not go back to the country.

Not only the raw materials, the very men and women who work in industry and who move to the city, come from the country. Urbanism beckons to them. They make their homes, such as most of them are, in the city; they use the money which Industrialism enables them to earn, to have "the good time" which is the important thing Urbanism offers them. The excitement and the glitter, the titillation of the senses on all sides, the gratification of impulsive desires, this is what the city offers. The city is one huge bazaar in which every imaginable thing which might tickle the palate, decorate the body, amuse and distract the person, or stir jaded senses, is on sale.

Industrialism is modern man's prescribed way of getting money. Urbanism is his prescribed way for spending it.

Ideas, like minds and bodies, can be either healthy or diseased. The ideas which are most dismal and most dangerous are those, like the idea of "wealth", which have all the appearance of health and rationality, but which if carefully examined, prove to be exactly the opposite.

For ideas are subjective, not objective in nature. They are in the souls, or if you prefer the minds, of men, not outside them. They move men, even when they refer to things which are objective and outside men. Men tend to think that it is they who possess ideas. But the fact is the other way about.

A great many ideas, like the idea of "wealth," are not possessed by men, but possess men, motivate them and obsess them. Men, it is true, conceive ideas, but too often they discover to their astonishment that they have themselves become slaves to, and the victims of, their own creations.

That men should believe that mere wealth, unlimited means for material and sensate gratification of their desires, can produce a good society and make a good life possible, seems fantastic. If this is true then Jesus Christ and the Vedic Sages, Gautama Buddha and Lao-Tze, Henry David Thoreau and Mahatma Gandhi, were all fools. Yet this idea that men should devote themselves to the creation of a way of life which aims simply at the enjoyment of as much wealth as possible, is the idea common to both Capitalism and Communism, the two ideologies responsible for the political crisis of our age. The successful realization of the idea of unlimited wealth is the real achievement of industrialized America, as it is the promise made to all mankind by the proponents of Socialism and Communism. The abolition of mass poverty is one thing, the pursuit of unlimited wealth or abundance is altogether different. It is this which explains what I think of as the world-wide mania for unlimited industrialization.

The real nature of these two social pathologies—maximum wealth and complete industrialization—were concealed from mankind by the coincidence of their emergence at that period of history which marked what I think of as the false dawn of liberty. It was not liberty that the American Revolution and the French Revolution introduced to mankind, but Industrialism

and Urbanism. The dazzling light of that false dawn blinded mankind to this historic fact.

The question which challenges this generation with these twin social pathologies, is: "Shall we continue to descend endlessly into the abyss of Materialism, until we reach the darker depths of the new materialistic barbarism of Centralized and Communized Industrialism? Shall we continue to pursue ever more and more madly the false God of Wealth until it reduces mankind to mere cogs in a gigantic wealth-producing machine? Or shall we discover that we have been worshipping an idol with feet of clay and that the true goal of mankind is the pursuit of the classic trinity of the good, the true, and the beautiful?*" Is it not time that we ask ourselves why it was that the ancient Greeks and Hindu sages only mentioned three of these goals and were so stupid as to overlook the fourth, wealth—the one which modern man has found the most important of all?

Wealth and political power are in many respects alike and interchangeable. They are in this respect like matter and energy. Both enable those who possess them, in the first case to purchase, and in the second case to command obedience and service. Both enable them to gratify the most sordid of their passions. That wealth makes this possible is obvious. It is not so obvious that political power is like monetary wealth in this respect.

There are, however, only four ways of satisfying human wants: *first*, by making what we want with our own hands; *second*, by trading what we have in surplus and do not want for what we *do* want; *third*, obtaining what we want from someone who has it to bestow as a gift; and *fourthly*, appropriating or stealing what we want. Morally, appropriation and stealing are distinguishable but not different. There is no moral difference between the public official who takes venal advantage of the perquisites of his office and the thief who steals in the night.

Political office enables those who enjoy it to obtain what wealth will buy, either in the ordinary course of its exercise by giving commands or by using it in such a manner as to transform

* In Sanskrit they are *Satyam*, *Shivam* and *Sundaram*.

it into wealth. This may be done venally by taking bribes or selling favours, or in a strictly legal form by conferring or acquiring special privileges.

There is only one way of making clear the truth about false gods of this kind, and that is through right-education. The mis-education which has exalted the pursuit of wealth and abundance, must be ended; the mis-education which has enabled Panarchists to conceal the iron fist they wield in the velvet glove of demagogic promises, must be exposed.

So long as education is fragmentized, the whole truth about man and society will never become known.

CHAPTER II

THE NATURE OF THIS STUDY

Men of superior minds busy themselves first in getting at the root of things, and when they have succeeded in this, the right course is open to them. — Confucius.

Ever since I became convinced that something was seriously wrong with the pattern of living which modern man has accepted and the manner in which he therefore deals with the problems with which he is confronted, I have been wrestling with the problem of what might be done about the matter.

When I began the studies and experiments which culminated in the establishment of the School of Living at Suffern, N. Y., in 1934, I found it necessary to list what were the most important problems to be included in such a school's curriculum. Most of them, of course, are dealt with in one way or another in the specialities which as a whole constitute modern social science. But as they are dealt with in these specialized sciences they undergo a transformation which produces confusion rather than solution. In each science, the basic problems with which man has to deal appear and reappear, but always under some novel label; a problem having to do with values is never clearly dealt with because the very term "values" has one meaning in economics, another in sociology, a third in esthetics, and usually a fourth in ethics.

None of the sciences seemed to recognize the importance of relating the subject with which they were dealing to the aggregate of all of men's basic problems, and none of them, in spite of the fact that they are the basis of the modern educational curriculum, seem to recognize that all efforts at integration must necessarily end in frustration unless there is first agreement about the basic problems with which various fields of knowledge deal. Aristotle's synthesis, Aquina's synthesis, the Vedic and the Confucian synthesis, great as each of them were, were all unfortunately pre-scientific. Comte's attempt at scientific integration completely ignored the basic problems of mankind

and attempted merely to synthesize the various special sciences which had developed, higgledy-piggledy, since the dawn of the Scientific Age.

My own approach to this problem grew out of the analysis of an experience in 1935 when I was directing the School of Living. The families in the experimental communities the School established naturally looked to me for help in dealing with their problems. One day, one of the men in the first community we had established came to me with a personal problem. His wife was ill; he wanted to send her to a hospital; he was afraid she would have to have an operation; he didn't have the money he needed; what could he do about it? What I suggested that he should do is not the point of this story.

After he left my office, it suddenly flashed into my mind that it would be interesting to make a collection of problems of this sort, of the real problems of individual human beings, not the abstract problems with which nearly all the sciences concerned themselves, but particular problems, of particular persons, at a particular time and a particular place. I jotted down the details of this particular human problem on a four-by-six inch card together with the name, place, and date which made it a case and not an abstraction. And from that day on I began to jot down on similar cards particular human problems of every imaginable kind. They included problems, like the first one, in which I was personally concerned, but also problems reported in newspapers and magazines, recorded in histories and biographies, and in any kind of record in which the necessary details about such problems were to be found. The problems to which I restricted myself however, were those which confronted an actual individual at some definite time and place. I carried blank cards in my pocket wherever I went. I accumulated them in a card-index tray on my desk; eventually I had over a thousand. When I had my first hundred I began to try to classify them, and it was then that my real difficulties began.

What I had thus far done was the substantial equivalent of what in the scientific method is called observation. Each card was a specific observation. I had noticed, however, very early

that problems of an essentially similar character were accumulating—problems different in their details, but in their essentials alike. The work of accumulating the problems was not difficult, but the task of classifying them proved staggeringly difficult. Every attempt at classification proved in some way defective; every attempt seemed to end in confusion.

The first real advance toward the method of classification I finally adopted had to do with the form in which the problems were stated. I found it impossible to equate the often very humdrum and practical questions, with which actual people had actually to deal, with the problems with which the sciences were concerned. I found this particularly true in my own special field, economics. Economists have written probably millions of words about the problem of values, but this problem plainly had no relationship to the particular problems of the particular individuals in which I was interested. The problem of the origin of species, which has generated so many special sciences that the integration of the biological sciences alone is a virtual impossibility, is not a problem of living. The problem of "What is the nature of man's digestive organs?" is a problem with which anatomy and physiology deal, but it isn't a problem of living.

When I realized one day the nature of the difference in form between these abstract problems and what I had come to think of as problems of living, I felt like crying "Eureka!" *A problem of living, I found, was always a question of how to act; it was always a question about what an individual should do or feel or believe during some interval, long or short, in his life.* When I began to re-write my accumulation of problems in this form, real progress in classification became possible.

Thereafter I lost interest in the abstract problem in economics with which I had concerned myself for so many years, and in most of the problems with which our scientific specialists concern themselves, except in so far as the knowledge that had accumulated threw light on the problem of how human beings should act. This change in form very often resulted in transforming scientific knowledge which was abstract into concrete

knowledge which could be used to solve the actual problems with which individual human beings were confronted.

This change in form had an additional importance. At the same time that it revealed what was defective in the conventional organization of modern science, it increased my appreciation of the contributions which art, religion, philosophy, and even traditional folk-lore could make to the solution of the problem of how to live. It made it possible to compare alternative solutions of the same problem. And it revealed the fact that, so far as the basic problems of living were concerned, solutions which make it possible for individuals to live like normal human beings were not only available but had been available for millenniums of time.

My first attempt at the classification of my problems was based upon the assignment of each case to one science. That broke down immediately. It was impossible to say whether a problem such as "Should I eat meat?" should be assigned to physiology, (on the ground that it had to do with health), or to ethics, (on the ground that the killing of animals is wrong), or to esthetics, (on the ground that it involved the question of good taste). Should one of the problems with which a mother came to me, ("Should I spank little Edward for breaking my neighbour's window?") be assigned to ethics, to psychology, or to education? The almost complete uselessness of classification in accordance with the existing sciences developed when it became perfectly plain that *every problem could on some ground be classified under every science*; that it was possible to view every problem from the standpoint of every possible science.

One of my attempts at classification was a very naive one. From time immemorial philosophy had dealt with three problems: the problem of the good, the problem of the true, and the problem of the beautiful. I tried classifying my problems this way, and the uselessness of such a classification became immediately obvious.

After trying method after method, I finally decided that the most promising was the classic methodology of botany and zoology. A particular problem such as "Shall I eat meat?"

could be considered as falling into an initial category which might be called *the problem of eating*; eating and drinking could be considered as falling into a broader category which might be called *the problem of nutrition*; all problems having significant characteristics in common with nutrition—problems like those of breathing, exercising, resting—could be considered as falling into a still higher and broader category called *the problem of physiological health*; and since all problems of a physiological nature have significant characteristics in common with those which are of a psychological nature, all these problems could be in turn classified as falling into a final category called *the psycho-physiological problem*. This proved the highest common denominator of all the problems in the category in which eating belonged. Above this there was nothing but the common merger of all the possible final categories in what might be considered the ultimate problem, *the problem of how man should live*.

We shall consider this problem of classification in some detail in Chapter 8. So far as my collection of actual problems is concerned—which eventually I came to think of as the basic problems of man and of society—what happened was that at first five final categories emerged, then eight, then eleven. At that point I conducted the first seminar dealing with basic problems of living at Oberlin University in 1940. Subsequently I worked with as many as fifteen; one, I later felt justified in combining with another; and so at present there are fourteen.

About what the definitive number will finally be, I do not want to be too positive; I am however, pretty well satisfied with the fourteen with which I have been working since about 1950. What I am positive about is that this method will eventually result in the clear definition of the basic problems with which all our sciences ought to deal, and that such a set of basic problems furnishes the only sound basis for ensuring that education will educate mankind wholly and not as at present in fragmentary bits and pieces of various kinds.

In sum, what I was driven to do was to reverse the method used in the development of the sciences today. Instead of starting, let us say with biology, then subdividing it, and then

subdividing the subdivisions *ad infinitum* as each biologist proceeded to carve out a speciality of his own, I started with particular problems—with cases, not abstractions—and after classifying them by the significant characteristics which they had in common, I not only was able to satisfy myself as to what the basic problems were, but I had also made it possible *to classify all the ideas, ideals and ideologies developed by mankind for dealing with its problems, in accordance with the problems with which they dealt*. Starting with problems, more and more rigorously defined, but always focussed on *how to act*, I ended with a classification of the answers made to them by great seers and religious prophets, by great philosophers and writers, by great teachers and scientists; by the masses of mankind as embodied in their traditional folk-lore and traditional folkways; and, by the use of methodologies which had vindicated themselves in scientific research, to establish which of those solutions, or combinations of solutions, were plainly invalid, and which, because they prescribed behaviour which made it possible for men and women to live like normal specimens of *homo sapiens*, represented norms of living. Without such norms education in the methodological, descriptive and applied sciences as we are today providing is possible, but normative education in any valid signification of the term is not.

This book is addressed directly to the teachers of mankind. But the problem with which it deals, the challenge which it presents to them, and the response which it calls from them, is the concern of every genuinely thoughtful man and woman no matter what their vocation in life may be. For while it deals with the immediate problem of the right organization of education, it deals in fact with the problem of how to live a genuinely civilized life so that civilized life of that kind will become possible for the whole of mankind.

This study is not merely a plea for a revolution in education. It is an attempt at a more fundamental analysis of the nature of the problem inadequately described as the problem of general education; it is avowedly a prescription for the kind of education toward which general education aims to provide.

There are two ways in which the actualization of such a revolution in education can be attempted. It can be attempted from the "bottom up," by trying to rightly educate the masses of mankind. Or it can be attempted from the "top down," by trying to rightly educate the educable minority of mankind. It can be attempted from the "bottom up," as Vinoba Bhave has tried in India and James Yen tried in pre-Communist China, by "mass education." Or it can be attempted as Plato suggested by educating a minority of philosopher-kings; it can be attempted as the great sages of India of the times of the Vedas prescribed by placing an educated minority—the Brahmins—at the top of the social hierarchy; or attempted as the organizers of ancient Chinese civilization tried, by making the scholar—the Superior Person—pre-eminent in a Feudal social order.

Another way of saying this is that it can be attempted either on the level of the common school, or on the level of higher education.

This study is based upon the assumption that the solution of the problem calls for approach from the university level down. It is based upon the theory that a planned solution of the problem cannot be left to time and to chance; that if the solution is to be planned, it must begin by rightly educating an elite capable of providing the leadership for what in this study will be called total education. It is based upon the theory that we cannot afford to wait for miracle men like Socrates and Confucius, like Gandhi and Vinoba Bhave; we must begin with such men as we ourselves happen to be. It is therefore based upon the theory that the challenge of the times as well as the nature of the problem calls for beginning such a purposed educational revolution at the top as the pre-requisite for an educational revolution from top to bottom.

This is the real lesson, it seems to me, of the revolution in education which Nicholas Grundtvig initiated in Denmark over a century ago. The transformation of education which the Danish Folk Schools achieved in Scandinavia did not get under way until a group of dedicated teachers were produced. The lesson of the Danish Renaissance is not that we educators

should blindly imitate the Danish Folk School or blindly duplicate the Danish Folk School curriculum. The lesson is that we should produce in properly organized institutions of higher learning the kind of educational leadership for which the problem calls—a leadership which recognizes, as Grundtvig did, that in the task of "enlivening" and of "enlightening," enlivening comes first and is prerequisite not merely to enlightening but to the use of enlightenment to create a better life and a better social order for the whole of mankind.

The revolution in education for which I plead can of course be started anywhere. It can be started here in India. Indeed, because of the fact that India is in ferment; because of the fact that here in India there is an effort at peaceful and not violent social revolution; because of the fact that the educational system of India has not yet crystalized past almost all hope of change as is the case with education in America and in most of the Western World, there seems to me more hope that it can be started here, and spread more rapidly from here, than from anywhere else in the modern world.

CHAPTER III

THE NATURE OF HUMANIZATION

Man's inhumanity to man, makes countless millions mourn.
—Alexander Pope.

Humanization, in a brief preliminary definition, is the process by which human beings are taught to live and to act like normal humane beings. But for this definition to become meaningful, the concept of normal living and normal action must be defined in all the detail which its importance warrants. This I have attempted to do in Chapter 7, which deals with the formulation of norms of living.

Because we have no vocabulary for discussing education worthy of the name, a certain amount of arbitrariness in the adoption of a terminology for this study is unavoidable. All that I can do is try to make as certain as possible that each apparently arbitrary term like humanization is adequately defined.

In order to avoid a length digression, I shall therefore limit myself to this brief definition of humanization for the time being since some definition, no matter how inadequate, is necessary to make clear that humanization is not being dealt with by modern education. It is necessary to make clear that enculturation is not humanization. For enculturation is the prevailing, though mistaken, answer being offered by educators to the problem of education's function.

By enculturation I mean the process by which the young are equipped with the language, the beliefs, the purposes, the

* The term maturation, which has in recent years been popularized by the writings of Harry Overstreet, a distinguished American philosopher and educator, refers to much the same thing as the term humanization. "The Mature Mind", which Overstreet discussed in one of his most popular books, is the mind of a humanized human being. My own preference for the term humanization is due to the fact that I prefer a term which applies not only to adults but which is applicable to every period in man's life-cycle. It is possible to speak of a child or an adolescent as being humanized or dehumanized; but it is impossible to speak of the young as mature without doing violence to the logic of language.

values, the customs, the traits, the techniques, the vocations, the methods of supporting themselves, and of discharging their civic responsibilities—"the mores and folkways," in Sumner's* famous phrase—of the particular culture in which they are born, and in which the vast majority of them will live and therefore be required to deal with their immediate personal and social, local and national problems. Education today, as for ages past, is primarily devoted to enculturation no matter how fantastic, irrational and inhuman the culture may be. Enculturation is simply indoctrination with the ideologies of a given culture.

Enculturation makes for patriotism but also jingoism; for racial pride but also for racial bigotry; for partisan devotion but also for partisan prejudices; for cultural pride but also for cultural arrogance; for religious conviction but also for religious fanaticism.

Humanization transforms all these various parochialisms into Humanism. It creates not Sectarians but Humanists.

Enculturation is of course, an absolute necessity. Man being a gregarious animal, he must learn how to live with the group to which he belongs; but because so many cultures are either dominantly or in parts irrational and inhuman, humanization must take precedence educationally over enculturation. For man is a member of the human race before he is a member of any particular race or religion, any particular nation or culture; any particular social, political or economic ideology, movement or party. Nothing illustrates more clearly the validity of the priority I am according to humanization than does education with regard to race. Enculturation makes for racial consciousness; in white nations it tends to include the belief in white supremacy; in Japan and in China, the belief that all non-Japanese or non-Chinese are barbarians; and so on *ad infinitum*.

Humanization, on the other hand, gives priority to recogni-

* William Graham Sumner, (1840-1910), an American political economist whose writings not only in his own special field but in related fields were original and provocative in the extreme.

tion of the fact to which Stringfellow Barr* called attention in his widely circulated essay, "Let's Join the Human Race". It aims not at adjusting the individual to his own particular nationality, but adjusting him to the problems involved in living as a member of one whole human race.

Humanization calls for both intellectual and emotional education. It is impossible to produce it without dealing with both its intellectual and emotional aspects. Even in order to deal with its intellectual aspect, both have to be taken into account.

For man is not born human. At birth he is human only physiologically, and that is the least human thing about him. And the fact that he is an infant and not an adult of the species makes it difficult to call him human in even that respect at that early time. For a long time after conception the foetus of man is indistinguishable from that of the lower animals. And even after parturition, he is not much more than any other infant mammal. He is, in sober fact, merely a two-legged mammal, unable even to use his legs like legs—a mammal, however, with enormous capacities for the development or mis-development of his mind. Whether he is eventually humanized; whether he achieves the minimum mental development which will mark him as human, or falls short of it, is determined solely by one thing—his education.

Every infant of the human species begins at birth with only one desire, the desire to satisfy its hunger; and exhibits only one purpose, growth. For nine months in the darkness and security of its mother's womb, its hunger had been automatically satisfied. But though hunger remains its dominant desire for a considerable period of time after birth, by the time it has had its first feeding, the first step in its humanization or

* Stringfellow Barr, formerly President of St. John's College in Annapolis, is one of the group of American educators who lead a revolution against existing methods of college education by substituting the study of the great books of the western tradition for the disintegrated curriculums now being used in American colleges. Others in the group include Robert M. Hutchings, formerly Chancellor of Chicago University, Mortimer Adler, and Scott Buchanan.

dehumanization has taken place. If at that time it is breast-fed; if it feels the warmth, the security, and the love of its mother in this all-important activity of infant-life, the first step in its right-education and humanization has taken place. But if, on the contrary, this does not happen—if, for instance, it is bottle-fed, or if it is separated from its mother and left to the tender ministrations of a trained nurse—then its mis-education has begun.

Humanization begins, therefore, emotionally and not intellectually. The education of this potentially human infant is, during this all-important period of its life, entirely in the hands of its mother and its family. The school can do nothing directly to educate individuals properly at this time. But it has an enormous responsibility, nevertheless, and it is not entirely helpless—even if resolution of the problem calls for a plan for generations, rather than for the school-span of a single individual. What it cannot do directly to humanize the individual during infancy, it can do indirectly by re-educating and humanizing the parents—by providing a system of adult education whereby the parents can learn not only their responsibilities in this all-important matter, but what science and the accumulated knowledge and wisdom of the ages has to teach about the educational functions of the home.

The enormous importance of the first few years of life is something we have only become fully aware of since Freud demonstrated that mistakes made during this period make such a powerful impression on the unconscious mind that they continue to affect human behaviour throughout the whole of life. Nothing that the school can do subsequently can entirely eradicate them. They become a psycho-neurotic problem to be dealt with outside the school. The school should not aggravate deficiencies in humanization, but it can do little to correct infantile dehumanization except to gloss it over or repress it, with no assurance that it will not later burst out in what is called juvenile delinquency in youth, and perversion and crime in adulthood.

What is important from the standpoint of the teacher and

the school is recognition of the fact that the first step in emotional education is not a school, but a family function. No institution, not even the best managed boarding school, can do what the evidence indicates only the mother, the father and other members of the family can do educationally for the child during its first years of life. Failure to recognize this means usually two things—the school attempts a role that it cannot fulfill, as in the case of nursery schools, and it relieves the parents and family of a responsibility they have no right to evade.

A second important problem in humanization develops when the child begins to feel the first stirrings of sexuality, with the onset of puberty. It continues throughout the whole period of schooling, and ends when mating has satisfactorily taken place. And here, at the age of puberty, the school has a definite role to play.

This problem is not solved unless during this period the young have learned how to control and how to sublimate their surplus sexual energy. Man, like all other organisms, is equipped with far more sexual energy than he needs. Nature cares nothing for man as man; it cares only for the survival of the species. The basic fact with which education has to deal in providing for this problem is that man is not equipped, as are the lower animals, with inbuilt instinctual controls for his sexual behaviour. The plasticity of his instincts calls for the substitution of conscious control for instinctual control. If education of the right kind for dealing with this is not provided in the school as well as in the home, bestialization and not humanization is the result. Failure to deal with it not only stimulates masturbation, at the very least, but all kinds of sexual perversion at the worst. The problem cannot be ignored by the school, if for no other reason than that failure to educate properly with regard to sexual behaviour is almost certain to produce students who do not want to study.

It can, however, do worse than this. It can set up a system which makes the situation worse; by taking the children out of the home too young. Particularly if they are taken out completely and placed in boarding schools such as the English public

schools. Frank Harris,* in his biography of Oscar Wilde,** insisted that the prevalence of homo-sexuality such as Wilde's in Britain's upper classes was due to the fact that children were sent to boarding schools at seven and eight years of age, when they were still in great need of mothering. Depriving the young of a normal outlet for their love, he insisted, promoted homosexual expressions of it.

All this is simply an attempt to suggest the many areas involved in the concept of humanization. I mention it only to make it clear that instruction only in the academic specialities which now constitute almost the entire curriculum, no matter which ones are selected, cannot possibly humanize our young.

In higher education there has been traditionally a feeling that humanization is provided by the study of the humanities. But this is not true. The liberal arts, far more humanistic though they are than the sciences, are after all special subjects. These subjects tend to produce the cultivated rather than the humanized man. Humanization is not properly dealt with unless the school provides a course, or a whole series of courses, which will provide the young with a humanistic philosophy of life. Such courses, or educational activities as they might more accurately be designated, must have not only an intellectual but also an emotional content.

It is my thesis that the intellectual aspects of humanization should be dealt with by a course of study of the basic problems of man and of society. This suggestion is discussed at length in the second volume of this study in the consideration of general education and in this volume in the description of these basic problems in Chapters 4 and 5. The emotional aspects of

* Frank Harris, (1856-1931), though an American, was the editor of "The Saturday Review" in London, a leading literary journal at the turn of the century. He was the discoverer of George Bernard Shaw and H. G. Wells, and the sponsor of Oscar Wilde. He wrote a biography of Wilde which is a revealing account of the demoralizing effects of perversion upon a great talent, and of the bigotry with which Victorian Puritanism treated such matters in England.

** Oscar Wilde, (1856-1900), was an Irish poet and dramatist of real distinction. He was the leading playwright of the London stage at the time of his arrest and conviction for homosexuality, and because of the high social standing of those involved in the scandal, the case was a *cause celebre*. His "Ballade of Reading Gaol," written during his imprisonment, is one of the most moving poems in English literature.

humanization, which are almost completely ignored in the modern organization of education, are discussed at length in the second volume in the chapters devoted to emotional education.

It is my conviction that if the concept of humanization is examined in depth, two facts will emerge: that humanization is the ultimate function of education, and that education today is not providing it.

CHAPTER IV

THE NATURE OF BASIC PROBLEMS

Man is born not to solve the problems of the universe, but to find out where the problem begins, and then to restrain himself within the limits of what is comprehensible. — Johann Wolfgang Goethe.

As the term problems* will be used in this study, it will be used almost exclusively as an abbreviation for the phrase "the problems of individual human beings;" it will not be used with reference to its ordinary dictionary meaning of any question proposed for solution.

It will be used specifically with reference to any situation in which an individual is confronted with the possibility of two or more alternate courses of action, two or more alternate beliefs, or two or more alternate values as to what should be the basis of action by him. The course of action which he actually takes, is his resolution of such situations.

All the problems of living thus defined, fall first of all into two categories which differ in one significant respect: they are either *cases*, the particular problems of particular individuals at particular times and particular places, or they are *classes of problems* which have some one or more significant characteristics in common.

The first are specific and concrete cases; the second generalized abstract problems. Particular problems may be very important to the particular individuals involved, but unless such a problem has some characteristic which applies to many cases and which can be stated as applying to a whole class of similar cases, it has a strictly limited importance.

* A problem may be defined as a proposition requiring some operation, or a question requiring some answer, for solution, decision, or determination. Problems of living may be defined as questions with which individuals are confronted in choosing which of various alternative ways they should act in order to live like normal human beings.

It is a problem of this limited importance which is represented by the problem of a particular individual, (let us call him John Doe), who is eating his dinner, and finds himself considering whether or not to take an additional helping of meat. The matter confronts him with a problem because there are several alternative courses of action open by him. He can resolve the matter by deciding "Yes;" he can resolve it by deciding "No;" he can resolve it by deciding to eat something else, perhaps some salad or some of the other vegetables on the table.

This seemingly trivial problem, typical of innumerable particular problems with which living confronts every individual, has nevertheless an aspect of real importance. The nutritional problem is important in dealing with the problem of maintaining health. Good nutrition is the aggregation of good solutions of many such problems, each one of trivial importance by itself, but which as a whole make for health. Nutritionally the question of how much John Doe eats and what he eats is important. Most problems of this trivial nature, however, are resolved by most individuals without much thought; they are disposed of either by the impulse of the moment or by habits which reflect the manner in which problems of that kind are dealt with by convention, by fashion, by custom and tradition, by the folkways of the group into which John Doe was born of which he had become a member.

But it by no means follows from this that this customary or impulsive solution is the correct or perhaps best possible solution of the problem; it may be merely a disposition of it and at the same time an entirely wrong method of dealing with it. If human beings are to live as human beings should, they must somehow learn what are the genuinely rational methods of dealing with the problems which confront them. This is just another way of saying that there must be some standards, some principles, some "norms" to which they can refer, and so choose the right one of the various alternatives to which they can turn when confronted with a problem.

There is only one rational way of doing this. It cannot be done by following the culture pattern, nor by leaving the

decision to mere impulse. The culture-pattern may itself prescribe for such problems badly; the impulses of John Doe may in fact be not only irrational but actually harmful to him or to others who may be involved in what he does. The only way of doing this is to abstract from the problem what is most significant and important with regard to it, and then find an existing norm, or formulate a norm, which applies to all problems with the same significant characteristics.

If problems are classified for this purpose, as we have seen, we finally arrive at the all-inclusive category into which particular problems of various kinds fall. These final categories are what are here called basic problems. As we move down from this final category to the subsidiary classification within the categories, the universality and the perpetuity of the problems in terms of human life decrease. In those parts of India where nobody eats meat, the problem of whether to take an additional serving of meat does not arise at all. This is a problem local to those regions of the Earth where the people are meat-eaters. The problem of nutrition, however, exists in both regions; it is a universal problem because it confronts every human being on Earth. And it is a perpetual problem because it came into existence when man, in the course of his evolution, could no longer rely upon his instincts in dealing with his needs—when the plasticity of his instincts made it necessary for him to choose among alternative means of satisfying them.

The Problems of Man versus the Problems of Society. It is necessary to call attention to the fundamental significance of the distinction which emerges both in the classification of human problems and the classification of human actions. Just as it is necessary to distinguish between individual and collective action, so it is necessary to distinguish between individual and collective problems—between the problems of man and the problems of society. The failure to recognize the significance of this distinction is probably the most unscientific aspect of the social sciences—the sciences which deal with human behaviour in some form—up to this time.

All problems, including those which are called social problems, are in the final analysis the problems of individual

human beings. Ultimately, there are only individuals. For better or worse, society consists only of individuals; and no matter how completely the individual may be socially dominated, no individual can avoid developing to some extent an individual personality of his own.

A single individual—a Caesar or a Napoleon, a Gandhi or a Lenin—if he was a strong enough personality, may actually determine what a society of millions at some particular time will do. The fact that most individuals play no such part in what society does, does not alter the fact that they may, individual by individual, help to decide what society shall do, or may help to determine, by action in some representative or official capacity for society, what it shall do. Regardless of what the nature of the social problem of which social action is a resolution, every social action is in the final analysis nothing but what the individuals of which society is composed in fact do. Only individuals initiate, only individuals oppose or acquiesce in what society is said to do. All so-called social problems are resolved by what individuals who are living do, or by what individuals who may have been dead a long time have done. Living individuals may accept what individuals in the past have done about a social problem, but if they do, their acceptance, just as would be their opposition, is an individual action of their own.

For in actuality there is no such thing as society. Society is a hypostatization. No matter how elaborately organized or how definitely incorporated, as in a modern nation, society is nothing but an operational fiction, what is called a legal fiction or an artificial person in the language of the law—something assumed to have existence and created presumably to act in the interest of, or in accordance with, the wishes of the natural persons who have created a society, who belong to it, and who control its activities. It acts only through actual individuals or natural persons; its own activities are a mere figure of speech.

What makes this distinction so important is the fact that its recognition gives to the education of the individual a significance which tends to be obscured if men are taught and conditioned to think of social action and of the activities of society

as the operation of merely impersonal, historical, or economically or otherwise determined forces about which they do nothing.

The distinction between the problems of man and the problems of society is therefore a distinction useful mainly for the purpose of relating the data of the social sciences to the education of the individual for collective, social or public action. When these problems are considered from the standpoint of this distinction, some of them, like the institutional problem, are primarily and almost exclusively problems of society, and some of them, like the occupational problem, primarily and almost exclusively problems of the individual. All of them, however, have both individual and social aspects. But no matter how social the social aspect of any of them, every one of them involves individual action even if the action consists of nothing more than individual consent and acquiescence in what is socially done.

If education is to educate wholly and not partially, the individual must be taught how to deal both with his own personal problems and how to deal with those of society.

Problems of Thought versus Problems of Action. In the classification of these problems, two super-categories emerge as shown in Chart I, *problems of thought* or of purely mental "action," and *problems of motor-action*—problems which involve the practice or implementation of what is felt or believed.

Problems which can be disposed of by study and reflection only, without any other form of action, are manifestly different from problems which call for motor-action if they are to be dealt with and disposed of. Seven of the fourteen basic problems are essentially problems of thought. They are disposed of the moment an individual comes to either an expressed or implied conclusion about them. A problem such as that posed by the question "Should I believe in the existence of God?" is in fact disposed of when an individual comes to conclude either there is a God—and so accepts some Theistic solution of the problem, or that there is no such being as God—the Atheistic solution of the problem, or that there is no rational way of determining whether there is or is not a God—the Agnostic solution of the

CLASSIFICATION OF THE BASIC PROBLEMS OF MAN AND OF SOCIETY

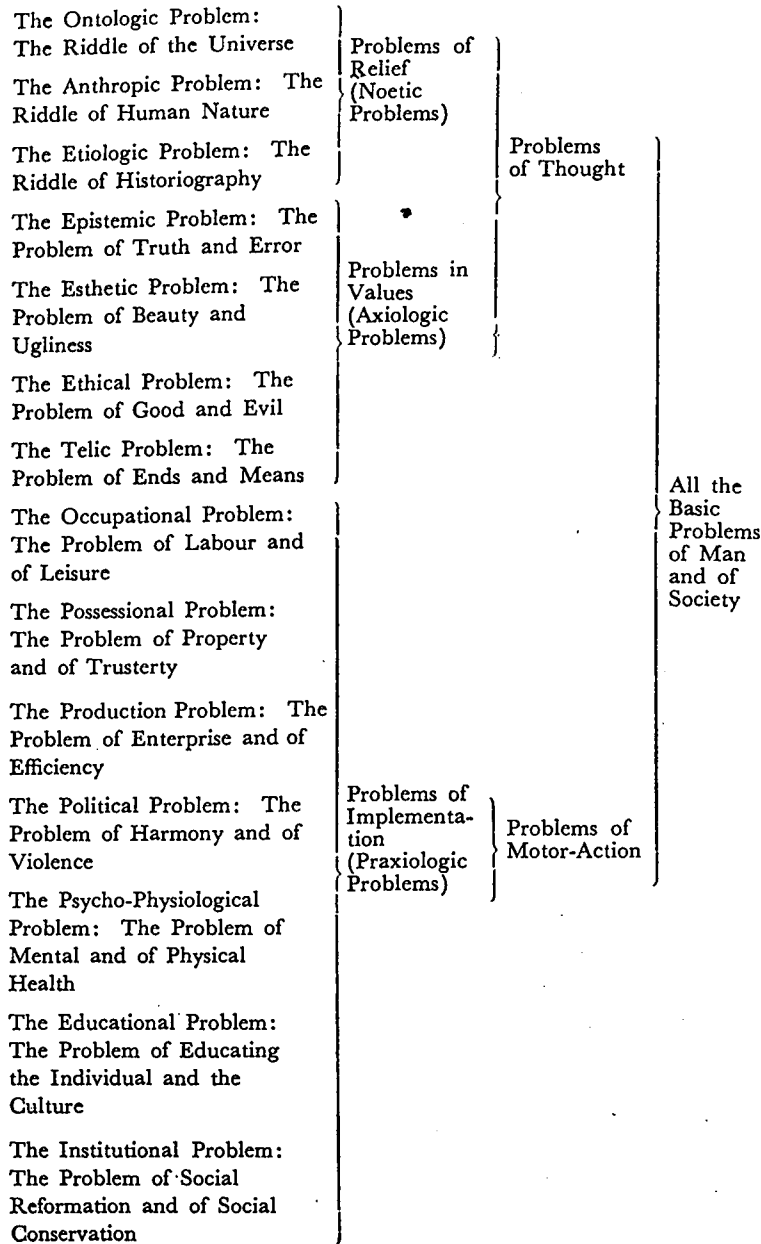


CHART I

problem. The seven basic problems which can be disposed of in this way by thought only—by reflection or by a mental action only—are listed in Chart I.

Since the answers to these seven problems become the basis of all the beliefs and values of the individual, and of the manner in which he implements all the problems with which he is confronted, no scheme of education is adequate unless it helps the individual not only to come to conclusions with regard to them, but to come to conclusions which he accepts with such conviction that he disposes of the problem not on the basis of an unthinking impulse or an unthinking observance of custom, but on the basis of rational thought. Man cannot afford to abdicate the use of reason. For better or worse, he is a thinking animal. Right-education must help the individual to understand, and on the basis of understanding deal with these seven kinds of problems. It is mis-education of the worst kind to ignore them. Higher education which produces technically or professionally trained men and women but which omits these problems from the subject matter of its curriculums, produces a highly trained barbarian, not a rounded personality or whole human being.

The seven problems of practice, of motor-action and implementation, cannot however be disposed of by thought only. They too, like the problems of pure thought, require study and consideration. But even after thinking about them has led to conclusions as to how they should be dealt with, they are not disposed of until the conclusions are put into practice; until they are "implemented." It is the fact that man cannot afford to abdicate his responsibilities as a thinking animal that makes it necessary to include their definition and consideration in the educator's curriculum. No man can afford to act with regard to them impulsively like an animal; his instincts are too plastic; if he does not learn how to dispose of them rationally, his behaviour can be more bestial than that of the wildest beasts.

John Doe's problem about what he should eat therefore calls for study and thought, just as the problems of the existence or non-existence of God calls for thought and study. It calls

for resolution in terms of all that he can learn about the psycho-physiological problem. But it is not disposed of by mere study and thought; it calls for putting into practice what he learns; it calls for eating in accordance with the norms of nutrition and in accordance with a dietetic regimen which will maintain mental and physical health.

The Seven Problems of Motor-Action. The seven basic problems of motor-action, which will be technically designated as praxiologic* in this study, in the order in which they shift from a predominantly personal to predominantly social form, may be briefly described as follows:

1. The problem which is most completely personal and which is only incidentally social is what in this study will be called the *Psycho-Physiological Problem*, to emphasize the fact that health is both mental and physical in nature. This dual problem calls for consideration in terms of two different methods of action, the first having to do with the *maintenance* of health, and the second with the *restoration* of health when health has been in any manner impaired.

2. The second, which will be called the *Occupational Problem* is in a sense the problem of how to spend time; of the proper way in which the individual should spend his time throughout the whole of his life-cycle; of the occupations proper to normal living in each of the different periods of life which call for different kinds of work, recreation, and recuperation. It is primarily a personal problem, but with greater social, economic, and political implications than the Psycho-Physiological Problem.

3. The third, the *Possessional Problem*, though again primarily a personal problem, has even greater social, economic and political implications than the Occupational Problem. This is the problem of things and properties, both tangible and intangible, which we should desire to possess and try to acquire, in terms of the actualities essential to living like a normal human being.

* From the Greek word *praxis*, which means practice.

4. We come now to the first problem which is primarily social in nature, the problem we shall call the *Institutional Problem*. This is the problem of (a) the maintenance of the social institutions essential to normal living, (b) the reform of any existing institutions which need reformation, (c) the abolition of any of those which are abnormal and should be abolished, and (d) the establishment of normal institutions to replace those which are abnormal and should be abolished. This problem is again a two-fold problem. It is in part the problem as to which institutions are essential to make possible a good life for the individual in a good society, and in part the problem of how to make changes in those that exist today and which call for reformation of some kind.

5. The fifth, again primarily social in nature, is the *Production Problem* — the problem of the organization and operation of enterprises of all kinds, and not only economic; enterprises which are *voluntary* and not compulsory in nature, so that they realize their purposes most efficiently.

6. The sixth problem, the *Political Problem*, is still organizational in nature, but it deals with those enterprises — the enterprises we variously call the government, the nation, the state — which are ineradicably compulsory and not voluntary in nature. Efficiency, which is primary in terms of the Organizational Problem, is secondary in the Political Problem. Here the crucial problem is that of the functions which it is proper to implement by the use of force and compulsions of various kinds.

7. The final problem of implementation, the *Educational Problem*, is personal in application but both personal and social in its consequences.

Though these seven problems are primarily problems calling for action, their study is virtually meaningless if it does not result in implementation; but they can only be disposed of rationally and humanely if they are dealt with in accordance with the seven basic problems of thought — the seven basic problems of beliefs and values.

The Seven Basic Problems of Thought. Problems of belief and problems in values are alike in that they are problems of thought, but that is the only respect in which these two categories of problems are alike. Both these groups of problems have in common the fact that they can be resolved by thinking to a conclusion. The three problems of belief can be dealt with satisfactorily on the basis of hypothetical conclusions only — conclusions subject to the sort of reservations expressed in the legal phrase, "to the best of my knowledge and belief." But the four problems in values call for conviction, for felt-judgments, for conclusions as to the validity of which there is such conviction as to warrant their being considered absolute.

The problem of a future life, for example, calls for some sort of resolution. Millions of Christians and Mohameddians believe that the answer to this question is "Yes". Unfortunately beliefs of this kind become the basis for the values and the activities of those who believe in them. But the millions who do not believe in Christian or Mohammedan dogmatic answers to such a question, or who believe in heterodox and not orthodox religious dogmas, are in danger of persecution if the orthodox, or an orthodox priesthood, are tempted to use compulsion in any form to insure that their beliefs shall prevail. As a result, no individual, no group, and certainly no government, has any moral right to impose religious solutions of these problems in belief on those who disbelieve in them.

This is not only true of religious solutions of the problem concerning the nature of the universe, the nature of man, and the nature of the origin and destiny of both man and the universe in which he finds himself. It is also true of scientific "beliefs." Scientific beliefs should not be treated as dogmas. No matter how convincing the evidence for belief in the second law of thermo-dynamics, there is no warrant for assuming that laws of nature of this kind are free from hypothetical elements. Scientific beliefs too are properly to be treated as probative. No matter how close science generally may come to establishing absolute truths, it will never arrive there. With regard to much of our present day scientific knowledge we may be fully justified in acting as if it was in fact true, but never that it is

unrevisable. Only about mathematical tautologies can we be dogmatic, and these are absolute only because they are tautological.

Nearly all scientists assume the actuality of the phenomenal world which they study and describe, and most of them dismiss the doctrine of *maya*, which denies its actuality as a superstition. But no one can read Aurobindo Gosh*, who has a better knowledge of modern science than most educated Westerners, and not feel forced to acknowledge that belief in the absoluteness of the phenomenal world should be probative and not absolute. Solipsism cannot be entirely ignored. Pearson, in his classic study of the philosophy of science**, in the very same book in which he marshalled the evidence for the acceptance of modern science, emphasizes the relativity of all our scientific knowledge. *Maya*, and the belief that the phenomenal world is a delusion of the human mind, may be a superstition, but Pearson makes it perfectly plain that even if this is true, the believers in science have still to make the reservation, "There is a possibility that we may be mistaken."

But with regard to values, in contrast to beliefs, the very nature of the problems calls for something more. Values become merely academic, and amount to nothing but verbalisms, unless they are felt. And to justify the feeling that they are valid, the validity of values must be established beyond the possibility of all reasonable doubt. The problem of whether stealing and murdering is right or wrong, cannot be dealt with as if there might be a doubt as to whether stealing and murdering is wrong. We cannot afford to hesitate about using force to the utmost in dealing with those who attempt to steal or to murder, and in preventing an habitual thief or a murderer who might murder again, from committing crimes again. But the judgment that any act considered a crime is in fact criminal

* Aurobindo Gosh is probably the outstanding figure of the recent past who has tried to develop a systematic reconciliation between the Hindu concept of a supra-rational approach to knowledge and the Western concept of a purely phenomenal and rational approach to it.

** Karl Pearson, (1857-1936) in his famous "Grammar of Science" developed a comprehensive philosophy of science.

confronts us with one of our four basic problems in values, the problem of moral values—a problem especially acute today because Ethical Relativists deny the validity of moral judgments of any kind.

This does not mean that everything that is valued by this or that person, this or that nation, this or that religion, is absolute, and that the use of force is justified in dealing with those who disregard these values. Many values are not and cannot be established to be wrong. When this is impossible no compulsion should be used with regard to them. The distinction involved—that between true crimes and pseudo-crimes, for instance—is the essential problem which we need to be studied in detail in the consideration of the four basic problems in values.

Right education—the education of the whole man—is impossible if the individual is not taught how to integrate all the knowledge he acquires, all the bodies of knowledge or ideologies embodied in the arts and sciences, the religions and the philosophies of which he becomes aware, in terms of these seven problems of thought.

The Three Basic Problems of Belief. The basic problems of belief, which will be technically designated as noetic problems* in this study, and which arise in the formulation of the postulates upon the basis of which human beings act, may be briefly described as follows:

1. The first, in this study called the *Ontologic Problem*, is that of what to believe, and what to assume, to be the truth about the nature of nature—about the nature of the world in which man finds himself. The problem is created for the individual by the fact that man cannot avoid acting either upon the belief that it is only the natural world with which he has to deal, or that he has to deal with both a natural and with some kind of a metaphysical or supernatural world.

2. The second basic problem of belief, the *Anthropic Problem*, is created by the fact that man cannot avoid acting without some beliefs or assumptions about the nature of human

* The word noetic is used in philosophic discussion with reference to ideas grasped by the intellect alone.

nature, both in dealing with his fellow-men and also, if he believes that man has an immortal soul, in his dealings with the supernatural world of which that soul is a part.

3. The third of these problems of belief, which is here called the *Etiologic Problem*, is that of what to believe about the causation of events. The Ontologic and Anthropic Problems are problems which deal with nature and with man in a mainly static frame of reference. As a matter of fact of course neither is static; both exist in the flux of events; and beliefs about the cause of the drama represented by events such as the origin and destiny of the world, the rise and fall of civilizations, and the life and death of individuals, are the postulates upon the basis of which both the individual and the masses of mankind base their actions.

What the individual believes about these three great problems are, consciously or unconsciously, the basis both of his values and of the manner in which he tries to implement them.

The Four Basic Problems in Values. There remain four more problems of thought, the four basic problems in values—problems which education is virtually ignoring today. These four will be technically designated as axiologic problems* in this study.

1. The first of these I think of as the *Epistemic Problem*. This problem is not that of the theories and verity of our knowledge. The theories we form about the nature of our knowledge are mere preliminaries to the real problem, the problem which has to do with the inculcation of values: in the case of the Epistemic Problem, with the inculcation of a deep love of open-mindedness, of tolerance, of eternal truth-seeking.

2. The Second, the *Esthetic Problem*, is the problem of beauty and ugliness in all the arts, both useful and fine. In the complex of esthetic problems, the first we have to dispose of

* Axiology is the science of values of all kinds and includes ethics and esthetics. The word *axio* is the Greek word for worthy.

if that of esthetic standards, for without esthetic standards man becomes either an esthetic illiterate or an esthetic anarchist. But the ultimate Esthetic Problem is that of inculcating a love for the beautiful and a revulsion for what is ugly. The ultimate problem is one of values — of emotional education in contrast to intellectual and technical education.

3. We come now to the *Ethical Problem*, the problem of good and evil. As in all problems of values, it is in its first stages an intellectual problem; it requires a scientific and not merely a subjective foundation. Without establishing ethical norms, the education of mankind results in the production of educated barbarians — of barbarians equipped with enormous quantities of technical knowledge, but without the wisdom essential to its proper use. But again, as in all four axiologic problems, it is ultimately a problem in emotional education, of imbuing the individual with a love of good and hatred of evil.

4. Finally we come to the *Telic Problem*, the problem of purpose in life. It is the problem of ultimate ends, in contrast to means and to mediate purposes, for without formulating the ends to which life should be devoted, there is no rational basis for choosing among means and methods of living. But formulation of ends is preliminary to inculcation. Without the resolution of this problem, the individual is left to drift, so far as goals in life are concerned, and to accept the drift of the society, or the group in society, of which he happens to be a member.

It is necessary only to survey these four problems to realize to what an extraordinary extent the modern school and college curriculum ignores them. There is an almost limitless quantity of knowledge dealing with them scattered about in the various arts and sciences, religions and philosophies. But of this knowledge, the curriculum today concentrates on one part of one basic problem only — on one-third of the occupational problem; on the part of it which deals with the equipment of the individual for earning his living. Modern education is oriented vocationally, and at every stage, even in common schooling long before any thought of work is central, it concentrates on equipping the young with those symbolic

disciplines which are essential to employment in the modern world. Literacy is featured in preference to manners, because literacy is useful in obtaining employment and in preparation for vocational studies, while good manners — much less the virtues — are, for this purpose, virtual superfluities.

Without a comprehensive concept of the nature of human action — of all the activities and not only those concerned with employment — the curriculum will never make proper provision for the education of whole man; the necessity for providing leadership not only in the school but in every area of living in which education takes place will not be recognized; the concentration on methods of teaching which deal with the conscious mind — the intelligence — will continue, and the necessity for methods of teaching which deal with the emotions will continue to be ignored.

CHAPTER V

THE NATURE OF BASIC IDEOLOGIES

Every idea is an incitement. It offers itself for belief and if believed, it is acted on unless some other belief outweighs it or some failure of energy stifles the movement at birth.—Justice Oliver Wendell Holmes in his dissenting opinion in *Gitlow vs. the People of New York*, 1924.

When the problems of mankind are resolved, the solutions will always be found in ideas, ideals, and ideologies. No education is complete which does not provide the individual with a tool for mobilizing the right ideas, the right ideals, and the right ideologies for dealing with the problems about which he must do something, and about which he may do the wrong thing if he does not learn to do what is right about them.

Human beings are—and always will remain—animals. But they are more than animals; they are animals capable of dealing with their problems not instinctually but on the basis of ideas and ideals; of devoting their lives not like mere beasts to sheer self-preservation and self-reproduction, but to self-expression and to self-realisation. They alone among the myriad forms of life evolved here upon the Earth are capable of formulating ideas, of transforming ideas into ideals, of developing ideas and ideals into ideologies, and of trying to realize and actualize what they have come to believe good and beautiful, true and humane.

They are capable of acting upon ideas not merely to a limited extent; they are capable of acting upon them—and have often acted upon them—to an almost unlimited extent. They have, as a matter of historic fact, over and over again not only transformed their own lives but also transformed the social systems which they had previously accepted, ever since that remote time when animal-impulses ceased to be the only basis of their behaviour and they began to reflect about the meaning of the three great riddles with which life confronts them—the riddle of the universe, the riddle of events, and the riddle of man himself.

In dealing with the problem not only of education but of life as a whole, we must recognize how profoundly the ideologies in which their ideas and ideals are embodied have modified what would otherwise have been their instinctive and impulsive method of dealing with the problems with which life confronts mankind.

All that individuals have learned about life and living—about how to act day by day and year by year—has become embodied in the ideologies which are a part of the total store of knowledge and of the wisdom of the group and the community to which they belong. But these ideologies, unfortunately, are not all consistent with one another; on the contrary, even when dealing with the same problem, they are notoriously contradictory both in their analysis of and in their prescriptions for dealing with their problems. Many ideologies must, therefore, deal with them incorrectly.

Whenever an individual is confronted with a choice between alternative and often contradictory ideologies—between ideologies like Democracy and Totalitarianism, Individualism and Collectivism, Paganism and Christianity, Idolatry and Mohameddanism, Urbanism and Agrarianism, Industrialism and Craft Production—he is confronted with an ideological problem.

Ideological problems are problems which man cannot escape so long as he insists on having new ideas. An individual may fail, or deliberately refuse, to give any thought to the task of choosing between opposing ideologies. But neither failure nor refusal to choose represents escape from the necessity of choosing. Even his most trivial acts will be found on analysis to possess ideological implications, even though he is utterly unconscious of the fact that in performing them he is disposing of an ideological problem. He may go to church every Sunday morning, and, in common with millions of other Christians who have never given the matter a thought, be unconscious of the fact that in doing so he is rejecting the ideology of Sabbatarianism. If properly analysed, every act performed by an individual in the course of his life, and every institution in the society

of which he is part, reflect the influence of previous deliberate efforts by human beings to solve the problems of living through the formulation of ideologies which deal with them.

1. *Ideas*. The words *idea*, *ideal* and *ideology* all come into English from the Greek word *idein*, meaning to see. All three have in common the fact that they refer to something which, figuratively, we see. But the things "seen" are so different from each other, and often so important to us, it is essential to make certain that when we use these words to designate them we see clearly to what each designation refers.

Plato made the word *idea* the most celebrated in philosophy. But when he used the word, he was referring to something outside the actual world, to an *archetype* existing outside the human mind, of which our minds are capable only of forming shadowy approximations. Since he was in fact referring to archetypes, and not to the approximations to archetypes which is all we are capable of seeing with our human minds, Plato's "ideas" will be referred to not as ideas but as archetypes in this study.

An idea, therefore, in the meaning which will be attached to it throughout this study, will refer only to what is in the human mind. All our ideas are in our minds, even when they refer to things like archetypes which are supposed to be outside the visible world.

Secondly, it will always refer to the designation of a class of things, never to a particular; it will always refer to the classes to which different kinds of particular things are assigned. John Doe's house is a particular house — a particular in the classic Scholastic conception of a particular. It is a particular thing, not an idea. But since it is a house, it belongs to a class of things called houses, and this class of things is an idea. In referring to what John Doe owns as a house, we have already classified what he owns, and every such classification of particular things becomes an idea if it is clearly enough formulated in our minds. In Scholastic philosophy, ideas of this kind were called universals; in modern thinking about them, they are called abstractions. But modern usage of the word abstraction really

refers to two different things, to the qualities of things and also to classes of things. To live up to my semantic ideal of "one word, one meaning, and one meaning, one word" in this study I shall refer to these two meanings by two words — classes of things I shall designate with the word *classifications*, and qualities of things with the word *abstractions*.

Thirdly, while all ideas are classifications, not all classifications are ideas. Classification is a more inclusive term than idea; it includes not only classifications of ideas, which are things clearly seen and formulated, but also classifications of notions, which are not. The distinction between the two is of great importance; many things now called ideas should really be recognized as mere notions. The word "house" may refer either to a mere notion, or a clear idea of what the class of things called houses refers to. "House" becomes an idea in our minds only after we have clearly formulated the characteristics which are essential to a house. There are at least four of these essential; a house must have a floor, it must have walls, it must have a roof, and it must have a door. Without a floor, it is an enclosed pit; without walls, it is merely a floor; without a roof, it consists only of walls; without a door, it is a box, not a house. Most people have only vague notions about things; they rarely stop to formulate their notions so clearly that they deserve to be called ideas.

The importance of teaching people to substitute clear ideas for vague notions cannot be exaggerated. Most individuals have only a vague notion of what freedom means, and it is because of this vagueness that so often they are willing to barter freedom away for what in the ultimate proves to be "a mess of potage."

Ideals are sometimes defined as forms or images in the mind, but this then uses one term to refer to two different things; for a clear formulation of something in the mind, and for mere forms and mere images. But nothing is gained by equating the word *idea* with the word "form" and the word "image"; the word *idea* should be reserved to refer only to what is clearly formulated.

Fourthly, ideas can be formulated not only about tangible things but also about intangible and even completely imaginary and fictitious things. The idea *house* refers to a tangible thing; the idea of *freedom* to an intangible thing; the idea of *devil* to an imaginary thing.

Fifthly, ideas may be either true or false. The idea that the Earth is flat we now consider false because, in trying to formulate more and more accurately the original notion man had about the Earth, it became clear that this notion of its flatness did not conform to the actualities involved. The importance of this fact about ideas cannot possibly be over-emphasized, because, as in the quotation from Oliver Wendel Holmes' famous dissenting opinion in the Gitlow case, *ideas move men*. When the ideas are false, they move them in the wrong direction and frequently move them to do things which human beings should not do; but when they are true, they move them in the right direction, in the direction in which all human beings should be moved.

2. *Ideals*. An ideal, on the other hand, is an idea the characteristics of which have been formulated not in terms of *what is* but *what should be*. Because of man's imagination, and his capacity for imagining things as they might be if they were perfect, every idea is capable of being transformed into an ideal. The idea of house, if formulated in the mind not as houses actually are but as the mind can imagine them in their perfection to be, becomes the ideal house; the idea of family as families actually live, can become the ideal of perfect family life; the idea of community when formulated merely in terms of communities as they actually exist—however clearly and accurately—is still an idea; but when formulated in terms of what the imagination can imagine a community might be, it becomes the ideal of the perfect community.

Ideas, then, refer to actualities; ideals to imaginaries. But this, instead of reducing the importance of ideals, increases them. As Kant said: "Ideals, though they cannot claim objective reality, are not therefore to be considered as mere chimeras,

but supply reason with an indispensable standard, because it requires the concept of that which is perfect of its kind, in order to estimate and measure by it the degree and number of defects in the imperfect."*

It is not correct, in terms of the distinction between idea and ideal to say, as Oliver Wendel Holmes said, that ideas move men; what moves men, and what leads men to strive and to sacrifice for the sake of an "idea" are their idealizations of the idea. The most eloquent expression of this truth we probably owe to a poet, Heinrich Heine, who in his discussion of "Religion and Philosophy," said:

"It is horrible when the bodies which we have created ask of us a soul. But it is still more horrible, more terrible, more uncanny, to create a soul, which craves a body and pursues us with that demand. The idea, *which we have thought*, is such a soul, and it allows us no peace until we have given it a body, until we have brought it into actual being. The thought seeks to become deed; the *word*, flesh. And strange, man like the God of the Bible, needs but to speak his thought, and the world shapes itself accordingly: light dawns, or darkness descends; the waters separate themselves from the dry land, and even wild beasts appear. The universe is but the signature of the world."**

Substitute for "the idea which we have thought," the phrase "the ideal which we have imagined," and for Heine's use of the word "word," the word "ideal," and his poetic and metaphorical statement that "the universe is but the signature of the word," becomes the statement of an ineluctable fact: "What man actualizes in the world, is but the signature of his ideals."

* Imanuel Kant, in Max Mueller's translation of the "Critique of Pure Reason," p. 46.

** From "The Prose Writings of Heinrich Heine, with an Introduction by Havelock Ellis", London, 1887, pp. 170-172.

3. *Ideologies*. An ideology,* it cannot be too often repeated, is nothing mysterious or esoteric. It is simply a more or less consistent body of ideas, and often ideals, usually developed around an underlying central idea. It is unfortunate that as Marx and his disciples used the word, it has become a sort of epithet, an evocative term with which to awe and impress the unwary. The concept is, however, absolutely essential if mankind's total accumulation of knowledge is to be integrated, and so made a means not of confusion but of clarification in dealing with the problems with which life confronts every individual human being.

Christianity, Mohameddanism, Hinduism and every specific religion is an ideology; so is Theology, Stoicism, Hedonism, and Humanism; so is Idealism and Materialism, Theism, Agnosticism and Atheism — every specific philosophic system of any kind. Astronomy, Biology, Sociology, and every science without exception is an ideology.* Literature, Music, Architecture, and all the arts are ideologies. All have in common the fact that they are bodies of related ideas.

This is true also of every culture-pattern, whether primitive or modern. Every culture, without exception, represents the practice, and is the embodiment, of a body of ideas. And this

* Ideologies can usually be identified by the suffixes attached to the words designating various theories and doctrines, sciences and arts, religions and philosophies. These suffixes include *ology*, which comes from the Greek word *logos* meaning discourse or doctrine, as in theology, biology, and anthropology; the suffix *ity*, which comes from the Latin *itas*, meaning state of, as in Christianity; by the suffix *acy*, as in democracy, aristocracy and plutocracy, coming also from the Latin *itas*; by the suffix *pathy*, as in allopathy, homoeopathy, osteopathy, *pathy* coming from the Greek *pathos*, meaning not suffering only but state of feeling; but most frequently by the suffix *ism*, as in Capitalism, Socialism, and Industrialism, *ism* coming from the Latin *ismus* and the Greek *ismos*, meaning doctrine or practice.

* About this C. N. Patel, of Gujarat University, comments as follows: "This would be true of such sciences as astronomy and biology only if these sciences implied norms of conduct. Ordinarily they are believed to be positive sciences, not ideologies."

Mr. Patel is quite right about this if the meaning attached to the term ideology is restricted to its present connotation. But denotatively the term does not need to be restricted to normative bodies of ideas. Denotatively it means simply a body of ideas. And it is important to use the term in its denotation and to try to avoid its present connotation, because such a concept is very badly needed. Astronomy and biology, though positive sciences, are nevertheless bodies of ideas dealing with age old problems which have troubled mankind. — R. B.

too is true of what might be called behaviour-patterns within a culture, like the behaviour-pattern called Industrialism which embodies the ideas practised in the conduct of modern industries; like the behaviour-pattern called Urbanism, the behaviour-pattern of city and metropolitan populations; and that called Agrarianism, the behaviour-pattern practised by village and rural populations.

We need the concept of ideology as it is here defined to make it clear that all these differently designated bodies of ideas have in common the fact that each is an answer to some problem of mankind. This is true not only of normative sciences like ethics, but also of descriptive sciences like astronomy and biology. Astronomy is a body of ideas which provides science's answer to one of the riddles of the universe. The Mosaic cosmogony in the Book of Genesis consists of a body of ideas dealing with the same problem. Biology is science's answer to the riddle of organic life. Again, every religion includes a body of ideas dealing with the same problem. In the final analysis, religion and philosophy, science and art, folk-lore and tradition, custom and convention, different as they are, are in fact bodies of ideas dealing with some of the problems of mankind. Nothing is more important educationally than to provide a frame of reference within which all these different bodies of ideas can be focussed on all the problems with which education should, and with many of which it does, deal.

Ideas, Ideals and Ideologies. The distinction between ideas, ideals and ideologies to which I have drawn attention can be illustrated in the history of the ideologies called Capitalism and Communism. This illustration should make clear the fact that the term *idea* may properly be used to refer to both descriptive and normative concepts; but the term *ideal* can be properly used only to refer to normative concepts. It should also make clear the fact that the term *ideology* should not be restricted to merely normative bodies of ideas, but should be used to refer to descriptive bodies of ideas as well.

Adam Smith started the writing of "The Wealth of Nations" with an idea, the idea which the French Physiocrats expressed

by the phrase *laissez faire, laissez aller*. Around this idea that the government should not regulate, should not interfere with, and should not take any part in the economic activities of mankind, he developed a whole body of ideas dealing not only with politics and economics but with the social system as a whole. But few of those converted to the acceptance of his seminal idea of economic freedom stopped with the mere acceptance of the validity of the idea. He himself did not stop with its purely descriptive significance. Their imaginations began to work, and the result of envisioning the operations of the idea in their completeness and perfection, led to the idealization of the idea. Economic freedom was thus transformed from a mere idea into an ideal.

But they did not stop with any partial formulation of their ideal. The whole existing social system — economic, legal, religious, philosophical and educational — was attuned to the realization of a quite different ideal, no longer Feudal and Christian. To actualize the ideal of economic freedom, they saw that it would be necessary to transform every institution in society into an instrument which would either promote economic freedom or do nothing to interfere with its actualization. The end result was the implementation of the ideology which is now generally called Capitalism.

In writing "Das Kapital", Karl Marx started with an entirely different central idea — the idea that "all the instruments of production and distribution" should be owned and operated by the government. And again, fired by a vision of what the actualization of this idea would mean to mankind, the idea was transformed into an ideal. But to actualize this ideal, Socialists and Communists saw that the whole Bourgeois world, which was an implementation of the ideology of Capitalism, would have to be revolutionized. The end result was the development of a complete Communist ideology which involved the implementation of such a revolution.

The process is ubiquitous. Whenever man begins to apply his imagination to envisioning a seminal idea in its perfection, he transform it into an ideal, and then, to make it possible to actualize his ideal, develops a whole body of ideas that either

increases the certainty that it will be actualized, or lessens the danger that it will not.

This is true not only of normative ideologies like Capitalism and Communism, but of descriptive ideologies — of the sciences which are called pure or positive. The theory of evolution has now become an ideology ramifying into not only all the sciences but into all sorts of programmes about how life should be lived. The process began, however, with an idea — with Darwin's idea of "natural selection." But when this idea was visualized by men like Huxley and Haeckel, Tyndall and Spencer, in all its ramifications, they transformed it into a scientific ideal, and they struggled to win acceptance for this purely descriptive ideology with all the fervour with which the disciples of Adam Smith and of Karl Marx struggled to win acceptance of the normative ideologies of Capitalism and Communism. And just as the Communists saw the idea of "private property" as something to be utterly destroyed, so Huxley and Haeckel saw the idea of "special creation" as something to be utterly repudiated.

Ideas, ideals, and ideologies are charged, like electricity, with voltage — with varying degrees of emotional voltage.

Most ideas are charged with very little, though all of them have some capacity, however slight, for evoking emotional reactions.

Ideals on the other hand, are highly charged emotionally, they are much more than intellectual conceptions. Once an idea has been pushed in imagination to perfection, it acquires the power of moving people who believe in it not merely to action, but often to sacrificial activities to which those without the ideal are utterly indifferent.

Ideologies, however, are charged emotionally to the *nth* degree. A particular ideal we may discount and discredit because we think it the product of utopian dreaming, but this is a dangerous point of view to take with regard to an ideology. For included in the ideology are elaborate systems for its vindication. It fortifies a mere ideal with facts and logic; it gives to those who believe in it confidence in its validity and truth, its desirability and importance.

Ideas we can play with as counters in an intellectual game; ideals can transform the whole of an individual's life; but ideologies can set a whole civilization marching.

This whole study is based upon analysis and classification of between four and five hundred ideologies of all kinds. The study of this small number has made it clear that a comprehensive classification of ideologies would reveal that there are not hundreds but thousands of them, varying sometimes in essence but mostly in form. Biologists have thought it worthwhile describing over a million different species of animals; and although ideologies are infinitely more important in terms of learning to live like rational and humane beings, social scientists have not thought it worth while to make any such comprehensive study of them.

Implied versus Expressed Ideologies. Ideologies may be either implied or expressed. There are great numbers of ideologies which we do not think of as ideologies simply because, for one reason or another, there is no literature in which the ideology is vindicated. This is the case with the ideologies of primitive peoples who, since they have no written language, have not recorded them in books. But the absence of books does not mean that primitive peoples have no social or political ideologies, any more than the absence of scriptures means that they have no religious ideologies. Animism and Fetishism, though never recorded scripturally by those who believed in them, are both ideologies. All folklore and every folkway embodies an ideology. All these are implied or unwritten, in contrast to expressed and written ideologies.

But implied ideologies exist in plentiful numbers even in highly literate cultures. Some ideologies are considered so shameful, even by those who practise them, that no one in a literate culture dares to vindicate them in a book. This is the case with such ideologies as Venality and Prostitution. In such cases there is often an extensive denunciatory literature but none defending it. Yet Venality and Prostitution are practised, and there are all sorts of ideas embodied in both of these behaviour-patterns which have been developed in order to rationalize their practice.

There are also important ideologies of a quite respectable kind which have not been explicitly expressed and which can only be formulated from the implications of the behaviour of those who practise them. This is the case with the dietary ideology of modern man; specifically with the industrialized dietary, let us say, of the American people. That there are dietetic ideologies anyone who studies Vegetarianism must recognize. We do not, however, think of those who might be called Omnivarians as practising a dietetic ideology; but unless we are going to be fooled by the absence of a word with which to designate such a body of ideas, we must recognize that such an implied dietetic ideology has to be taken into account in dealing with the problem of nutrition.

No dietetic Bible was written for Modern America, as a political Bible was written for America in the Declaration of Independence and the Constitution. No one has published a book advocating the eating of canned, bottled, and packaged food, nor a book advocating the substitution of chemically and mechanically devitalized foods for the foods consumed prior to the acceptance of Industrialism. Yet the eating of white flour, white rice, and white sugar, and similarly processed and industrially produced foods is one of the ideas incorporated in the dietetic ideology practised by nearly all Americans.

In spite of the fetish which is made of objectivity today, the fact is nevertheless indisputable that every system of education, including the most modern and the most objective, involves the inculcation of ideologies. The modern student, however objective he is told to be and however hard he tries to be objective, ends up ideologically indoctrinated. Indeed, objectivity itself is an ideology; it consists of a body of related ideas having to do with an attitude which should be taken toward all knowledge and all experience, and this attitude is idealized in essentially the same manner in which the most subjective of ideologies are idealized.

That education, whether it is school-education as in our literate world, or education absorbed directly from the culture as in non-literate tribes, is always a process of implanting ideologies is indisputable. This is in substance stating a tauto-

logy. It is simply calling attention to the fact that the content of education consists of ideologies, and that ideologies constitute the content of education. So long as we teach without awareness of this fact, we inbuild biases without knowing that we are doing so, and without putting ourselves and those we teach on guard with regard to them. That inculcating the ideology of Roman Catholicism involves the inbuilding of a bias, every educator, including the Catholic educator, will have no hesitation in admitting. But that inculcating what I have called the fetish of objectivity also involves the inbuilding of a bias — of a bias against all subjectivity acquired knowledge — most educators will not acknowledge because most of them are unaware of the significance of the fact to which I am calling attention.

The Classification of Ideologies. It is this which makes it so enormously important to introduce, some order — some method of classification — into the welter of ideologies with which we cannot avoid dealing. In the effort to do this, I have experimented with dozens of methods of classification, and out of these experiments have come the three categories into which it has proved possible to assign every one of the hundred of ideologies which I have analyzed in the course of this study.

The difficulty of classifying them is enormous. The names by which they are known are worthless for purposes of classification. The same name is frequently used for mutually inconsistent doctrines, and identical doctrines are frequently designated by dozens of different names. In spite of the importance of the part played by them not only in teaching but in the lives of individuals and of societies, no serious attempt has been made to undertake the taxonomic problem involved. Educators, social scientists, theologians, and philosophers have been content to welter in the existing terminological confusion.

What made the task at first seem hopeless to me was the fact that most ideologies included incongruous and often inconsistent ideas in the body of ideas found under the same label. My method of escaping from this dilemma finally proved amazingly simple: using the fourteen basic problems as a sort of catalytic agent, every ideology was broken down so that what

it said about a specific basic problem was isolated from all the other ideas with which it dealt. This made it easy to assign it to the problem with which it dealt, and so into one of the three basic categories which I finally came to call (1) Supernal Ideologies, (2) Hylistic Ideologies, and (3) Cognitive Ideologies. Every ideology therefore must have two terms in order to be properly designated; a sort of binominalism is involved. Thus we have Supernal Ontologic Ideologies, Supernal Anthropic Ideologies, and so on through all fourteen of the problems with which Supernal Ideologies deal.

Supernal Ideologies. The significant ideas in all supernal ideologies are both noetic and axiologic in nature — they are products of both human reasoning and of human feeling. What they all have in common is the fact that what they prescribe about the solution of the problems with which they deal are based first of all upon (1) the assumption that the ultimate validity or final truth of any ideological prescription is dependent upon supernatural revelation or metaphysical intuition and not phenomenal knowledge of any kind; (2) the assumption that there is an ultimate noumenal world behind the actual, visible and chaotic phenomenal world, and that this noumenal world is in some form spiritual and not material in nature; (3) that man is essentially a soul and not a body—that his body is, like the world, actual but not like his soul ultimately real; (4) that the origin and destiny of the world and everything in it, including man, is a reflection of the will of some ultimate spiritual or divine entity; that it is not mechanically determined by an inescapable sequence of cause and effect but is subject to the will of this ultimate entity; and finally (5) the assumption that man's purpose in life must be transcendence of both the sensate and the intellectual limitations of life on the Earth.

Christianity and Brahmanism are typical supernal Ideologies as are virtually all religions except those so-called religions like Confucianism which explicitly exclude supernatural or metaphysical assumptions from what they prescribe, and of course those philosophies, like Materialism and Hedonism, which are "of the earth, earthy."

Hylistic Ideologies. The significant ideas which are common to all ideologies classified as Hylistic,* include (1) the assumption that the validity of the ideologies on the basis of which mankind must deal with its basic problems cannot be established by any kind of revelation or intuition, but only by phenomenal knowledge — by knowledge which, even when it includes inferred conclusions, is ultimately based upon data obtained through the senses; (2) the assumption that the actual visible and chaotic phenomenal world is all the world there is to know, and that whatever the nature of any noumenal or ultimate world behind it may be, it will in no essential respect be different from the material world of phenomenology; (3) that man is essentially a body, and that his so-called soul like his so-called mind, is an epiphenomenon of his body, and that he has no real free-will; that his notion that he makes choices and determines what he does, is an illusion; (4) that it is a misnomer to speak of the origin and destiny of the world because the whole cosmic process is nothing but a sequence of changes, mechanically determined by an inescapable chain of cause and effect; and finally, (5) the assumption that there being only one life for man in such a world, man's purpose in life — his *sumum bonum* — should be extracting the utmost pleasure and minimizing to the greatest possible extent the pains of living here and now. Gratification, and not either transcendence or satisfaction, should be his goal in life.

Capitalism and Communism, as we shall see, are typical Hylistic ideologies; their essential assumptions are all Hylistic. Most of the sciences are Hylistic, but since the word science is and can be properly applied to theology, to metaphysics and to any other branches of knowledge subject to systematic study, to include all the sciences in this category would be to indulge in a misnomer. All the natural sciences, of course, fall into this category; so do the methodological sciences. Furthermore,

* Hylism was the name given to the naive Materialism of the Ionian philosophers. The term comes from the Greek word *hyle*, which means wood, material, matter, substance. In the latest metamorphosis of the original assumption that the world is composed of matter, the concept of energy has been substituted for that of matter, but while the form has changed, in essence it is the same point of view toward the world in which man finds himself.

many philosophical ideologies, like Hedonism, and many practiced but not expressed philosophies of life, like Venality and Egotry must also be included in this category, because they too are in their essential nature Hylistic.

That the Hylistic approach to the basic problems of mankind did not die out with the crude Materialism of the ancient Ionian philosophers, nor even after the modern dissolution of the material and substantial atom into waves and particles, is proved in the case of a host of well known figures in the modern scientific world — John B. Watson in psychology and Bertrand Russell in mathematics for instance.

Cognitive Ideologies. Both Supernal and Hylistic Ideologies are essentially Monistic in nature; in the case of Supernal Ideologies, the Monistic idea is the assumption of the essential spirituality of the world and everything connected with it; in the case of Hylistic Ideologies, the Monistic idea is the antithesis of this, it is the assumption of the essential materiality — materiality, of course not being restricted to mere matter but to energy or to any of the new conceptions which have replaced the native original notions of Materialists about the nature of matter.

Cognitive Ideologies, on the other hand, are Pluralistic in nature; all ideologies which do not logically need to make assumptions of a Monistic nature, but which can validate their prescriptions about human action and human behaviour by assuming the possibility that there may be both order and disorder in the nature of the universe; that there may be both spirit and matter in it; that it may be in part determined and in part indetermined and that man may have some free-will but may also be subject to forces over which he has no control, fall into this category of Cognitive Ideologies.

In the modern world, Bertrand Russell gives primacy to the physical background of existence in dealing with the problems

* The word cognitive comes from the Latin *cogitare*, meaning to reflect upon. Ideologies which vindicate themselves by reasoning, thinking and reflection, and which place these methods of establishing the truth first, are well named Cognitive.

which he discusses; Aurobindo Gosh gives primacy to the metaphysical ground. For my part, if the thoughtful and concerned individual is to develop an adequate body of conclusions with which to deal with the basic problems of living, primacy must be given neither to the physical nor the metaphysical, but to the human mind — to the mind of man — with its unique capacity for reasoning.

The essential assumptions which must be present in any ideology to justify classifying in the category of Cognitive Ideologies are (1) the assumption that the truth about anything and every thing can be established finally only through the arbitrament of reasoning; that neither knowledge obtained by revelation or intuition, nor that obtained by merely phenomenal or sensate methods, can be relied upon to establish the truth about the solutions of any of the basic problems of man and of society; (2) that while there may be an ultimate noumenal and orderly world behind the actual and visible chaotic phenomenal world, we have to base our conclusions about it upon what arbitrament by reasoning enables us to determine about it; (3) that man is plainly a highly complex organism, plainly both a mind or brain and a body, but perhaps also a soul; that he has a sufficiency of free-will, (even though he is subject to forces both physical and social over which he has no control), to make choices and to determine how he shall act and how he shall live; (4) that the cosmic process cannot reflect the will of any spiritual entity if by that is meant that It or He may interfere with its operations, nor is it wholly determined by the commonly accepted Mechanistic conception of the nature of cause and effect but it is in some measure determined, slightly perhaps when measured by eternity but enormously when measured in terms of life here and now, by what man himself chooses to do; and finally (5) that man's purpose in life, if it is to reflect these assumptions, must be devoted neither to transcendence nor to gratification but the maximization of satisfaction and the minimization of frustration here and now — to the actualization to the utmost of the potentialities of normal human life as comprehended by human reason and demonstrated by logical and scientific processes of study.

I have designated these ideologies as Cognitive because reasoning and intelligence are used in both supernal and Hylistic Ideologies, thus making it inadvisable to call them Rational or Intellectual ideologies. The term Cognitive I believe fits them because their essential characteristic is reliance upon the reason and not the soul, upon reflection and introspection, and not the senses, and all this involve cogitation. Though I have used the word introspection in describing them, it is important not to include in this category ideologies which are based upon innate ideas, which is something the word introspection unfortunately tends to suggest.

The five criteria which I have used as the basis for making these distinctions and for classifying ideologies of all kinds, I think of as (1) the epistemic criterion, (2) the ontologic criterion, (3) the anthropic criterion, (4) the etiologic criterion, and (5) the telic criterion. In terms of these criteria, Rationalism and Humanism are typical Cognitive Ideologies; both base the validity of what they conclude and what they prescribe upon the use of reason; both are open-minded or at most Agnostic, (if by Agnostic is simply meant that we do not know and not necessarily that we never can know, the ultimate truth about the ontologic, the anthropic and the etiologic problems), and both must logically assume that the goal of life must be satisfaction, as that is defined in this study.

The fact that neither scientists nor philosophers have been willing to face the difficult task of analyzing and classifying the ideologies with which they deal, does not lessen its importance. Without some such evaluation of the ideologies with which science and art, philosophy and religion is concerned, there can be no acceptable rational basis for choosing between them, and certainly no satisfactory basis for a programme of education which will teach man how to behave like a normal human being and how to organize societies which will make that possible.

Because I find myself having to pioneer in this task, the difficulty of trying to classify all the theories, doctrines, creeds — all the schools of thought here called ideologies — is a disheartening one. Many of these ideologies have appeared, dis-

appeared, and re-appeared, usually under different names, from time to time in the history of human thought. The mischief for which this is responsible is not only intellectual and educational; it is a means for leading mankind to repeat over and over again tragic mistakes which might have been avoided. An enlightened nation like Germany was persuaded by Adolf Hitler to accept as something new one of the oldest and most terrible ideologies of all time, State Slavery, because Hitler dressed it in a new name and called it National Socialism.

What makes classification even more difficult is that the ideologies I think of as the super-ideologies are really aggregations of all sorts of ideologies, many of them self-contradictory and others inconsistent with the central idea of the super-ideology by which they are known.

Super-ideologies versus Special Ideologies. An important distinction needs to be made between what I think of as super-ideologies and special ideologies.

1. *Super-Ideologies.* Ideology, in the significance which Marx attached to the term and in which it is used for the most part today, referred to much more than a single and unitive body of ideas; it referred to the whole complex of ideologies of a whole social system. Bourgeois Ideology represented to him much more than the body of ideas which constituted laissez faire economics; it included not only the economic ideas of the bourgeois world, it included all the ideas reflected in the moral, artistic, scientific, religious, marital, and social institutions of bourgeois states. It was necessary for Marx to throw all these various bodies of ideas together and to treat them as though they constituted one consistent ideology because, with his Materialistic interpretation of history, all these modern ideas, both expressed and practised, were supposed to be mere reflections of the bourgeois mode of production and distribution. One result of this Marxian interpretation of ideology was the Marxian absurdity which maintains that there is an essential difference between Marxist science and bourgeois science. There is a difference, it is true, but that is because Marxian science, in so far as it begins with Marxian dogmas, is not scientific at all.

What happened in the case of the development of the Marxian super-ideology, has happened over and over again in the history of mankind. What began with a special body of ideas was eventually developed into a super-ideology dealing with all the ideas and all the institutions of the social system. Marxism began with a single idea — the idea of abolishing private property and substituting for it state ownership and operation of "all the means of production and distribution." Christianity began in the same way; it began with the idea that a single Jewish prophet, Jesus, was the Son of God. By the time the Canon Law had developed fully, there wasn't a single idea or a single institution in Christendom that was not included in the super-ideology of Roman Catholicism. The history of Mohammedanism parallels that of the history of the super-ideology of Christianity. Hinduism too is not a mere religious ideology; it is a super-ideology.

The danger of assuming that super-ideologies are consistent wholes and are reflected in consistent social systems is that this has never happened, except occasionally in primitive tribes which were completely isolated for long periods of time. What happens almost invariably is that the super-ideology becomes not a consistent order of ideas, but an agglomeration* of ideologies, some reflecting bodies of ideas imported from other cultures, some inherited from preceding cultures. Hinduism today is clearly such an ideology, but so are most of the practised super-ideologies of the rest of the world.

The sin of which Marx was guilty was in condemning bourgeois ideology as a whole. Every super-ideology which has existed for any length of time has in it ideas which are valid and ideas which are invalid, and wisdom suggests that however bad we may think the central idea of a super-ideology, it should not be condemned as a whole. This principle operates in reverse fashion too. Those who construct complete theoretical

* Ideologies which include ideas and ideals which are not consistent with their central idea, cannot be classified as a whole unless the basis of classification is the central idea. The central idea in the so-called Bourgeois Ideology might be said to be competition, yet co-operation, which is its antithesis, developed in all bourgeois societies long before there was a single Socialist state in the world.

super-ideologies are rarely completely consistent; inconsistency is a human failing. Wisdom dictates that each body of ideologies of which a theoretical super-ideology is composed should be weighed on its own merits. Even in the super-ideologies which Hitler and Mussolini created; even in Fascism and National Socialism there were good ideas, however vicious the central ideas of Racism and Nationalism may have been.

No man, not even a great religious prophet like Mohammed, nor a great social prophet like Marx, whatever the source of his inspiration or however great a genius he may be, can possibly deal with all the problems of mankind without making mistakes; if people are asked to accept, or what is much worse are forced to accept, the super-ideology of one man, they are deprived of the opportunity of discriminating between those which reason indicates are valid and those which it indicates are not.

What is true of such theoretical super-ideologies, is also true of implemented super-ideologies. Every culture and every society is such an implemented super-ideology. Not one, however seemingly perfect, but has irrationalities and invalidities incorporated in some of its ideas and some of its institutions. Good sense indicates taking this into account. The fact that the whole of the Oriental world is today frantically trying to duplicate the super-ideology of Western civilization is an illustration of the mistake to which attention is here being called.

2. *Special Ideologies.* In contrast to these super-ideologies are special ideologies which deal with one special idea and its related ideas only. Every science is such a special ideology, so is every art. Architecture, which is not merely an art but like all arts a special ideology, and biology, which is not merely a science but like all sciences a special ideology, are neither of them super-ideologies because they do not deal with all the ideas and all the institutions of a whole culture.

There is, of course, a sense in which many special ideologies may be said to deal with everything. Political science is an illustration of this. Though it is a body of ideas supposedly related directly to the idea of the state, its subject matter

properly includes consideration of all the institutions subject to the operations of states. Super-ideologies, even though their central idea is not that of the state, nevertheless deal with political science. The acceptance of Mohammedanism as a super-ideology entails the acceptance of the Caliphate as the basis for the organization of the state; the acceptance of Marxism as a super-ideology, the acceptance of organization of the state by a "dictatorship of the proletariat."

Theoretical versus Practised Ideologies. A second important distinction needs to be considered — that between theoretical ideologies and practised, or implemented, ideologies.

All ideologies are either theoretical constructions, or they are ideologies which have been put into practice and historically "implemented." All the pure sciences are theoretical constructions; all the applied sciences, ideologies which are practised and implemented. But the distinction, important as it is in the case of these kinds of sciences, is academic in comparison with the distinction between theoretical economic, political and social ideologies, and economic, political and social ideologies which have been implemented and put into practice. Every new ideology begins as a theory — as a theory developed in the mind of either a single individual or a group of individuals. But if it is a theory calling for motor-action, a theory for the organization and operation of social institutions and enterprises of various kinds; it ceases to be a theoretical ideology the moment it is put into practice by any group or any society.

Marxism, like Capitalism, began as a theoretical ideology. What Marx and Engels developed was a theory for the reconstruction of society. What they concocted remained a theoretical ideology for a full century before it began to be put into practice by the Bolshevik Party after the Russian Revolution of 1917; the idea of a "dictatorship of the proletariat" remained a mere theory until Lenin, Trotsky and Stalin established such a dictatorship by overthrowing the democratic government which was established under the leadership of Kerensky.

This too was the case with Capitalism; it was a theoretical ideology at the time that Francis Quesnay in France and Adam Smith in England began to write about it.

And this too was the case with Christianity, at the time when Christ and his twelve disciples first began to preach their gospel.

All theoretical ideologies are in a sense utopian in the beginning; they cease to be utopian the moment they are put into practice and implemented.

Conventional versus Novel Ideologies. The problem in dealing with conflicting ideologies impartially and objectively is rendered difficult by the very human tendency to think of them as acceptable, particularly educationally, when they are practised and everybody is accustomed to taking them for granted, or as unacceptable when they are novel and theoretical; by the tendency to think of those which are already accepted as practical, and those which are still novel or theoretical as impractical and utopian. Conventional ideologies are considered practical, (quite without regard to their practicality from an objective standpoint), merely because they are already accepted; while ideologies which are not yet accepted, are considered impractical and utopian, not because they are in fact impossible or undesirable, but for no better reason than they are not accepted and not being practised.

The modern dietetic ideology, with its conventional prescription of white bread, white sugar, white rice and other refined foodstuffs, is considered practical in America, and most of the industrialized world, (in spite of the fact that from the standpoint of health such a diet is most impractical), simply because it is the accepted conventional diet of the industrialized world. The theoretical dietetic ideology which advocates the consumption of whole foods — of whole wheat bread, of brown rice, of molasses and honey instead of white sugar — is considered by most Americans as queer, utopian and impractical; and the unconventional minority which advocates and practises it, are stigmatized as cranks and crackpots not because it is in fact a mistaken solution of the dietetic problem, (a question

which is never even examined!), but simply because it runs counter to the conventional ideas of the masses, whose tastes reflect nothing but dietetic indoctrination by the propagandists of the American food industry.

Theory versus Practice. The actual folkways of any people — their implemented and practised ideologies — simply reflect the historic evolution of their ideologies. Folkways, both modern and of course primitive, are seldom, therefore, representative of any completely logical and consistent ideology. Theoretical ideologies do not have to labour under this disadvantage.

The transformation of a theoretical ideology, originally considered impractical and utopian, into an implemented and practised ideology, invariably results in a loss of its original purity and fullness. Christianity and Democracy, and Capitalism and Communism, were all at one period in their histories, theoretical ideologies, and at the time they were first propagated considered impractical and utopian. Christianity in Europe, Democracy and Capitalism in America, and Communism in Russia, are all today implemented ideologies. But if the actual behaviour of so-called Christian Europe is compared with Christianity as it was conceived and taught to the declining pagan world in Rome by Augustine in his "City of God;" if Communist behaviour as practised in Soviet Russia, in Communist China, and in the other Communist states of today is compared with the Communism prescribed by Marx in his "Kapital" and by Marx and Engels in their "Communist Manifesto;" if the Democracy practised in America is compared with the Democracy advocated by Rousseau in "The Social Contract," the difference in the purity and fullness of practised and theoretical ideologies becomes clear.

The Lunatic Fringe. In a tradition-bound, static culture there is usually only one ideology dealing with each of the various problems of living. Primitive and savage cultures, which are naturally static, accept their ideologies for the simple reason that they have only one to choose; they do not have to choose among more than one. But the American of today, living in a constantly changing, essentially traditionless culture,

is literally surrounded and besieged by the advocates of ideologies of all sorts. Many of those generally considered impractical and utopian are obviously nothing of the sort; they are often far more practical and desirable than those which are generally accepted not only by the masses of Americans but by those who lead and educate them.

Other ideologies, often with many followers, plainly belong to what might be called the "lunatic fringe" of ideologies. The educated man today, versed in science and free from superstitions and vulgar errors, who thinks that ideologies like Astrology and Numerology which border on the lunatic and the scandalous either in theory or in practice, are unimportant, is ignorant of the real world in which he lives. No matter how successful he may be nor how practical and hard-headed he may think himself, he has not yet escaped from the academic cloisters in which his pattern of thinking about mankind was first set. The assumption that modern man is a rational being living in a scientific culture, is untrue. The fact of the matter is that most people today not only believe in many ideologies which modern science has pronounced delusional, but often act on the basis of one or more of the most scientifically disreputable of all ideologies. In literate America, after a century of expenditure for formal education — greater perhaps than ever made before in all the rest of the world put together — there are actually millions of men and women who drive around in automobiles, use the telephone and the radio, operate complicated machinery in factories, to whom Astrology means more than Astronomy, Numerology more than Mathematics, and Spiritism more than Science.

The popularity of Astrology and Numerology points clearly to a vacuum in the education of people with regard to causality and fate; the movement toward free-love, to the existence of social, religious and legal taboos in the matter of sex and marriage which need reform; the survival of Spiritism, to a protest by people against the fact that modern man is being taught nothing adequate about death.

It may be true that not only these, but all unconventional ideas, tend to be promoted by those whom smug people call

cranks. But a crank, after all, is merely the victim of excessive preoccupation with one compartmentalized idea. He is *par excellence* a specialist. Very often, however, he is no more sectarian, and no more circumscribed in his vision, than the perfectly conventional, professional, artistic and scientific specialists who devote their whole lives to "learning more and more about less and less." Many of the ideologies upon which these popular and academically approved specialists concentrate, are actually more futile, more useless and more sterile than those subjects to which the cranks and enthusiasts for whom these scientific and academic specialists profess unbounded contempt, devote themselves.

No thoughtful person can afford to dismiss these extremely unconventional and heterodox ideologies by saying that they are the creation of cranks. That is to run the risk of failing to distinguish between unconventional ideas which are founded on falsities, and unconventional ideas which are founded on truths. It is to run the risk of dismissing all unconventional ideologies, true and false, just because they are unconventional. It is refusing to seek the kernel of truth often hidden within an obvious husk of half-truth, superstition and error which leads the scientifically trained conventional person to reject them in their entirety.

Normative Ideologies. It is the fact that mankind has from time immemorial lived in accordance with normative ideologies, and the fact that theoretical and utopian ideologists so often succeed in putting their ideas into practice, which makes the distinction between normative and methodological, descriptive and applied ideologies so important. Until the distinction between normative scientific ideologies and all other scientific ideologies is recognized by scientists themselves, no scientific evaluation of the ideologies in accordance with which mankind lives, and is being urged to live, will become possible.

Mathematics, logic and semantics are methodological ideologies; astronomy, physics and geology descriptive ideologies. Physics, for instance, is a descriptive ideology because it describes the world, statically and dynamically, in terms of concepts like that of matter and energy.

Mechanics, on the other hand, is an applied ideology; it takes the facts and the principles described by physics and tells us how they can be used and applied in the realization of human needs and desires.

But the normative ideologies, unlike these sciences, do not deal with methods, or descriptions, or applications; they consist of ideas and ideals which prescribe what human beings should or ought to do, and why they should and ought to act and live as thus prescribed. Medicine and law are highly developed normative ideologies; so are religion and philosophy. Eugenics and euthanasia, on the other hand, are undeveloped normative ideologies, and so unfortunately are all the social sciences. Their failure to develop as normative sciences deprives us of any really rational means of choosing among conflicting and often antagonistic normative ideologies. A few illustrations will make clear what is involved.

Capitalism and Communism are normative ideologies because each prescribes different ways in which capital should be owned and operated. Industrialism is likewise a normative ideology, because it prescribes production and manufacture of goods in factories on a large scale, in contrast to Agrarianism, another normative ideology, which prescribes small-scale and home-production. Christianity, like all other religions, is a normative ideology which prescribes what human beings should believe and the manner in which they should worship. Vegetarianism is a normative ideology because it prescribes what they should eat; it tells them to restrict their diet to fruits, nuts, grains, vegetables and other forms of plant life, and forbids them to eat meat and other animal products like eggs and milk. Allopathy, or *Materia Medica*, Homeopathy, Osteopathy, and Christian Science are all normative ideologies because each prescribes what human beings should do to restore their health when it has in any manner been impaired.

If education fails to furnish the individual help in choosing between conflicting ideologies of these kinds, it fails completely in its task of dealing with the problems of the whole man.

There are, of course, descriptive elements in all normative ideologies. Every normative ideology predicates itself upon

postulates and assumptions of some sort about the world with which it deals; it bases itself upon some interpretation of the facts with which the pure or purely descriptive sciences deal. But the important and significant distinction between the two kinds of ideologies is that one prescribes how some problem or problems should be dealt with by individuals or groups, while the others stop at the mere description of what is, or what has taken place.

There are, similarly, normative elements of a kind in even the purest of descriptive ideologies — even in such pure ideologies as mathematics — but this normative element is restricted to what they maintain the individual should believe, and how he should formulate and communicate what he believes.

Normative ideologies, unlike most descriptive ideologies, never remain in the academic cloister; they leave the study and the laboratory and wrestle with the activities of mankind; they do not shrink from, but on the contrary grapple with, the problems of man and of society. Normative ideologies are not, of course, necessarily valid because they are normative. Many of them base themselves upon unscientific assumptions, and many of them draw illogical conclusions from scientific premises. But whether true or false, beautiful or ugly, good or bad in what they prescribe about how human beings should act, they at least deal with what are the inescapable living problems of mankind.

Education and Ideology. The ideology called evolution is a purely descriptive scientific ideology. It describes and accounts for the origin of different species of plants and animals; it prescribes nothing about how plants or animals should be treated and least of all about how human beings should treat each other; at the very most it prescribes what people should believe about the controversy between the advocates of special creation and those of evolution. As long as those who teach evolution teach it properly, its use as a basis for normative ideologies is apt to do no harm. But if it is improperly interpreted, as has unfortunately been the case with the ideology of evolution, immense harm can result.

When the ideology of evolution is reduced to a single, catchy phrase, such as "the struggle for the survival of the fittest,"

it becomes easy to popularize it, teach it, and obtain its acceptance. Such popularizations are, unfortunately, too often downright misrepresentations of the ideologies with which they become identified. They represent the substitution of mere slogans for adequate statements of the full and usually complex facts involved. To reduce Darwin's "Origin of Species" and "Descent of Man" to such a slogan, is to leave out all the logical limitations, amplifications, modifications and interpretations which intelligent protagonists of evolution have in mind.

Kropotkin wrote "Mutual Aid" in a futile attempt to correct the misleading world-wide impression created by the popularization of the idea that evolution functioned only as result of the struggle of all against each other in a ruthless struggle for survival. Though he showed conclusively that natural science furnished overwhelming evidence that co-operation was just as essential as competition to survival, and just as potent a factor in the evolution of mankind, the truth has never managed to catch up with its falsification. Competition, as it is interpreted by most of the opponents of Capitalism, is completely misrepresented; all competition is thought to be predatory, and the fact that most of it is fraternal and not predatory, is ignored.

The temptation not only of the masses but of those who have higher education, to act both individually and collectively on slogans rather than adequate understanding of ideologies, presents what is perhaps the greatest single difficulty in the right-education and re-education of mis-educated mankind. The average graduate of modern education reflects, chooses and acts not with the qualifications which should be taken into account when implementing an ideology, but as though every ideology could be reduced to a closed, complete, consistent, and compartmentalized doctrine expressible in a single slogan.

Modern scientists, with their predominantly Mechanistic and Materialistic approach to all the problems of man and of society, may not want those whom they lead and whom they teach to accept, much less to act upon, an unqualified and narrow Mechanistic and Materialistic body of ideas. But unfortunately that is what has in fact happened and will continue to happen, unless just as much thought and effort are

put into normative education of the right kind as into the merely scholarly formulations of pure science. When the people of the Western World finally substituted the scientific method for revelation as a means of establishing the truth, and the doctrine of evolution for the doctrine of special creation as that had been taught throughout Christendom, they made it possible to rationalize predatory Capitalism on the theory that it represented "the struggle for the survival of the fittest" and to rationalize predatory competition on the principle of "Each man for himself and devil take the hindmost." The tragic internecine, international, and inter-racial rivalries recorded in history for the past century and a half, which are so often justified in the name of evolution, are quite logical consequences of the failure of modern science to face the problem of developing normative science as highly as they have developed the descriptive sciences.

Man must not only be taught to know, he must not only be crammed full of facts, he must also be taught how to use his knowledge and what to do with his facts. That life could more be humanized with fewer facts and more wisdom in implementing them, is undeniable.

Every individual, willy nilly, lives and acts on the basis of whole groups of ideologies, even though no man may have, or ever will, live and act entirely consistently in accordance with any one of them. In addition, individuals habitually choose ideologies from time to time, sometimes deliberately and sometimes unconsciously, often ideologies which are implied and not expressed, for the purpose of motivating or justifying the things which they do and the manner in which they do them. What makes this so important is the fact that they either accept the prevailing ideologies in their own culture, as modern man accepts the ideologies which industrial and urban civilization is implementing; or they choose some of the alternative ideologies which people are being urged to substitute for the ideologies of their own culture — ideologies based either upon new theories or old but forgotten theories, or which are being practised elsewhere by peoples of other races and nationalities; or they deliberately choose their ideologies as rational human beings should, after adequately studying those which contra-

dict one another in their prescriptions for dealing with the problems the individual faces.

If men and women are to be permitted just to grow up, choosing their ideologies by accident, or accepting them more or less automatically along with their acceptance of their own families and their own cultures, their own mother-tongues and their own religions, then right-education must provide them with rational methods for choosing among them. Right-education must be able to help them distinguish between them; help them to make adequate comparisons of one with another; and then, by providing them with criterions which will enable them to choose those which resolve both their own personal and their own society's problems, help them to choose rightly between them. Instead of permitting them to shift about, accepting ideologies which may reflect only their prejudices or the fashions of the moment, it must help them to adopt ideologies which are valid universally and perpetually; which do not apply to living in only one country on the Earth, or to living in only one particular period in the history of mankind; which do not prescribe one manner of conduct for one aspect of living and contradictory conduct for others; but which are truly consistent; and are adequate because they equip them completely and wholly for action in dealing with all aspects of living, and do not leave them confronted with grave problems unequipped with practicable ideas about how to deal with them. Otherwise, however thoroughly modern science may be crammed into their heads to excite their imagination and stimulate their activities, nothing genuinely valuable will have been contributed toward the solution of the problem of how the individual should live, here and now.

Other criteria, perhaps better, may be found for helping people to choose among ideologies than those which I am here suggesting as essential to the education of the whole man. But there methods I have found *work*.

CHAPTER VI

THE NATURE OF HUMAN ACTION

I hear what you say; I see what you do —

Ancient Chinese Proverb.

The educator may not wish to be a social engineer, but he cannot avoid being one. For teaching ineradicably involves social engineering; it is impossible for the teacher to avoid dealing with basic problems, much less the ideologies which purport to solve them, without indulging in what I am calling social engineering. Without a proper social science, he can teach, but he cannot deal with this aspect of education properly; what he teaches will not bear properly on the problems with which his students will have to grapple, and for the resolution of which his profession should equip them. To answer the question of *how to educate properly* he cannot avoid dealing with the question of *what kind of society to educate for*.

If this dilemma is to be resolved, a fresh approach to the social sciences* is needed, for the existing approaches have a sociological bias which calls for correction.

Today, we take it for granted that the function of education is fulfilled if the individual is "adjusted" to the existing modern world; if he is equipped with the facts and techniques that will enable him to live as progress in the modern world prescribes; if he is made the kind of citizen or subject the leaders of the nation consider desirable; if he is prepared to fill some niche in the economic or political or social system created for him by the business men or politicians who happen to exercise power; if he becomes a kind of specialist who can earn what

* That these sciences were called "social sciences" is, I believe, one of the most unfortunate events in the history of science. They should have been called "human sciences," or if a Greek term is to be used, the anthropic or better still, the praxiologic sciences, since they are sciences dealing with man's behaviour, of which his social activities are merely one manifestation. Calling them social science has contributed to the bias represented by the sociological approach to their study.

will enable him to enjoy the standard of living that modern progress has made possible. It is taken for granted, (under the prevailing concept of education), that it is not the educator's profession to furnish leadership in the matter of how human beings should live, or how society should be organised to make such living possible.

It is not, it is assumed, the function of education to humanise him, to equip him to live as a normal human being, nor to help him create the social institutions and the social conditions that would make such living possible for all mankind.

His humanity, and that of the existing social order, are taken for granted, although the facts of history and the conditions of society everywhere completely belie this assumption. What the facts and the conditions necessitate amounts to nothing less than an educational revolution. Only if a properly educated and humanized population is created will mankind progress in the direction in which it should at a rate which will neither neurotise the individual nor involve the sort of violence which bestializes everybody.

It is because we accept the role of adjustment to the prevailing world that the basic assumptions of education and of educators today are sociological and not praxiological; it is because of these assumption that the sociological approach to the development of the social sciences is accepted, and the specialities which constitute the modern curriculum of education are, therefore, accepted. But if this sociological approach is invalid, as history in the past half century has demonstrated, or even if it is not the only approach that should be used; if the praxiological approach is in fact essential to the creation of genuinely human rather than merely social sciences, then we find ourselves confronted with the necessity of substituting humanization for adjustment as the basic function of education.

This is the contention of this study: that education should be based upon a science of human action, both individual and collective in scope; that adequate analysis of the nature of human action proves conclusively that the preoccupation of

social scientists of all kinds — economists, sociologists, political scientists — with the sociological approach, introduces a hopeless bias into education; that it begins by making the educator accept the role of adjuster instead of leader; and ends by conditioning those whom he teaches to accept collective and political solutions for what they are almost gleefully told are social problems, when in reality most of them are problems that can be far better solved family by family, and individual by individual.

In what respect does the praxiological approach differ from the sociological approach? The answer is, *in the nature of the entity selected for study*. The entities studied to-day by our social scientists are all collectivities — entities like a society, a culture, a nation, an economy. The present situation calls not for the abandonment of such studies, but for adequate study of the entity here called the *individual human action*. Until this entity has been scientifically studied and fully taken into account, it is no exaggeration to say that social sciences will remain nesciences rather than genuine sciences.

Since the recommendation here made is that the entity to be studied should consist of individual actions; that the particulars to be scientifically examined, should be individual actions and not the hypostatizations which I have called collectivities, what must first be done is adequately to describe and in effect define what is meant by an individual human action.

The essential constituent of living is time. If the problem of how to live like a normal human being is to be solved, the unit of study must not be a *thing* such as matter, nor a *condition* of "things" like life, and certainly not a *hypostatization* like a society; it must ideally be a *measurable fact* like a unit of time.

Every event in life, including the most trivial and the most significant, manifests itself only in what individual human beings do or believe or value *during intervals of time*. What they do during these intervals — the actions into which they divide their time — can be observed. They can be meticulously observed and meticulously recorded; they can be classified;

they can be the subject of induction and deduction; above all, they can be individually, and not only collectively, planned and controlled.

How to live is in reality therefore the problem of how to act. Biography and also history, in the final analysis, are merely records of individual human actions. Man's problem in living, if it is ever to be dealt with rationally, must be restated in terms of the things which individual human beings do in time, and the manner in which they should occupy themselves during these intervals of time.

Human Action. The term human action, it is true, is an abstraction; it is a universal not a particular. But the actualities to which it refers are not abstractions. Every human action, every human experience, every condition of awareness of an event by a human being, is something particular. It is a particular because every action without exception is experienced by particular individual human beings, during particular intervals of time, and at particular places on the Earth.

In what is loosely referred to as social action and more specifically in this study as interaction, the fact that two or more individuals participate in an interaction does not alter the fact that for each of the participants, the interaction is a particular individual action. In what are loosely referred to as events, the fact that an event may consist of a series of related actions performed often by a large number of individuals, does not alter the fact that for each participant in the event, the event consists of a single particular action or of a single series of particular actions.

To concretise the concept of human action; to transform the concept from a vague notion into a clear idea; to furnish the social and behavioural sciences with empirically observable and classifiable particulars for study; to provide for the rational organisation of education; to provide philosophical, religious and ideological prescriptions for human conduct on an objective foundation, there must be recognition of the fact that all human life consists of what *particular* individuals do, experience, or become aware of, in *particular places*, on *particular calendrical dates*, and during *particular intervals of time*.

The concept *interval of time* is crucial to the recognition of the scientific validity of the entity with which science and philosophy, and above all education, must deal if the individual is to be equipped to deal rationally and humanely with the problems which confront him in the course of his life.

The intervals during which acts of essentially the same nature take place are never exactly identical; there is a relatively narrow range within which acts of the same class vary. The variation between actions of different classes, on the other hand, ranges from a matter of seconds to many hours. But always each action* is followed, without a break from birth to death, by a subsequent act — sometimes by the simple repetition of the act just finished, as a worker on an assembly line repeats the same action over and over again; sometimes by a totally different kind of action, as when this same worker, the moment he stops working, *walks* away from his appointed station on the assembly line, *takes off* his work clothes, *goes* to a bus which will take him home, and so, action after action, as long as life lasts. Some of these acts last only a few seconds, as in *drinking* a glass of water; some of them many hours, as in *sleeping*.

Action, as here defined, may refer to (1) *doing* something during an interval of time, (2) *experiencing* something during an interval of time, or merely (3) *being aware* of something during an interval of time.

1. *Doing.* What I am at this present moment doing is writing. A particular person, Ralph Borsodi, is performing this act; in a particular place, in my home in Melbourne, Florida, U.S.A.; at a particular time, on July 3, 1956. Since writing is an act differing significantly from other kinds of acts; since it is an act which I perform many times, and which many other writers perform, all these acts can be properly

* It should be borne in mind that many kinds of acts take place simultaneously; while *writing a letter*, the acts of *breathing, thinking, writing, sitting*, are all being performed at the same time: hence the interval of time devoted to writing a letter is really an interval during which a complex of mental and physiological actions are taking place. But each act, like the act of writing a letter, ends at some time, and is then necessarily followed by another act of some kind.

grouped into a classification which can be properly designated writing. In every instance these acts involve duration. The interval in this case during which I have been writing began at 10.43 a.m. and will end at the moment I start doing something else.

2. *Experiencing*. It is of course true that while I am writing I am also experiencing. But it is necessary to distinguish between doing and experiencing because there are "acts" performed by every human being which he experiences, but of which it is not possible to say that he "does" them or that he is "aware" of what he is experiencing. Last night I lay down to sleep. *Lying* down was an act of which I was aware, as well as one involving doing. But the act of *sleeping*, which by its very nature is performed unconsciously, is an experience involving neither awareness nor doing. Yet it does have duration — it takes place during an interval which can be measured.

3. *Awareness*. Similarly, it is necessary to distinguish acts which consist primarily of awareness from those which consist of doing, because they involve little than can be called "doing". *Looking* at a landscape consists primarily of awareness; sheer awareness is the most significant aspect of what is "done" by the individual in the course of such an action. But these passive acts, too, have in common with doing and experiencing the characteristic of duration.

The Classification of Human Actions. The whole of this study is based upon some eight thousand recorded observations of individual human actions. Some of these actions were personally observed by myself and my collaborators; observed as recorded in newspapers and magazines, in histories and biographies. In each instance some effort was made to determine what moved the individual to perform the act, and what followed from it. This is, it is true, a ludicrously insufficient number. When this number is compared with the number of observations made by zoologists in the study of animals, and botanists in the study of plants, its insufficiency

becomes staggering. Millions of observations of plants and animals have been made by botanists and zoologists and as a result they can speak with some confidence about the million species of animals which they have identified, and the three hundred thousand plants which have been similarly identified.

Yet the classification of this small number of human actions by the entirely objective method I have used, has been sufficient to produce value-judgments of the utmost importance. Without making any effort to pass a moral judgment upon the actions, classification of them has nevertheless produced judgments which conform so completely with the moral judgments of the greatest leaders of mankind and the insights of the wisest men who have ever lived, that no one who studies them can lightly dismiss what is here claimed for this method of study.

I have with me here in India, (where I am re-writing my draft of this chapter on which I last worked in the United States four years ago), nearly four hundred charts, as I call them, which consist of classifications of these eight thousand actions. All human actions, as I shall later make clear, have many aspects, and it is possible to classify them on the basis of any one of them. But all of them finally combine in one or the other of the fourteen basic categories of actions to which this study finally led. All of these charts represent classifications of these same eight thousand actions from one or another of these fourteen basic aspects. To illustrate what is involved, I am including in this chapter two of the charts which record the end-results of the classification of the actions from two distinct basic aspects — their ethical and their occupational aspects.

These two charts, I believe, are sufficient to make clear that what emerges as a result of this apparently mechanical process of classification, are *value judgments*. Both charts illustrate what I have in mind. But the chart which I am numbering Chart IV, which classifies the actions from their ethical aspects, is an easier one to discuss; everybody knows that actions have ethical aspects; only those who have taken part in the seminars I have conducted on this subject know what I mean by the occupational aspects of human actions.

CLASSIFICATION ETHICALLY OF HUMAN ACTIONS OF ALL KINDS

(From The Ethical Problem)

This chart summarizes the classification of the eight thousand actions upon which this whole study is based, in accordance with their ethical aspects. The classifications in the first column are called Divisions, in the second column Sub-categories, and in the third, Categories.

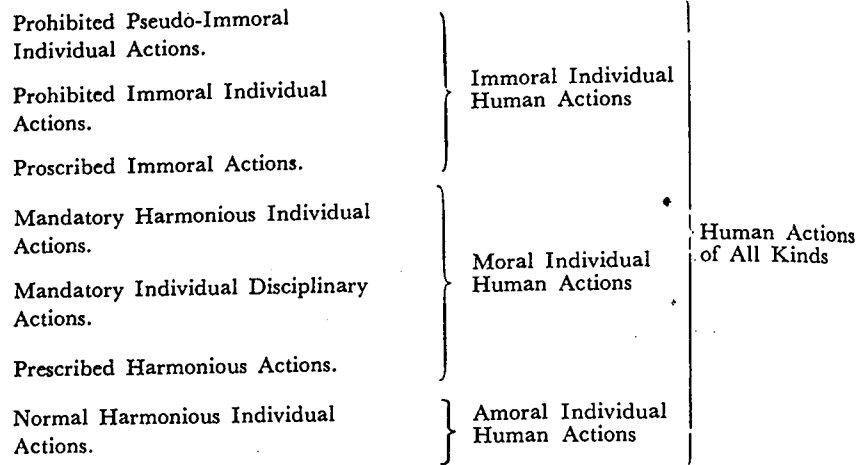


CHART IV

OCCUPATIONAL CLASSIFICATION OF HUMAN ACTIONS OF ALL KINDS

(From The Occupational Problem)

This chart summarizes the classification of the eight thousand actions upon which this whole study is based, in accordance with their occupational aspects. The classifications in the first column are called Divisions, in the second column, Sub-Categories, and in the third, Categories.

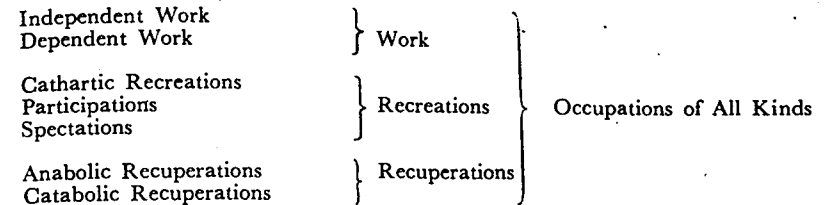


CHART V

Classification upon the basis of two characteristics* present in all human actions — the causes or motives of actions, and the effects or consequences of actions — these actions all finally fell into three distinct ethical categories, designated on Chart IV as (1) immoral, as (2) moral, and as (3) amoral actions. The actions in the sub-categories of immoral actions in turn fell into three divisions called (1) prohibited pseudo-immoral actions, (2) prohibited immoral actions, and (3) proscribed immoral actions. The actions in the sub-category of moral actions fell into four divisions called (1) mandatory harmonious actions, (2) mandatory disciplinary actions, and (3) proscribed harmonious actions.

For the moment it is unnecessary to pursue the analysis of ethical actions any further; those who want to feel certain that these classifications are objective and not subjective in nature should push their analysis of the actions classified in the chart down the ladder of abstraction to the level of the actual cases which are used as the objects of observation.

These are the best of grounds for assuming that in spite of the small number of observations relative to the importance of the undertaking, this categorisation can be applied to all human behaviour whatsoever, without regard to the culture involved. Whatever the reaction to my terminology, the fact is that the definitions are not made arbitrarily, but in terms of significant characteristics common to the actions in each category.

What is the meaning and importance of this so far as education is concerned? Granted that the function of education

* Of these two characteristics, the first is a matter of inference, the second a matter of observation. In virtually all the reports and observations of human actions used in this study, there is some description of the effect, consequence, subsequent action or actions which follow the observed action. With regard to the purpose or motive of the observed action, there is often not only the stated purpose of the person who performed the act, (which should be taken *cum grano salis*, because stated purposes too often represent rationalizations and tend to ignore unconscious motivations), but there is also the inference which can be made from the nature of the action itself. It is possible, for instance, in recording observations of a person engaged in the act of eating, quite logically to infer that his purpose was "to satisfy hunger" of his "desire for food", even though the person observed said nothing at all about his purpose in performing the act.

is humanisation, and that humanisation without education in values is a contradiction in terms, *nothing becomes more important than to provide the educator with an objective basis for teaching values*. The social sciences today furnish him no such basis. On the contrary, they have deprived him of those which religion and tradition formerly furnished him. So the educator today talks about the relativity and the subjectivity of all values and is forced to dismiss as unscientific all the moral absolutes which religion and tradition, and even the law today, still consider binding upon human beings.

If the praxiological approach in contrast to the sociological approach provides such absolutes, we educators will find ourselves once again able to include in our curriculums the teaching of values.

The moral categories which emerge from the classifications summarized in Chart III can be accepted for planning moral education because they are not based upon divine revelation or upon the arbitrary human authority of secular law, but because, like the laws of the physical sciences, they are based upon natural laws — not subjectively evoked, but laws which like all natural laws, men have discovered.

And the basis of discovery is, as the ancient Chinese proverb quoted at the beginning of this chapter puts it, *not what people say but what they do*.

1. *Normal versus Abnormal Actions*. The study of human action might well begin with the consideration of three fundamental distinctions, the distinction (a) between normal and abnormal actions, (2) between individual and gregational actions, and (3) between automatic and voluntary actions. Chart VI diagrams these actions.

The distinction between normal and abnormal actions acquires its importance from the biological necessity under which *homo sapiens* labours, of learning how he should act. The plasticity of the instincts, and the high degree of irritability of *homo sapiens*, makes it impossible for him to rely upon his instincts and instinctive impulses in determining how to

act. He must therefore learn to distinguish between acts which it is normal and those which it is abnormal for him to perform. Interesting as it is to know how men do act, the real problem is not that of merely acquiring information about how men in this or that culture act, as anthropology and sociology provides it, but how individuals without regard to the conventions of particular cultures should act. Science and history provide us merely with the raw material for dealing with this problem when it furnishes facts but does not venture to do what every parent finds it necessary to do in rearing children — tell them how they should act.

It is, for instance, normal for man to eat those foods which nourish the body and maintain it in a state of optimum health; it is abnormal, on the other hand, to eat foods which contain toxic substances or which are without the various nutrients — vitamins and minerals, proteins and starches — which the body requires if it is not to break down. That eating of the first kind of foods is normal, and eating of the second kind is abnormal, everyone will, of course, admit. But that this distinction applies to every kind of human action whatsoever, is something which is not so obvious, and its enormous importance in providing a basis for the right-behaviour and the right-education of mankind is even less obvious until attention is called to it.

It is the contention of this study that distinctions between what is normal and what is abnormal in all kinds of human actions can be formulated which are not arbitrary; which do not draw their sanctions from custom or tradition, from statues or religions, and which can be vindicated by the fact that they are objective and scientific in nature.

But so important is this normative in contrast to descriptive study of human actions to the creation of a foundation for humanization and for right-education that it demands detailed consideration at our hands. Since this is the subject-matter of Chapter 7, dealing with the establishment of norms of human action, nothing more is needed at the moment than to take note of the profound importance of the two great sub-categories into which all actions which human beings perform divide themselves.

HUMAN ACTIONS OF ALL KINDS

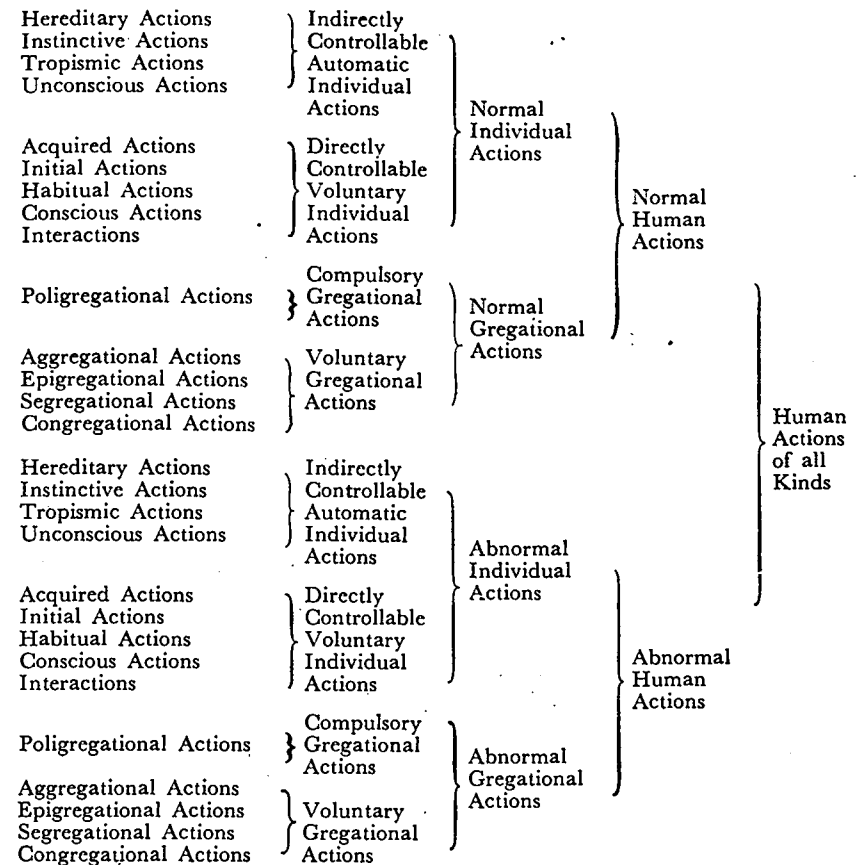


CHART VI

2. *Individual versus Gregational Actions.* The second of the important distinctions which grow out of the classification of human actions in Chart VI is in fact not a distinction between two kinds of actions but in reality a distinction between two kinds of individual actions. For in the final analysis all human actions are individual, some being properly called individual (I) because no other persons or groups of persons of any kind are directly involved in their performance, (as is the case when an individual bathes and clothes himself), and others being properly called gregational (II) because other persons or groups are directly involved, (as is the case in such an action as voting in an election or participating in a meeting and so by that individually performed action contributing to what the gregation involved can be said to have done).

a. *Indirectly Controllable Automatic Individual Actions.* What I have attempted to make clear about "automatic" actions in Chart IV is that they consist of two orders of actions only one of which is strictly automatic in nature (but that even these, though automatic in the meaning of that term, are nevertheless, as we shall see, indirectly controllable by the individuals performing them), and the other of actions which, because they are voluntary in their essential nature, are directly controllable by the individuals performing them.

Every human action, both mental and motor, is so predominantly either (I) automatic or (II) voluntary in nature that distinction between them is justified not in terms of degree but of kind. Hereditary, instinctual, unconscious, and tropismic actions are predominantly automatic in nature because all have in common the fact that, though not uncaused, they are involuntarily generated.

Voluntary actions, on the other hand, are actions which are consciously and deliberately performed; they are actions which are acquired and not inborn and reflect what the individual has learned after birth; they are not actions which are instinctual or hereditary in nature. They may be either original or habitual, but in all instances they are individually

chosen or accepted, or individually willed and planned by the person performing them.

Automatic actions, therefore, include all those actions which individual human beings perform, have to perform, and cannot prevent themselves from performing, (as in the case with actions such as eating).

About mankind's automatic actions, education can do nothing directly but indirectly it can do everything necessary to ensure the humanisation even of actions of this kind.

About mankind's voluntary actions, it can obviously do almost anything, and do it by dealing with them directly.

But although restricted in what it can do directly to educate automatic action, that does not justify excluding education of automatic action from curricular consideration. As we shall see, what it can do directly in dealing with voluntary action can be used to deal indirectly with automatic action. The whole man, not only conscious man, is thus educable. This fundamental truth is demonstrated in *yogic* education where automatic actions — breathing, for instance — are *yogically* conditioned.

All human actions are, therefore, in one way or another within the domain of suggestion when suggestion is used in its broadest signification.

Tropismic Actions: At the lowest level of human action there are an enormous number of glandular, neural and muscular acts and activities which the body is driven to perform as mechanically and automatically as if *homo sapiens* was a mere animal or vegetable. They are so nearly tropismic* in nature as to deserve no other designation.

* Tropisms are the involuntary movements or actions of a whole animal or plant or any of its parts or organs — movements which may involve turning, curvature, or axial orientation. These movements are induced either automatically (as a consequence of sheer life and growth), or in response to one or more external stimulating influence such as light, chemical agents, the earth and the sun (as in roots going down and shoots going up).

Most of these tropismic activities (such as the act of cell-division in tissue formation) are unconsciously performed, but many of them (such as the act of breathing) are activities concerning which human being can, by an effort of will, become aware and conscious. Tropismic acts of this kind are subject to control and can be directly controlled by the individual. That breathing, for instance, is susceptible to control is obvious, in spite of the fact that it is an action which has to be, and is usually performed mechanically and unknowingly. No human being has to decide voluntarily to breathe. He can, of course, hang and asphyxiate himself, but short of committing suicide, he has to breathe.

About the manner in which he breathes, however, he can make voluntary decisions. He can breathe through the nose or through the mouth; he can take shallow or deep breaths; he can breathe through the chest or diaphragm. He does not have to be taught to breathe, but he can be taught how to breathe. And what is true of such an automatic action as breathing is true, in one way or another, of nearly all automatic actions.

What is not so well recognised is that tropismic acts of which we are incapable of becoming conscious — the activities of our glands and organs, which are wholly automatic — are susceptible of *indirect* control. No one can prevent cell-formation (short of committing suicide), but he can eat foods which so pollute the blood stream as profoundly to affect not only the rate of cell formation (as in anemia), but also the kind of cell formation (as in cancer). The consumption of sugar, which is certainly subject to individual control, is indirectly a means of weakening or destroying the entirely tropismic activities of the islets of Langerhans in the pancreas, and so producing diabetes. Even in the case of inborn and inherited tropismic traits, (like haemophilia), much can be done individually to control them indirectly. A haemophiliac may be unable to change the manner in which his blood coagulates, or rather fails to coagulate, but he can reduce haemophilia in the next generation — which is certainly one way of exercising human control — by refusing to beget children who will

be condemned to a life of abnormal blood-coagulation. But they are controllable not only mentally and behaviourally, they are also indirectly controllable by chemical and even physiologic treatment. It is possible to deliberately use chemicals of various kinds — not only narcotics and alcoholics but drugs like digitalis and like our modern biotics — which effect these tropismic actions. If these are taken long enough, and in heavy enough quantities, many of them effect irreversible changes even in these apparently inherent and tropismic activities of the human organism.

Tropismic acts are, therefore, in the long run, subject to the intelligence of man; they are indirectly, when not directly controllable by the individual man or woman who has been taught how to control them.

Unconscious Actions. At least one-third of every individual's life is devoted to the performance of acts which he performs unconsciously, acts of which he has no knowledge and of which he is unaware at the time he is performing them. The act of sleeping, as already pointed out, is such an act, and of course in terms of time spent is far and away the most important. But there are many others. The time spent in comas, when hypnotized, when stunned by a blow or an accident, when in a mystic trance, when drunk to insensibility, when under the influence of opium or other narcotics, or when anaesthetised, consists of intervals during which the individual is performing unconscious acts.

But while an individual is unconscious during the performance of such acts, he is conscious both before and after them. He is conscious, for instance, while drinking alcohol until the time he has ingested enough to make himself insensible. And he is conscious when he awakes from such a drunken stupor; acutely conscious, usually, of the headache and physical pains which drunkenness causes.

While it is true that he can do nothing to control his unconscious actions after he has become unconscious, he can do many things to control them beforehand. His drinking habits, his sleeping habits, and other unconscious actions,

except those which are accidentally caused, are products of acquired habits, and all his acquired habits are either accidentally or deliberately learned. Of his unconscious actions, like his tropismic actions, it can therefore also be said that they are to a surprising extent educable.

Sleeping is an unconscious act. But the individual who is preparing to go to sleep is conscious and capable of performing actions which he controls up to the moment he falls asleep. He can, if he wishes to, stretch out in bed and permit himself to fall asleep as quickly as he ordinarily does; he can take some sleeping pills to make himself fall asleep more quickly, sleep more soundly, or sleep longer than he would without them; he can set his alarm-clock, or resort to auto-suggestion, to make himself awaken earlier than ordinarily. All these kinds of voluntary actions affect what takes place while he is asleep; what he does while still conscious affects what he does after he loses consciousness. Once asleep, he is completely unaware of what he does during the interval in which he is, so to speak, performing this unconscious action. He would most certainly move about in his bed; if a somnambulist, he might get out of bed and walk about entirely unconscious of what he is doing; he would dream, and most of what he dreamed he would be unable to recollect.

The facts warrant a sweeping assumption if for no other reason than to challenge attention. *All individual human actions—even those here called "automatic"—are humanly controllable either directly or indirectly.* It is this faculty or power of self control which differentiates *homo sapiens* from all other animals.

In the course of his evolution, man has emancipated himself from what is hereditarily predetermined; he can, if he is properly educated, substitute for what in other animals is predetermined, voluntarily chosen acts or habits of his own. Everything he does in life is a product of his exercise of self-control (or of his failure to exercise it), or it is a product of acts of his which, as a child, were subject to the control of those whose control he could not at that dispute but whose control he does not have to accept after he arrives at the age of accountability and responsibility.

Not the most ruthless despot, not the most powerful social force, not even the most compelling biological and instinctual drive, can make an individual do what he may not choose to do.

If he does what a Stalin orders him to do, it is because he chooses, perhaps unconsciously, to do so; he can at all times refuse to act as ordered (as many Russians did in fact refuse) and run the risk of suffering the consequences.

If he does what he is conditioned to do by the group to which he belongs, the nation of which he is a citizen, the society or culture of which he is a member, it is because he chooses, often unconsciously, to do so; again, he can refuse to comply, as innumerable individuals have refused, and consciously undergo the suffering which may be the consequences of his refusal.

If he does what he is impelled to do by his instinctual biological drives, (as most of us unconsciously do), it is because he chooses neither to disregard them nor to exercise control over them. They can be disregarded; men have fasted to death. They can be controlled; birth control is not a misnomer. Self-control of hunger and sex—powerful as are these two biological appetites—is so common that those who think of man as a helpless, ineducable pawn in the hands of the state, of social forces, or of animal impulses, are disregarding facts recorded over and over again in human biography and history.

Since every kind of human action, even those performed automatically and those performed unconsciously, is subject to some degree of control, either directly or indirectly by the individual performing it, the performance of every kind of action is therefore susceptible to some degree of either right-education or some degree of mis-education. This is true even of automatic actions and actions performed when unconscious, because, as we have seen, although such actions cannot be controlled while they are being performed, it is possible to control them indirectly by what is done deliberately and consciously before such an act begins.

Instinctive versus Acquired Actions. Every action is at one and the same time both an effect and a cause, both a response and a stimulus.* It is always response to some previous experience, and always a stimulus to some subsequent experiences. The act of eating is a response to the stimulus of hunger; it is at the same time the stimulus to the subsequent action of digestion.

As stimuli, acts have both physiological and psychological aspects.

The accumulation and consumption of energy — the phenomena called anabolism and catabolism — which is an accompaniment of every act in life, gives to every act its physiological aspect. Acts like eating and drinking, which store energy, are stimuli to which the responses are not only motor acts like working and playing, but also acts like digestion, defecating and urinating. Acts like working and playing, which consume energy, are stimuli to which the responses are acts like resting, sleeping, eating and drinking.

Acts, on the other hand, like looking and listening, all acts involving the use of the senses, and acts like recollecting, imagining, intuiting, introspecting, reflecting and reasoning, are stimuli which are psychological in their nature. The acts with which human beings respond to physiological stimuli are usually quite simple; responses to psychological stimuli are of an entirely different order, often involving not one but a whole series of complex acts and activities. An act of imagination suggesting the invention of a new machine may stimulate responses that will occupy the individual for years and change his whole life.

By far the greatest number of our responses to stimuli consist of glandular, visceral, muscular, and emotional acts

* It is a somewhat amusing reflection to realise that most of the excitement caused by the rise of Behaviourism was due to the substitution of the terms stimulus and response for cause and effect. That Behaviourism has helped to clarify many problems in psychology is true, but it is too bad that so much of what seems like an addition to the sum total of knowledge is really little more than the renaming of old concepts.

and activities which we are driven either to perform or to try to perform as mechanically and automatically as if we were mere animals or vegetables. Acts of this sort which are involuntary and innate, inborn and hereditary, I think of as instinctive.

No other acts performed by human beings deserve to be called instinctive. All acts which are not instinctive are learned, and the manner in which they are performed is acquired and not inherited. But since man's so-called instinctive acts express themselves only in impulses to action, the manner in which he responds to them is learned. Unlike ordinary animals, man can learn to control and even completely to repress the responses to his instincts.

The Reflex Arc. The impulse to reflex action is of course instinctive. I prefer to use the more inclusive concept of instinct in order to include activities of the organism such as living, growing, and dying. Man is not, as most expositions of reflex action suggest, a mere machine. Man grows from infancy to maturity; he reverses this process or activity and begins the process of decay, from maturity to the moment of his actual death. Growing and ageing, which man does during different intervals in his life, are acts and activities as I use the terms. Growth, as stimulus, excites and induces all sorts of activities of the organism which are not accounted for by the sheer ingestion of food, because, in spite of continued food ingestion, the moment ageing begins the organism's responses, mental and physical, and the nature of its activities, change.

What the reflex arc — of which reflex action is always the culmination — clearly explains is the action of the autonomous nervous system in creating our sensations and producing our perceptions; it accounts only for those relatively simple acts which begin with the stimulation of a receptor or sense organ, and end with the response of an effector upon a muscle or a gland. In effect it denies the possibility of any kind of mental activity except that which begins with sensate stimulation

and operates through reflex arcs.*

Yet it is difficult, and in my opinion impossible, to account for what actually takes place during acts of introspection and inception, recollection and imagination, without assuming the hypothesis of stimulation by what I shall call inflex arcs, in which the stimulus originates not in an afferent fibre but in the central nervous system — in some of the cells of the brain itself.

The inflex Arc. The arc may take one of two forms, depending on the nature of the stimulus which excites it. In the case of a train of thought, of a series of reflections, of a sequence of ideas during introspection, the arc begins in the central nervous system and never leaves it; it begins in one cell in the brain and ends in another. This is true even if the introspective sequence was originally inspired by an outside sensation, or began with thinking about such sensations. In the first of such a sequence, we have reflex arcs operating, but thereafter, in pure introspection uninfluenced by outside sensations, we have the operation of inflex arcs only.

The second form of the inflex arc does not differ from the first in point of origin; the initiating stimulus is still experienced in the central nervous system, but if the nature of the response for which it calls requires glandular, organic, or muscular action, the stimulus passes from the central nervous system into the autonomic nervous system, and is responded to by a gland, an organ, or a muscle to which the stimulus is communicated by an afferent nerve. When, as the result of thinking about great danger, the individual is moved to make an ejaculation, we have the inflex arc ending in the afferent nerves which move the whole set of muscles that make for speech.

The only way the reflex arc can be used to explain what initiates a deliberate and voluntary act by an individual — let us say the composition of a new poem, which represents the

* The physiological description of reflex action is that it is an act or movement performed involuntarily in consequence of a nervous impulse transmitted inward by afferent fibres from a receptor or sense-organ, to a nerve centre and, (commonly through adjustor neurones), outward to efferent fibres to an effector which may be a muscle or a gland.

culmination of a period of feeling and thinking — is by dogmatically assuming that all the time he was composing the poem he was in reality being affected through these senses without being aware of the fact, and that each change in thought was produced not by his mind through what I have called inflex arcs, but by sensory stimulation or sensations through a series of reflex arcs. That it is possible for a person sitting quietly in a chair before a desk in his study to obtain a series of sensory stimuli which induce and correspond precisely with his changes of thought, is an assumption so unreasonable that its advocacy can only be explained as a penchant of Behaviourist psychologists for ignoring the fact that the complex thinking of geniuses is just as much in need of explanation as are the simple, animal-like experiences of infants on which they are prone to concentrate.

A simple experiment will demonstrate the inadequacy of explaining human behaviour solely in terms of the reflex arc. Take two persons; seat them in an identical manner in the same room at the same time and for the same length of time; stuff their ears with cotton and blindfold them, and as nearly as possible make it impossible for them to obtain outside sensations to stimulate reflex arcs; but as they will receive some, whatever is done, let them be as nearly identical as possible. After a period of time release them and have them report in separate rooms what they thought about during the interval of the experiment. No matter how identical the sensations they receive, no matter how few, *they will not have thought the same thoughts*. Even if they both start by thinking about the experiment, which is quite probable, the difference in their thoughts, and in the sequence of their thoughts, can only be explained in terms of their past experiences — of something already in their minds — and not of any sensory stimuli which they receive from their environment from moment to moment during the period of the experiment itself.*

* In the first experiment of this sort, while the thoughts recorded by the two subjects were entirely different and originated in introspective stimuli concerning experiences long antedating the experiment, sensory stimuli also crept in. One subject whose ears had not been properly stuffed, had the thought, "I think I can hear talking, so apparently we don't have complete silence." Another, referring to the fact that she was touched to notify her that time was up, had the thought "Why, this is short."

I cannot place too much emphasis on the distinction I am making between reflex and inflex action. We breathe, for instance, not because of the operation of the reflex arc, but because breathing is essential to survival. To say that a human being is living is to say that he is responding to the stimulus of his instinct for survival, for sexuality, or for self-expression. Every act which is essential to life has its fundamental root in something more than the reflex arc. The sight of food may furnish the stimulus for eating, but the fundamental reason — the underlying stimulus — for eating is not neural but biological, or as I think of it, psycho-physiological. The reflex arc and the inflex arc — if my hypothesis can be substantiated — are the mechanical accompaniments and explanations of instinctive action, rather than its original cause. Only in the case of acts which are entirely responses to sensory stimuli from the outside environment — as in the case of the act of withdrawing the hand from a hot stove — do we have an action which may be designated purely and primarily a reflex action.

Here it may be well to take note of the fact that while we eat in response to the instinct for survival, what we eat, when we eat, and how much we eat, are not reflex acts only, but also voluntarily determined. In human activities on the physiological level, such as tissue-formation, the action may have no discernible voluntary aspect. But most of what we call action has both instinctive and voluntary aspects. Purely voluntary acts can be distinguished from those which are purely instinctive by the consequences of trying to suppress them. Refusing to bear children, as many modern women do, does not prove that reproduction is not instinctive; all it does is to channel the instinct in some other direction, perhaps in substituting a pet dog for a child, or lavishing the maternal instinct on a business career.

The penalty for attempting to suppress the instinct for self-expression is neurosis; for suppressing that of genitality, sexual perversion; for suppressing that of survival, morbidity and death.

b. *Directly Controllable Voluntary Individual Actions.* The distinction between instinctive and acquired actions grows out of the difference between actions performed because of biological drives inborn and inherited by every individual and actions individually acquired, which each individual learns to perform after birth.

What is important to those concerned with the educational problem, is to keep in mind the fact that all acquired pattern of action are in ultimate origin matters of free choice. Instinctive actions are biologically determined; acquired actions, even when they represent habits deeply ingrained in the individual, are psychologically determined. At best, instinctive actions can only be rechanneled; they can never be completely eradicated. Acquired actions cannot only be changed, they can be completely abandoned. It is proper, therefore, to treat every kind of acquired action—at least educationally—as if they were matters of voluntary choice.

In using the word voluntary* in this connection, I do so deliberately, in spite of the fact that so few acquired actions are, before they are performed, matters of conscious choice by the individual himself. Most of our actions, I fully recognize, consist of actions habitually performed—often subconsciously—most of them prescribed by the mores and folkways of the culture to which we belong. But all this means is that the actions were originally matters of free choice, at some time in the past, by others than ourselves, and that choice today, so far as we are concerned, means whether or not we choose to do what custom or tradition prescribes for us. That we in fact *acquiesce* rather than *consciously choose*, does not make the act compulsory; it is still humanly possible to refuse to act as prescribed by tradition or prescribed by law.

In tradition-bound cultures—those of homogeneous, primitive peoples, for instance—the “choosing” may have been done by individuals who lived thousands of years ago. In the heterogeneous culture of America, which Izrael Zangwill

* The word is from the Latin *voluntarius* and *voluntas*, meaning will, choice; its dictionary meaning may be summarized as *action based upon choice, design, intention, purpose.* c. f. pp. 303-316 EDUCATION AND LIVING.

called "the melting pot" because of the mixture of races and nationalities of which it is composed; in America, with its new technologies, new inventions, new designs for living, and novelities in ideas, and ideologies—"choosing" is freer, and acquiescence means following the prescriptions of leaders who live today and not those who lived in the immemorial past. But the fact that we can choose, and that some of us do reject what fashion prescribes, what politicians, educators and preachers, writers and dramatists, movie makers and radio broadcasters, business men, advertising men, and sales managers prescribe for us; that we make more or less free choices of our own, proves conclusively that all action above the instinctual level is in fact voluntary.

This is not denied by consideration of the acts and activities which we are seemingly compelled to perform by law. The fact that criminals—and enormous numbers of respectable men and women—choose to disregard laws of all kind; the fact that conscription for military service is refused by conscientious objectors; the fact that so many choose tax avoidance when they do not choose tax evasion, proves that observation of the law is in its ultimate analysis as voluntary as is its non-observance.

The fact that an act or pattern of behaviour is free in its origin and essence, does not preclude its becoming an act so habitually performed as to become for all practical purposes impulsive. We can acquire habits which in time become so built-in psychologically that they are indistinguishable from instinctive actions. But they differ from inborn acts because they have not only been acquired, but because, unless there is deep neurosis or psychosis, they can be abandoned. And this is not true of instinctive acts, attempts to suppress which are psychologically and sometimes physiologically suicidal.

What follows is the inescapable conclusion that *every kind of action and behaviour is more or less individually and humanly determinable, controllable and educable.*

Since this constitutes a denial of that part of Freudian psychology which considers behaviour to be determined wholly by the unconscious; of the Behaviourism that denies the fact of

consciousness itself; and of Fatalism and Determinism as this applies to human beings, it is worthwhile exploring the matter in some detail. Such study, I am convinced, furnishes overwhelming evidence that all human action and behaviour—including that performed by individuals as members of a group—are controllable to some degree and in many instances to an enormous degree. That man—and specifically modern man—is the helpless victim of social, economic and political forces about which he can do nothing in his individual life, is false. That he is for the most part helpless, is true; that he will not use his powers, or be taught how to use them, is unfortunately very probable; but that he cannot do anything to control the circumstances of his life is not true. The sooner the leaders and teachers of the world learn what man is capable of doing, and the extraordinary extent to which he can be taught to control and direct his own activities, the sooner the humanization of mankind will begin.

Habitual Actions. A distinction needs to be made between acts which are repeated merely because repetition is inborn, and involved in their essential nature—acts like breathing, ingestion, digestion repeated acts like going to school or church, or going to work at a certain time by the same mode of conveyance. The first kinds of repetitive acts are not merely hereditary, but are essential to the maintenance of life; only the form in which they manifest themselves is subject to voluntary control. Only those acts which are voluntarily acquired, whether acquired deliberately or inadvertently, will, in this study, be called habits or habitual acts. Tropismic acts which are constantly repeated to maintain life are merely repetitive tropisms, and not, in this usage, habits.

No programme for living, and no programme of education for normal living—for realizing to the utmost the potentialities of human life—is possible without training in habits. William James was probably the first psychologist to call attention to the now accepted theory that every physical sensation and contact with the outside world leaves a permanent trace, however faint, among the ten thousand million cells of the brain. Since these traces in the brain are permanent and cumulative, their

sum total constituting our characters and personalities, he insisted that nothing was important than living up to the full potentialities of this extraordinary mechanism.*

Everything we do, James pointed out, makes it easier to do the same thing again. Electrical currents, in a way not fully understood, record all that happens to an individual by creating pathways among the cells of the brain. The more frequently an action is performed, the deeper and broader—figuratively speaking—these pathways become. Implanting the right kind of pathways for human actions, James considered a sort of insurance for wise behaviour. “The man who has daily inured himself to habits of concentrated attention, energetic volition, and self-denial, will stand like a power when everything rocks around him and when his softer fellow mortals are winnowed like chaff in the blast. Sow an action and you reap a habit; sow a habit and you reap a character; sow a character and you reap a destiny.”

“We are spinning our own fates, good or evil, and never to be undone,” he said. “Every smallest stroke of virtue or of vice leaves its never-so-little scar. The drunkard excuses himself for every fresh dereliction by saying ‘I won’t count this one.’ Well, *he* may not count it; but it is being counted none the less. Down among his nerve cells and fibres the molecules are counting it, registering and storing it up to be used against him when the next temptation comes. Nothing we ever do is, in strict scientific literalness, wiped out.

“This has its good side as well as its bad one. As we become drunkards by so many separate drinks, so we become saints and authorities by so many separate acts of good and hours of work!”

There is a notable similarity between this and an old Sanskrit proverb which says that “The effect of actions, good or bad, are not wiped out for aeons.”

* Pavlov, of course, explained the mechanism in terms of the conditioned reflex, but the newer explanation in no way upsets the essential conclusions which James drew from his observations of human behaviour.

Initial versus Habitual Actions. Every habit originates with an initial action. When this initial act is repeated often enough, it becomes a habit. The habit of brushing the teeth every morning, is a habit which must have begun with an initial act of brushing the teeth; the habit of using table ware in eating, must have begun in an initial act when spoon and fork and knife were first used; the habit of smoking cigarettes, in an initial act the first time a cigarette was smoked, and so on *ad infinitum*.

Habits can, however, not only be initiated but also changed and abandoned. Each such change involves the substitution of a different kind of action for the habitual one; and the first time this is done it is an initial action even though, by repetition, it too eventually become habitual. When habits are abandoned, however, as in abandoning the habit of smoking, some other activity must necessarily occupy the time formerly devoted to it. Perhaps the nervous impulse that led subconsciously to the smoking of a cigarette is responded to by chewing gum or eating a piece of candy. But abandonment differs from a change of habit; a habit is changed if cigarettes with filters are substituted for those without filters, or when cigar or pipe smoking is substituted for cigarette smoking. The habit is abandoned only when smoking is altogether abandoned.

Habits, like all actions, may be good or bad, in terms of health, in terms of morals, in terms of various kinds of values. Whether they are good or bad, calls for objective and scientific, not subjective or arbitrary evaluation, granted that such objective evaluation is possible—as the discussion of normal and abnormal actions will maintain—nothing becomes more important than to learn, and for educators to teach, how bad habits can be broken.

Conscious versus Instinctive Action. All human actions are performed at some level ranging between the fullest self-consciousness and the completest unconsciousness. Action at the lowest level is called, as here designated, tropismic. At this level it is predominantly instinctive; it is hereditary and in most instances can be very little affected by learned or acquired traits.

At the next level of awareness, unconscious action—action dominated by the unconscious, in the Freudian sense of the term—learning begins to play a part in shaping action, and increases its dominance as action rises from the unconscious to the subconscious, the conscious, and the self-conscious levels of awareness. Education, strictly speaking, takes place only at conscious and self-conscious levels of awareness. At levels below these—in their study called subconscious and unconscious—traits are acquired, it is true, but they are today usually acquired adventitiously and accidentally, inadvertently rather than deliberately, because the prevailing form of education virtually ignores all planned training of the unconscious mind.

The *act of eating* is a conscious act. On the other hand the *act of thinking* about what to eat is a self-conscious act.

It is a supererogation to furnish evidence that acts consciously and self-consciously performed are subject to individual control, since this is true of the very state of consciousness itself. An individual may go to sleep, drug himself, permit himself to be hypnotized, or put himself into a trance, and so by his own action suspend his state of consciousness. But when conscious, and engaged in performing acts like working and playing, walking and reading, plainly and obviously what he is doing is subject to voluntary control by himself or by other persons whose directives he accepts.

What is learned while conscious or self-conscious plays a tremendous part in shaping subconscious and unconscious action; traits which are acquired when the individual is fully conscious, tend to sink into the subconscious and entirely unconscious minds. Subconscious action—as studied in Volume III dealing with the nature of human nature—consists for the most part of habitual acts which were originally acquired consciously and self-consciously.

Even instinctive action is, in man, in a sense a misnomer. What is endowed with hereditarily are instinctual drives rather than distinct instincts as the term instinct is usually used. When he expresses these drives in his acts and activities, they take the

form of acquired and learned, rather than inborn and inherited traits.

To avoid seeming to exalt to the point of absurdity the possibilities of education for the control by the individual of his own destiny, three limitations upon voluntary individual control by three limitations upon voluntary control by individuals of their own actions, (a) incompetence, (b) history, and (c) gregational action.

a. Incompetence. The first limitation arises from incompetence—the temporary incompetence of the normal human being during infancy and childhood, when it is not the individual but the parents, (who, it should not be forgotten, are also individuals), who exercise control over, and in the interest of, the child; and secondly, the permanent incompetence or temporary adult incompetence of those who are either partially or totally lacking in the physical or mental qualifications of healthy, whole, sane, responsible, mature, normal persons.

The fact that all infant “individuals” are incompetent to act, and do not act for themselves; and that some individuals—the insane, the crippled, the paralysed—may be incompetent to do so for most of their lives, simply shifts the control of action from the individual himself to the individuals who act for him. It does not alter the conclusion to which this study of action drives us: the necessity of educating individuals in how to act, not only when acting for themselves but when acting *in loco parentis* for children, or in some position as a trustee for those not qualified to act for themselves.

The world's population, it is true, includes an enormous number of adults—not all of them by any means confined in institutions—who are so dull-witted, so infantile, so suggestible and immature, or so badly miseducated that they ought to have responsible individuals act for them. This does not mean that human action is uncontrollable. Most of the population is sufficiently educable to act as responsible human beings, and if all of those capable of planning their own lives and controlling

their own activities were rightly educated, only a small percentage of the whole population would be found incapable of coping with the internal and external natural forces with which everyone is confronted, and of emancipating themselves from many of the social, economic and political forces about which no one today is supposed to be capable of doing anything.

In the normal course of maturation, every individual progresses from infancy and childhood; from a condition in which he has no control, or relatively little, over his own acts, to maturity, when he achieves maximum control over them. But even after he has achieved a substantial degree of self-control, no individual can completely control what another individual may do to him; even less can he control what some gregational enterprise like a corporation, a union, a church, a political party, an army, or a State may do to him; and least of all what some natural accident like a fire or flood may do to him. He can, of course, if he is fully mature and has learned how to deal with the problems of living like a normal human being, control his responses and reactions to what is done to him and happens to him. He can learn "not to cry over the spilt milk;" he may even learn how to turn what is an unavoidable mishap or misfortune into something favourable; finally, he may learn that there are instances in which greater satisfaction can be gained from resisting and fighting injustice and tyranny—though the cost be great in suffering and pain—than in meekly accepting them.

b. History. There is secondly the limitation on voluntary individual action created by events, events like floods and famines, which have their source in "natural" history, and events like wars and revolutions, which have their source in "human" history.

That natural events like the Russian drought of 1921 and the great 14th century plague called the Black Death, limit the freedom of action and effect the behaviour of individuals is perfectly true. This too is true of human events, like the French Revolution of 1789 and the Russian Revolution of 1917. That the vast majority of individuals react with substantial uniformity to events of this kind is likewise true, but no matter how great

the proportion which responds in this manner, there are always deviants, and it is these deviants and their behaviour which evidence the fact that every individual can exercise some control over what he does even within the limitations which history imposes upon him.

To vindicate those social scientists who maintain that human behaviour is historically determined, the response of every human being to events of this kind would have to be uniform and invariant. The fact that there is no such uniformity is proof positive that they have a capacity for individual direction and control of their behaviour which it is grossly unscientific to ignore.

It is true that with time enough, intimidation enough, and force enough, (as with the Catholic Inquisition in Spain, the Gestapo in Nazi Germany, and the OGPU in Stalinist Russia), even those who may be opposed to what state and society at the time prescribe, can be made seemingly to conform to historical necessity. But this overlooks two things: that deviation is never entirely exterminated; that there is always a minority which does not accept, but at most bows to the dictates of force, and that no matter how ruthless the pressure exerted by those in power, the history of mankind is not one of conformity but one of change. The logic of Historical Determinism calls not for change, not for variation in the reaction of individuals to events, but for invariance. If something outside of the individual determines his actions, then everyone subject to the same outside events would have to react to them uniformly and would continue so to act as long as he is subjected to the same outside influences.

It is not the degree to which man acquiesces in historic events nor the tendency to react to external necessity uniformly that requires explanation, but the fact of variation—the fact that even a single individual may refuse to act as history makes it apparently "necessary" for him to act.

History itself—human in contrast to natural—is ultimately a product of individual actions; every new religion, like Christian science; every new nation, like Indonesia; every new invention,

like the steam engine, the electric generator, the railroad and the airplane; every change in technology and in custom or social behaviour originates in the acts of individual innovators, individual deviants, individual heretics, and of minorities composed of individuals which refuse to accept what historic necessity seemingly prescribes for all. The limitations upon voluntary action imposed by history merely shifts the nature of the problem calling for explanation from that of the behaviour of individuals acting in a mass—from what in this study is called gregational action—to the actions performed by the individual leaders and teachers who are the creators of new values and the initiators of new patterns of action. If people were properly educated and properly led, they would still acquire habits, they will still follow customs. But they would cease to develop habits and to conform unthinkingly; they would cease implementing the idea of living like bees in a hive or cogs in a social machine. They would explore the idea of living like normal human beings—a pattern of living, action by action and individual by individual, which calls for developing to the utmost the initiative, the responsibility, and the potential personality with which all normal human beings are endowed.

3. *Gregational Forces.* The third limitation upon voluntary action reflects the influence exerted upon him by the activities of gregations or groups of various kinds. Man, being a gregarious animal, not only lives in a herd but for the most part acts as a participant or as a member of a social, collective or public entity of some kind—a family, a labour union, a corporation, a church, a State or nation, a tribe or community, a society or culture. By personalizing these entities and treating them as if they were living organisms, it becomes easy to minimize, and what is worse completely ignore, the fact that all the influence they exert upon their members is in the final analysis dependent upon individual acquiescence in what the so-called organism does.

Many socialistically oriented social scientists maintain that the individual ability to act individually is illusory; that the way man acts is predetermined by social forces about which he can do nothing. Marxian social scientists, for instance, main-

tain, that the changes in man's behaviour which followed from the invention of the steam engine by Watts, the spinning-jenny by Arkwright, and the power-loom by Compton, are mere reflections of the social forces generated by the change in the "modes of production" from cottage industry to factory production. If this contention of theirs is correct, then the underlying assumptions of this whole study are all mistaken; if man's behaviour is not in fact voluntary and if individual action is an illusion, then it is custom, and the habits which he acquires in responding to custom, and not his education which is the assumption upon which the social sciences should be developed. Let us see whether there is not some error in the interpretation of the facts which is responsible for this belief.

Action versus Interaction. One of the sources of confusion under which the social sciences labour today is their failure to distinguish sharply between action and interaction. It is this fact which makes them emphasize the social rather than the individual, and the sociological rather than the praxiological approaches to problems of mankind. As these sciences are formulated today, they emphasize social in contrast to individual force, and tend either to belittle or to ignore the power of the individual to act as an individual in shaping not only social forces but even in determining his own activities when subject to them.

Man is a gregarious animal, it is true. The hermit living in isolation is in no way representative of the normal behaviour *homo sapiens*. Every normal individual is born into a gregation—his family; he is educated in a gregation—his school; he works and plays in gregations; he lives in gregations in villages, towns and cities; he participates to some extent in the activities of still larger gregations called economies, societies, nations and cultures. He naturally and necessarily interacts with all sorts of individuals with whom he is connected or comes into contact in any way. In a sense he interacts even with those who merely pass by him on the street or drive by him on a highway even though the interaction is negative in nature and consists only of avoiding bumping into them or colliding with them. He may even be said to interact with individuals with whom he

has no real contact at all, with individuals he never meets but who happen also to be members of the whole human race. Interaction, therefore, ranges from the polar extreme of no contact at all to the almost continuous contact which takes place among the members of a family, and from complete indifference to each other by those who interact to the intimacy of the interaction between men and women in the act of coition.

But no matter how numerous the interactions; no matter how frequent and intimate the interaction with the same individual; no matter how much the behaviour of those interacting reciprocally effects those involved in them, the fact remains that each of the individuals to the interaction is engaged in performing an individual act; *and scientific observation of living must begin with this, and not with interaction.*

Because every event and every experience in life ultimately resolves itself into an individual action, the education of mankind must begin with this, and not with social action. Until the human and social sciences are reformulated and rewritten in terms of individual human actions they will remain pseudo-sciences; they will deal with hypostatizations and not with realities; they will continue to confuse instead of clarify the subject being studied. Until this takes place they will not only be barren sciences; what is much worse, they will continue to condition those who study them, or who are in any manner influenced by them, to seek for collective and governmental solutions for all their problems, including those which are in reality individual and not social problems at all.

If every event of which any human being has ever become aware; if every experience to which any human being has been subjected; if every action and interaction which any human being has performed or in which he has played a part, is ultimately individual, gregational action becomes a mere figure of speech. Even those events in which no human being has participated at all—events such as the supposed creation of the world, for instance—are not experienced at all until there are individuals to become aware of them, to think about them, to read about them, to make them postulates upon the basis of which they act.

Corporations do not produce steel, except figuratively speaking; steel is produced by individual human beings who invest their savings in the corporation; by the individual workers who handle the coal and iron, who operate the furnaces, and dispose of the finished products.

Unions do not conduct strikes; strikes are declared by individual labour leaders; they are conducted by the individual members of the union; they are settled by individuals who represent a fiction called the *labour union* and another fiction called *management*.

Mobs do not riot; do not burn down houses; mobs do not maim and kill. All these things are done by individual members of a fiction called a mob, some of whom do nothing at all but accompany the mob; some of whom do nothing but shout; some of whom however do the actual burning and killing.

Nations do not wage wars. Wars are fomented by individuals who write and make speeches; they are declared by individual public officials; they are directed by individual generals and admirals; they are fought by individual soldiers, sailors, and airmen.

There are no such actualities as corporations, or unions, or mobs, or nations, or societies, or cultures, or races, except as figures-of-speech or operational fictions as conveniences in dealing with large and complex collections of individuals and their possessions. These are all hypostatizations; and when we use them, we must be on our guard not to endow them with attributes which only human beings actually possess. The distinction which lawyers make between natural persons and artificial persons, is perfect. These artificial persons the lawyers call legal fictions. State and society, and every other group and gregation, are fictions; some of them like the State, are properly called legal fictions but all of them, even when not legal creations as is the case with society, are operational fictions, and we must never forget it.

No evaluation of the validity of this study is possible without understanding the distinction between individual and gregational

action, and the conclusions which flow from it, that all the phenomena which is the subject matter of human history, of economics and politics, of sociology and anthropology and all the other social sciences, consist in the final analysis of actions by individual human beings, action by action, individual by individual.

The study of mankind is properly not the study of society but of human action. The study of the so-called social sciences, therefore, should be the study of individual human action in all the multiplicity of its manifestations.

The proper basis for equipping ourselves, and for teaching those whom we influence to deal with both their personal problems and the great social, economic and political problems of our times in a genuinely rational and humane manner, should focus all the sciences, all philosophy, all knowledge and wisdom how the individual, individual by individual, should act.

CHAPTER VII

Section I

THE NATURE OF NORMS OF ACTION

The proper study of mankind is man.

—Alexander Pope.

To suggest that there is any such thing as a normal way of living, and that this normal way of living can be established by the use of the scientific method, is to run the risk of being considered factorious. For it seems perfectly obvious that since man has survived all the different ways in which he has lived in the past, (many of which seem fantastically abnormal by the concept of normality which prevails today), there is no such thing as a normal way of living, there are no such things as norms of human action, and there can be no such thing as education for normal living.

But this proves nothing at all. Survival, in spite of an abnormal pattern of living, proves only that in every generation enough human beings live long enough to beget progeny and so make it possible for the species to survive; it ignores the fact that whole tribes and whole civilizations, when their patterns of living involved sufficiently serious violations of the norms of living, entirely died out. It ignores the fact that unless the abnormalities they practise kill them all off before they can bear progeny, the violators of the norms of living will leave progeny, and so on, *ad infinitum*.

I am saying, however, not only that it is possible scientifically to distinguish between activities and patterns of living which are normal and those which are abnormal, but that it is possible scientifically to establish the fact that the pattern of living of which modern man is so proud — and which he is taught to live — is an abnormal one. I am saying further that it is possible to establish norms for human action which must be observed by him if he is to cease living abnormally,

and that he will not begin to reduce the social pathologies in this "Brave New World"* of which he is so proud, and measure up to the problems with which life confronts him, until he develops a science of living based upon such norms, *and is taught to live in accordance with them*. Finally, I am saying that he will never be able to live as man is potentially capable of living — that he will never cultivate the Earth, utilise its natural resources, profit from his cultural inheritance, and spend the years of his life individually and collectively, healthily, affectionately, rationally, conscientiously, and with good taste — until he develops a system of education based upon some such ideal as normal living — or, to use the words of Matthew Arnold, upon the idea of "the humanization of man."

Such a discipline is needed, however, not only for the purpose of teaching individuals how to avoid frustration and achieve satisfaction in living, but also as a basis upon which to organise a proper social order. For it ought to be obvious that until we know with some degree of assurance how human beings should live, passing laws, planning social institutions and reforming governments is more or less futile. This was obvious to Hobbes when he projected an order based upon the principal of universal strife; to Rousseau when he projected one based upon the principle of social contract; and to Kropotkin when he projected one based upon both competition and cooperation, or as he referred to competition, "mutual aid." They at least recognised the need of some sort of norm as a basis for designing a social order even if all three mistakenly took as their norm what they assumed was man's way of living in a "state of nature". But today our social reformers, and, what is worse, our social scientists, are busily engaged in prescribing for our social problems without recognising the futility and absurdity of venturing conclusions until they have first established *how man should live*.

Unfortunately normal living means to most people — including our educators and social scientists — living in conformity with the conventions of the race, the nation, the commu-

* This is the novel in which Aldous Huxley describes a pattern of living which is completely abnormal from beginning to end.

nity, and the group of which the individual happens to be a member. A distinction needs therefore to be drawn between living in conformity with custom and what I call normal living.

To make this distinction clear, it is necessary to consider six problems, each of which is related to the problem of giving content to the concept of normal living.*

1. The first is the problem of defining the words *norm* and *normal*, and the concepts *normal living* and *norms of living*. The word *normal* is now loosely used, and *normal living* suggests, even to those used to precise thinking, some average of *what is* rather than a prescription for *what should be*. Unless some precise statement of what is meant by these words can be formulated, no rational discussion of the whole concept is possible.

2. The second problem is that of *method*. No such norms of living as those considered in this study can be formulated, and certainly no such norms can be used as a basis for education, unless there are rational and scientific methods — methods which are objective and which make verification possible — to determine how human beings, both individually and collectively, as personal and as social beings, should live. As we shall see, there are a number of methods which can be used for this purpose.

3. The third problem arises, strangely enough, in connection with the word *individual*, because of two facts; because individuals, in spite of the identity and continuity of their personalities — the identity and the continuity of the "self" — are changing organisms, organisms with a life-cycle each stage of which calls for a different pattern of living; and secondly, because of the bifurcation of individual into two sexes, male and female.

* Perhaps there ought to be still another chapter dealing adequately with the definition of living in terms of the individual's relationship to the cosmic and the eternal. The religious individual, whose life purpose (and solution of the telic problem) involves the quest of some form of eternal salvation, cannot live here and now like a reasonable creature, without planning and ordering it to ensure that salvation. But the ideology of normal living is expressly restricted to the consideration of living on a human and not a supernal level.

The first of these two difficulties arises because of the fact of human metamorphosis; because of what I think of as the human life-cycle. Human beings are not simple, uniform, and static objects; they are not units of some azoic and homogeneous substance, but instead variable, complex, and heterogeneous, organism. Using the term metamorphosis in its biological meaning, every living individual is passing through a continuing process of transformation from one kind of individual to another—a fact which we ignore when we think of metamorphosis as a phenomenon restricted to plants, insects and the lower forms of life. At various periods in the course of each individual human being's life, and at various places in which the individual spends time, the individual is quite a different being—infant, child, youth, adult. The definition of normal for the individual during any one of the poet's "seven ages of man," is not necessarily normal for him during other periods of his life.

Since living is a process which takes place both in time and space—not only over intervals of time but also upon various places on the Earth—the problem of the life-cycle involves the determination of how, the individual should spend his time during each distinct period in his life. We shall have made some progress toward teaching people how to live normally, if we can even tentatively formulate general principles which should be observed by human beings in organizing life to fit each inescapable metamorphosis in their lives.

The second difficulty in defining the concept of the "individual" human being, arises on account of the bifurcation of human beings into two sexes. It is obvious that if human beings are in actuality not one but two different kinds of organisms, the norms of living applicable to each sex must be as different as the actual differences between the two sexes. Normal living for men and normal living for women cannot therefore be one and the same thing. Moreover, the norms which have to be formulated and then taught for each sex to observe at each stage in the life-cycle, would have to take into account the differences in the activities of each sex at each stage in life from birth to death.

This whole problem arises because each of the nine periods of life for each sex being different, the problem of how they should occupy themselves so that they live normally from birth to death confronts everybody. Important as this occupational problem is to education for normal living, it would involve too great a digression to go into it in detail at this time.

4. We come now to the fourth problem in the definition of normal living—definition in terms of its social as distinguished from its individual aspects.

Since it is impossible for individuals even to come into existence, much less survive and live normally, without association with other human beings, it is impossible to define normal living without definition of the social unit which should provide for this association. The only unit which can provide this on a human—and therefore normal—basis, is the family. No substitute for this unit, such as the state, which Socialists ever since Plato have recommended, can fulfill this function except by substituting an impersonal, inhuman gregational unit for the intimate and human family. Since the individual is inescapably a part or fraction of this family unit, complete definition of the fraction, (the individual), is impossible without definition of the whole (or family) of which the fraction is a part.

5. The fifth problem in defining specifically and adequately the idea of normal living, is the problem of the relationship of the individual and the family to the community, to the society of which the community is a part, and to humanity as a whole—to the rest of humanity as it is organized in aggregations of various kinds. Neither the individual nor the family can avoid dealing with this problem, for one reason because all human beings are in the final analysis dependent upon access to land, and for another, because these larger units of mankind are those through which man's belligerent tendencies have always operated, and through which his desire for peace alone can be implemented. Norms which will control, if they cannot entirely abolish, organized violence and organized aggression, are essential if man is to be taught how to live like a normal human being.

This, like the normal organization of family life, is a production problem — the production, however, of intangible goods which I think of as harmony, peace, and law and order, in contrast to the production only of material goods like food, clothing, and shelter.

6. Finally we come to the sixth problem (if the definition of normal living is to be complete enough for purposes of humanization), the formulation of the whole complex of basic problems with which every individual has in the course of his life to deal, and which, as we have seen in the discussion of the nature of these basic problems in Chapter 4 of this volume, can only be properly dealt with if norms for dealing with each one of them can be developed. One volume in this whole study which I have been making will be devoted to each of the problems in the whole complex.

All that we need to consider of the six problems of definition which I have here outlined at this time, are the first two — the definition of norm and normal, and the methods by which norms for human action can be formulated objectively and not subjectively, positively and not relatively, scientifically and not arbitrarily.

CHAPTER VII

Section II

THE LAW OF HUMAN ACTIONS

It is a commonplace in science as in philosophy, that not knowing what one has been looking for means not knowing what one has found. — Simone de Beauvoir.

Since we are embarking on a rather lengthy exploration of what may seem like mere definition, some outline of where it should lead us is in order. For the end-result of study of these basic problems of man and of society should be the formulation of laws of human action — laws which our social scientists have not even tried to formulate, which the teachers of mankind have therefore been unable to make the basis of man's education, and upon which man has therefore failed to act consistently and deliberately.

If man's history is in so many respects worse than the history of any other species of animal; if his behaviour has been in so many respects worse than that of the beasts of the field and forest, this is due to the fact that he cannot, as can all other animals, rely upon his instincts in dealing with the problems with which he is confronted. He has to rely for direction on the use of his conscious mind.* His two-fold failure to use this extraordinary faculty with which he alone in the animal kingdom is endowed, first to determine *how he should act*, and secondly to condition himself so that *he acts as he should*, is responsible for his dark and tragic history, only fitfully lightened by marvelous artistic and scientific, cultural and moral achievements which provide a glimpse of what he could make of life if

* Mysticism of all kinds, particularly those like Zen and Taoism which are so largely epistemic in their emphasis, deny the truth of this. In effect they maintain that intuition, or revelation, or mystical communion with mounenal sources of knowledge, should be man's ultimate reliance in making decisions about how to act and how to live, and not his own conscious reason. To consider this point of view would involve too long a digression.

he were to use his mind to actualize his potentialities as a normal human being — to humanize, in other words, himself and to humanize society.

The law of human action, the full development of which in all its manifold aspects is the most important task to which science and art, religion and philosophy ought to direct themselves, should be man's conscious response to the impulses which came to him from his four inherited instinctual drives.

Here an enormously important digression cannot be avoided. The four instinctual drives around which this concept of law governing human action is developed, are not instincts. They are drives. They are forms of energy; of organic in contrast to inorganic energy; of what has sometimes been called psychic energy. Freud's concept of the libido is one concept of such a form of energy.

Instincts, in common usage, are simply traits — traits supposedly found in all human beings. I do not like either the common usage or the scientific usage of the term; neither seem to me based upon a satisfactory conception of the thing to which the word is supposed to refer. In my usage, instinct means simply an inherited trait; a trait inherited by every normal individual which manifests itself throughout his whole life. Enduring traits which are acquired, or learned, and which are subject to change even though changing them may be very difficult, are not instincts but habits. The habits of not only individuals but of groups of individuals vary from time to time and from place to place; one tribe or nationality or culture or race may exhibit habits which others do not exhibit, but so far as their instincts are concerned, every individual and every individual in every group, must have traits which are exactly the same.

From none of my readings in psychology have I been able to form either a comprehensive or a satisfactory list of man's instincts. Such a list would be useful if it made it possible to disentangle what is instinctive from what is acquired in behavior. The educator and re-educator of human beings would then have a list of traits which can be, and a list which cannot be,

changed by education and re-education. But the plasticity of instincts is man, and the difficulty which this creates, seems to make the attempt to disentangle the two hopeless. No wonder even the instinct psychologists cannot agree among themselves. For seemingly this plasticity makes the instincts themselves educable; it makes them indistinguishable from acquired habits, and if this is true, it makes nonsense of the assumption that instincts are inescapable because they are inherited and not acquired.

Personally I sometimes feel that there are only two instincts, one an instinct *to feel pain*, and another *to feel pleasure*.

They may, however, be merely two different forms in which a single instinct expresses itself, the instinct *to feel* — the instinct which biologists call irritability but which I shall in this study call sensitivity. I think in this way because these enduring traits are with him, in some form, as long as he lives.

Here a definition within this definition is called for. As the word feeling is here used, it is simply a synonym for sensation; and the feeling of pain or of pleasure are simply two different kinds of responses to the stimulus of sensations. I think of them as inherited and ineradicable traits because they are essential to survival; without them we could not avoid injuring ourselves constantly, nor would we be driven to do the things essential to sustain life. We might, for instance, starve to death if we felt no pangs of hunger, and felt no pleasure in ending them.

The concept of instinctual drives, around which this formulation of a law of living is here being developed, is instinctual because the drives are both inborn and ineradicable. There are three of them which are substantive and one which is derivative; the substantive drives are those which man exhibits first as a mere living organism, secondly as a sexual animal, and thirdly as a fully evolved human being. The derivative drive I think of as that which he exhibits when frustration makes him exhibit a drive for self-annihilation.

1. *The Instinctual Drive for Self-Survival — The Survival "Instinct."* As the law of human action should apply to man

as a mere living organism, it will necessarily apply not only to man but to every living organism from the one-celled amoeba to man himself; for its essence, which they all share as a common problem, can be summed up in one word, *self-survival*. For the normal human being, (the qualification normal is all-important), the law must formulate norms applicable to the question of how the individual should act in trying personally to survive.

But it should be emphasized, this is not man's most important problem as so many students of man and of society have assumed. It is his lowest, and in a sense his basest problem, since in essence it is the same problem with which the lowest and least evolved of all organisms have to deal.

This is why Marx's economic interpretation of history is such a travesty of the complex problem with which the history of man confronts us. It is not true, as he maintained in the Communist Manifesto, "That in every historical epoch, the prevailing mode of economic production and exchange, and the social organization necessarily following from it, form the basis upon which it (history) is built up, and from which alone can be explained the political and intellectual history of that period." Yet crassly untrue as this statement is, Engels said of it, in his introduction to the English translation of the Manifesto forty years after the original appeared, that "This proposition . . . is destined to do for history what Darwin's theory has done for biology." The fact that most historians today have accepted the economic interpretation of man's history, does seem to vindicate Engels' prophecy.

No wonder man's history is so dark and tragic when absurdities like this masquerade as science in the thinking of most educators!

2. *The Instinctual Drive for Race-Survival and Self-Reproduction—The Sexual "Instinct."* As the law of human action applies to man as a sexual organism, it will have to deal with two and not one of his problems, self-survival and race-survival. This second problem is a problem which developed much higher in his level of evolution, is a much more difficult one, and therefore

a much more important problem than the first. In formulating the norms applicable to it account must be taken of the problem of reconciling self-survival, which is an individual right, with race-survival, which is an individual obligation.

We owe to Marx over-emphasis of the problem of survival; we owe to Freud over-emphasis of the problem of sexuality, but of the two, Freud dealt with the more important problem. And what Freud was drawn to conclude after a life-time of study of human sexuality, can also be summed up in one word: *sublimation*. Man can not devote himself just to economics; he cannot devote himself just to propagation; his powerful instinctual sexual drive must be sublimated if he is to live and to behave like a normal human being. The discharge of his obligation—of the obligation which grows out of his right to survival—calls either for expression in progeny or sublimation in art and science, in religion, and philosophy, in education and humanitarianism.

3. *The Instinctual Drive for Self-Expression—The Expressing "Instinct."* It is at this point that the law of human will action have to deal with man's third great instinctual drive. Freud, in a sense, pointed towards its existence, but he was too sex-obsessed to recognize that his solution of the sexual problem was based upon the unrecognized fact that man also has an instinctual drive for *self-expression*. For the law of human action to grapple with the whole problem of living it must prescribe fully for the forms in which man should express his entire personality, integrally and harmoniously, individually and as a social being; but prescribe for it not as if he were merely an adult, but also as he passes through his life-cycle from birth to death; and not merely as if he were an asexual animal, but as he is, as either male or female.

Even this does not fully suggest the complexity of this aspect of the problem, for self-expression is both a right and an obligation; it is a right calling for a social condition, liberty; and an obligation calling for the development of a personal characteristic, responsibility. Man must have the liberty to express himself, but he is only entitled to this liberty if he learns how to use it as a responsible human being.

And this third aspect of the law takes precedence over both the first and second; it qualifies both of them; it sets the conditions for economic and sexual living; it precludes survival without regard to its consequences, as it precludes sexuality and propagation without regard to its consequences. It is more important that the first and second aspects of living for a very obvious and indisputable fact: it is the only instinctual drive which man alone possesses; it is the endowment which has raised him so far above all other animals; it is his development of this endowment which has made him human.

4. *The Instinctual Drive for Self-Annihilation—The Necrotic "Instinct."* The law of human action, however, has a fourth instinctual drive with which it has to deal. If man fails to live like a normal human being; if he fails to provide for his survival normally; if he fails to live his sexual and reproductive life normally; above all if he fails to express himself in all his activities normally like a humane being, and fails to realize in them his highest potentialities, then this fourth aspect of the law comes into operation.*

It is not enough for him to respond, as most men do after some fashion, to the two instinctual drives with which man is ordinarily credited—to hunger and to sex. If in living he bestializes instead of humanizes his behaviour in either of these two aspects, or if he fails adequately to express his highest potentialities and instead expresses his lowest, frustration follows, and frustration of this pathological kind we now know is a kind of morbidity.

With slight frustrations in this pattern of living, he becomes either lethargic or irritable.

With more serious frustrations, he becomes neurotic.

* Customs, and prescriptions for actions, which are violative of norms of living can be observed by some individuals all of the time, by other individuals some of the time, but they cannot be observed by most individual all of the time. It is impossible to prescribe celibacy, for example, (if celibacy is, as I believe the facts clearly indicate, quite abnormal), without discovering that while there are a few individuals who can practice this abnormality all the time and some for short periods of time, the practice of it by individuals of all kinds all of the time creates in most of them the morbidities we call neurosis and psychosis.

With frustrations of the most serious kind, his instinctual desire for self-annihilation becomes operative. Sometimes he seeks to escape from them in a mystical retreat from life; sometimes he escapes from them in psychosis. If, in his effort to escape, he takes to neither of these forms of death-in-life, he may try to escape either by killing others or by killing himself. Of these two escapes, homicide is of course much worse than suicide, and of the many forms of homicide, mass-homicide—war—is the very worst. If man has a horrible history as a mass-killer, it is because he has habitually adopted a pattern of living which made mass-frustration inevitable.

If this paints the consequences of frustration in terms which seem too extreme, all that it is necessary to do is to study the psychological life of any of the great mass-killers of history—the Tamburlanes, the Napoleons, the Hitlers, the Stalins, the Mussolinis and the fact of its validity becomes plain.

This outline of the law of human action is not, of course, a specific recipe for action; it is only the outline of the basic elements which enter into the formulation of detailed prescriptions for dealing with all the basic problems with which man is confronted. These more detailed prescriptions are what we shall consider throughout the whole of this study.

But these formulations of the way to live would become more and more complete and precise, and contain fewer and fewer errors if we were to focus half, or even a third, of all science, and art, and philosophy, and education which we now lavish on the mastery of physics and engineering, upon the definition of norms of living.

That is the reason I shall keep on insisting—even to those who may accept much of what is presented in this study—that the law of human action is a perennial challenge and calls for unending research and education. All the knowledge and wisdom of mankind, ancient and modern, Oriental and Occidental, must be integrated, not only upon the specific and critical problems which face us today, but upon the universal and perpetual problems of man and of society. Right-research and

right-education alone offer hope that all the labors of mankind and all the sufferings which life visits upon the individual can be rendered significant and so enduring.*

The man or woman who is not taught, and does not learn how to live as the law of living prescribes, does not and cannot realize the full potentialities and creative possibilities of the human personality. Only by learning how to deal with both his personal and his social problems can modern man end the frustrations to which his present devotion to progress and its implementation through centralization, condemns him.

* A deeply religious friend comments upon this: "Oh no: Can't this statement be tempered by omitting the word 'alone?'"

To this my response is: "Why should it be tempered? You can consider 'right-research' as calling for religious revelation; you can consider 'right-education' as calling for religious devotion. But if you do, you must prove in some adequate manner that revelation and devotion, which long antedated reliance upon reason, will result in normal living — will, in spite of past failures, humanize mankind." — R.B.

CHAPTER VII

Section III

THE DEFINITION OF "NORM" AND "NORMAL"

There can be nothing so absurd but may be found in the books of philosophers. And the reason is manifest. For there is not one of them that begins his rationation from the definition, or explications, of the names they are to use; which is a method that hath been used only in geometry, whose conclusions have thereby been made indisputable. — Thomas Hobbes, "Leviathan."

Strictly speaking, there are two kinds of norms of living between which it is important to distinguish; norms of condition and norms of action. Norms of weight, or "ideal weights", for men and women,* are norms of condition; dietary norms or norms for eating, are norms of action. The first describes conditions which should be realized; the second prescribes actions which should lead to the realization of the conditions. The first deal with the attributes of man; the second, with his behaviour.

All the conditions of man, both normal and abnormal, are the consequences of human actions. To this there are probably no exceptions; even the attributes he inherits, as for instance the colour of his skin, are consequences of the actions of his parents. To normalize the attributes and conditions of man, it is necessary to normalize the way in which he acts.

In the following definitions both kinds of norms are described, but it is the norms of action which are the more important. The norms of condition should not be overlooked, however, for two reasons: since the condition of an individual is always a product of antecedent actions—either his own or those of others which

* "Ideal Weights for Men," Statistical Bulletin Metropolitan Life Insurance Company, New York, Vol. 24, No. 6, June 1943, pp. 6-8; and "Ideal Weights for Women," Vol. 23, No. 10, Oct. 1942, pp. 6-8. The term ideal in these two bulletins is used in precisely the same sense in which I am using the term *normal*.

affected him—establishing these norms makes it possible to formulate norms of action; and since the realization of normality is the end toward which all human action should be directed, unless we know what the conditions of normality are, we cannot formulate valid prescriptions about how he should act to realize them.

Norm and Normal. The word norm comes into English from the Latin word *norma*, meaning a rule. Common usage defines it as an *authoritative standard*, and in turn defines standard as *that which is set up by authority, custom or general consensus as a measure of quality, quantity, weight, area, length or value*. Even by common usage, a norm is not *what is* but *what should be*. When either the word norm or normal is used to refer to any kind of *average of what is*, as unfortunately they are, particularly by educators and by social scientists, the word is plainly misused. Biologists, on the other hand, use it properly; animals which deviate from the normal they consider monstrosities, and these are studied in a special branch of biology called teratology. As norm and normal are used in this study therefore they will always refer to *what should be*; to what should ideally be characteristic of man and of his behaviour. A norm, in fact, will always be the statement of an ideal.

Used in this sense, a norm of living is either (1) a *description* of any one of the physical attributes of man, (such as his height or weight), or of his mental attributes, (as his emotions or his intelligence), which defines the range within which it may vary and still fulfil the specific function of that attribute and also permit the fulfilment of all the other functions of man—this is a norm of *condition*; or it is (2) a *prescription* for any of his acts or patterns of action, (such as working, thinking, playing, eating, residing, mating), prescribing either (a) classes of actions which he must not perform, or (b) classes of actions which he must or may perform, prescribing at the same time the range within which these classes of acts may vary and yet fulfil the specific function for which it is performed and permit the fulfilment of all the other functions which he must perform during each period of his life.

This second is a *norm of living of human action*. As has already been pointed out, the norms of condition are important not only because they help in the formulation of norms of action but even more because the normal condition of man is the end or purpose toward which all human action should be directed.

The Normal Individual. An individual human being whose physical and mental attributes, and whose actions and patterns of action, fall within the normal range of variation for each such attribute or activity, and who fulfils all the functions of human living during each period of his life and during his life as a whole, is a normal human being.

Plainly there are few normal human beings. And plainly there have been very few in the past. Some individuals, of course, have lived within all the ranges of what is normal; many have lived within the range of what is normal for part of their activities; but too many have deviated far below the lowest limits of normality. When to call deviant individuals of this kind subnormals and when monsters, is a question calling for intensive research. But at some point in deviation from the normal, many of the enormous number of neurotics in the modern world deviate so greatly that their perversities justify calling them monsters.

Normal Living. Normal living is living during each period of the life-cycle and during life as a whole so that the individual's acts and patterns of action fall within a range of variations which fulfil the specific purposes at which his acts are directed, and also permit the fulfilment of all the other functions of human life. Such a pattern of living exemplifies in all its implications the law of human action.

By these definitions, of course, only the perfect or ideal individual lives truly normally. For most of us, miseducated as we are and handicapped by the prior mis-education of our parents and all of those who have influenced us, living can at best be only approximately normal. But this approximation to the ideal could represent so great a humanization of mankind as to make even the most strenuous efforts toward the full realization of normal living worthwhile.

Most of us would consider the pattern of living in which cannibals indulge as monstrous, as such a pattern plainly is; but the cannibals might well retort that our habit of slaughtering people with motor cars is a more foolish and more monstrous deviation from the normal than theirs. As to what they would say about our habit of using all our scientific and technical ingenuity to slaughter one another in wars and revolutions, there is little doubt. With them, tribal warfare was usually an adventurous game which was called off whenever it became too deadly; ordinarily it was no more dangerous than such a sport as mountain climbing. With us, monstrous as war is, it is resorted to in the name of religion and ideology, trade and empire, patriotism and social revolution, and all too frequently is pushed to the point of virtual extermination.

Natural versus Normal. Common usage of the word *normal* is so vague that it is necessary to make certain that it is not confused with such concepts as natural, average, conventional, and uniform.

Natural versus Supernatural. There are two concepts usually designated by the word *natural*—the concept of natural as opposed to supernatural, and of natural as opposed to artificial.

In the concept of natural as opposed to supernatural, both the characteristics of man, and man himself, (without regard to whether they may be normal or abnormal), are natural simply because they are not, and he is not, supernatural. Natural in this sense, and normal, should not be confused. What is normal is natural, but what is natural is not always normal. Every idea of man and everything conceived by man is either natural or supernatural; it has to be either within nature or outside nature. Since both the normal and abnormal are within nature, what is abnormal is just as natural as what is normal. The blind, the maimed, the sick, the feeble-minded, and the insane, are just as natural as are the sane and healthy. But they are not as normal.

Natural versus Artificial. In the second concept of natural—that of natural as opposed to artificial—the various characteristics of individuals are natural or artificial to the extent to which their

original natural state has been affected by the artifices and the artificial conditions to which they have been subjected, directly or indirectly, by the activities of man himself. The sum of these changes of the natural state is often called culture; the process of changing them from the natural is called art and cultivation. I prefer to use more neutral terms—words like artificial and artifice, and domesticate rather than cultivate—because they avoid the suggestion of superiority associated with words like art and culture.

The importance of the fact that man's behaviour always reflects both nature and artifice, and that these two aspects of his actscan never be completely disassociated, cannot be exaggerated. Its importance is due to the extraordinary extent to which the behaviour and the mental and physical characteristics of man today have been artificially modified by man himself. The fact that the food he eats, the house in which he lives, the furniture he uses, and the clothes he wears may profoundly alter the actual condition and functioning of his organs, his muscles, his skin, and even his bones, and render them either normal or abnormal, enormously increases the importance of the habits he is taught to adopt. The wearing of clothes not only lightens the colour of the skin and affects the operation of the pores, it thins the epidermis and lessens the extent to which the skin protects the body and preserves body-heat. Sitting on the floor, as is customary in Japan and India; or sitting on chairs, as is customary in the Occident, has physical and perhaps mental effects which are quite different. Occupations not only cause occupational diseases; they shape the body—muscles, organs, and bones; even more, they influence the mental attributes of people. It is this fact which enables education to shape mankind so profoundly; to shape it by human artifice toward the normal or toward the abnormal.

Average versus Normal. It is even more important not to confuse normal and average. Human norms can only be expressed in ranges. No mere average can be a norm. The average temperature of the human body is recorded as 98.38

degrees Fahrenheit;* the extreme deviations, 90 degrees and 109 degrees. The normal temperature, however, is not an average but a range between 97.5 and 99.5 degrees.** Within this range, any one temperature is just as normal as another.

Conventional versus Normal. Nor should normal, as I am using the term, be confused with conventional. Conduct which conforms to the recognized behaviour pattern of the culture to which an individual belongs—which is in accord with custom, convention, tradition, or fashion—I think of as conventional behaviour. The use of the term normal, where conventional might better be used, is misleading unless the behaviour which the culture prescribes happens also to be really normal in some such sense as that in which normal is here used. In our business culture, a man who repeatedly refused to accept an increase in salary for fear it would raise his standard of living would be considered abnormal merely because the prevailing behaviour pattern prescribes getting ahead and trying to earn more than other men. If, however, such a man who was without competitive drives lived in a Pueblo Indian village, his behaviour would be considered quite normal, because in such a culture no one is expected to want to earn more money or to exert himself more than is absolutely necessary to satisfy the wants which Pueblo conventions prescribe. It would be far less confusing to designate such conduct as unconventional, rather than abnormal; and as conventional, rather than normal.

Uniform Versus Normal. Finally, the concept of human normality should not be interpreted as human uniformity. A human norm is a standard only in the same sense that even the most perfect of all standards is uniform—within some margin of variation. We speak of engineering standards and gauges as “correct to .001 of an inch,” which means that two objects intended to be uniform may still vary as much as .002 of an inch, one being .001 longer and the other .001 shorter than the theoretically perfect standard. In trying to establish norms

* “The Range of Human Capacities,” David Wechsler; Williams and Wilkins Company, Baltimore, 1935; p. 140

** Ibid., p. 70

for behavior, the best that can be done is to take a range which excludes only the definitely abnormal. In trying to formulate norms of living statistically, quartile deviations, mean deviations, and standard deviations may be used, but it is extremely probable that useful as these may prove, less arbitrary ranges based upon correlation will prove more so.

Defining the Definition. To make certain that this definition of norm and normal neither begs the question nor evades the issues involved—that it is no indulgence in either the fallacy of *petitio principis* or of *ignoratio elenchi*—it is necessary to define precisely what is meant by the significant words and phrases which may seem vague and ambiguous in this definition.

The term *human being* is used with reference to individuals of the species *homo sapiens*, in the same sense in which biologists speak of any individual plant or animal as belonging to a species because it bears a close resemblance to other existing individuals in its more essential features and activities, and because it is capable of producing a fertile progeny bearing a close resemblance to its progenitors.

The phrase “*fulfils all . . . the functions of an individual*” refers not only to biological functions but also to economic and social functions. Biologically, it means the production of fertile progeny sufficient in number to ensure survival of the family. Economically, it means self-support and contributing to the maintenance of a family. Socially, politically, intellectually, ethically, and esthetically, it means a personal contribution to sustain, and to develop further, the culture of the society to which the individual belongs.

The modification of the phrase “fulfilling all the functions of a human being” by the addition of the phrase, “during each period of his life,” refers to the fact that normal individuals contribute to the maintenance of a family and to the sustenance of society as much as they are able during every period in life—during childhood, youth, and old age, as well as during maturity and their fullest period of productivity—accidents and conditions beyond their control alone excepted.

By saying that the range within which an attribute or activity may vary, "and both fulfil its own specific function and permit the fulfilment of all man's other functions," I mean that an individual is not normal, even though specific attributes of his — his arms, his legs, his hands, his brain — fulfil their specific functions sufficiently well to enable him to conduct himself in a seemingly normal manner, if they are not used, in addition, to support himself and make his proper contribution to family and society.

Satisfaction versus Frustration. The consequences and accompaniments of all kinds of actions — and the states or conditions which actions engender in individuals — are both physical and mental; both objective and subjective. The most obvious physical consequence or state engendered by the act of copulating (by a woman) is pregnancy. The physical and objective consequences of this (and all other acts) may be either normal or abnormal). They are normal (in this particular example) if the pregnancy goes to term; if a healthy infant is born; if the mother is uninjured, and able to give suck to her child. They are abnormal if there is still-birth, abortion, premature-birth, congenital malformation or debility of the child, or if the mother dies, is permanently injured, or unable to suckle the child.

The mental or subjective consequences of all acts may likewise be normal or abnormal. They are normal (in this particular example) if the feelings of the mother are those of completion, of beauty, of pleasure; of loving and being loved and respected. They are abnormal if instead, the feelings are those of anxiety, of fear, of ugliness, of pain; of hate and contempt, or of being disliked and despised. The normal subjective consequences — the normal feelings engendered in an individual by any kind of action, by any pattern of activities, and by any particular way of living — I think of as a state or condition of satisfaction; the abnormal, as a state of frustration.

Satisfaction and frustration, then, refer to the psychological and not the physiological aspects of the state of individuals; they are the feelings or emotions felt as a result of

some act or actions performed, or events or events experienced, by an individual. (Parenthetically it should be remarked that the act or actions which produce this state and engender these feelings, may be either motor acts or mental acts; an individual may be frustrated by his inability to run fast enough to catch a bus; he may also be frustrated — if deeply religious — by uncertainty as to his ability to solve the problem of salvation).

Since it is my contention that normal behavior produces a state of satisfaction — and makes it possible to avoid a condition of frustration — we can use satisfaction and frustration as criterions by which to test the normality or abnormality of any act or prescribed pattern of living, just as we can also use physical criterions such as health and disease for the same purpose.

Normal versus Mediocre Living. The desirability of teaching people to devote their lives to normal living has been questioned by those who assume that normality and mediocrity are one and the same.

Those who voice this fear acknowledge that the substitution of normality for sub-normality is desirable. The fewer dependents, delinquents, decadents, and degenerates we have, the better off society will be. But the question is, what effect would the abandonment of the ideology of Progress have upon the development of deviants from the normal who are not sub-normal but super-normal? What about geniuses like Isaac Newton, Charles Darwin, Louis Pasteur, Richard Wagner, Michael Angelo, Leonardo da Vinci, Saint Francis, Martin Luther, Saint Paul, Jesus, Buddha, Lao Tze, and Confucius? What about women like Florence Nightingale, Saint Theresa, Hypatia, and Sappho? If the substitution of normal living for other ambitions and ways of living would eliminate or reduce the number of geniuses in society, the final result might be a general state of mediocrity in which man would have been reduced to little more than a species of healthy and happy and perhaps moderately intelligent animal without any trace of the divine spark.

Hereditary Genius. The obvious and most conclusive method of answering this question is, in effect, to dismiss it by calling attention to the fact that genius is one of those accidents which, like all mutations, originate in conditions and laws of its own. Genius arises under all conditions, among the poor and the rich, among the base-born and the noble. It is not confined to any one class. In some instances it is hereditary; in others acquired. To the extent to which it is hereditary, no change in the mere environment can prevent its appearance. The world will always have its share of hereditary geniuses just as it will always have its share of hereditary sub-normals.

Acquired Genius. Most of our geniuses, or deviants toward the super-normal, have come from what today we call the middle-class. Nearly all studies of human eminence confirm this fact. This may be due to heredity — to the fact that there are more genes of genius in the germ plasm in this particular social class than in the others. But it may be due to the fact that middle-class families nurture potential genius, develop it, and give it a better opportunity to express itself than it is given by families in either the richest or the poorest classes. There may therefore be such a thing as acquired genius — genius which comes into existence as a result of a favorable environment. The question we have then to ask is whether a change from our present manner of living to a more normal way of living would lessen the probability of the development of such genius? I see no reason for thinking that it should. And there is one compelling reason for believing that, on the contrary, it would provide better conditions for the development of talent and genius.

As we shall see, self-expression is a basic norm of living. In a genuinely normal family, therefore, the environment in which the members live would encourage rather than discourage the realization of their potentialities. Even today there are countless instances in which the members of families have joined in sacrificing that they might individually have liked to do in order to make possible the education and cultivation of the talents of some one of their number. There is

every reason for assuming that if normalization of family and community life became general, the encouragement and cultivation of genius and talent would increase rather than decrease.

CHAPTER VII

Section IV

NORMS OF LIVING: METHODS AND CRITERIA

Man is the measure of all things. He measures the existence of all those things that are, the non-existence of those that are not. As all appears to everyone, so it is. — Protagoras.

Has mankind, in its present state of civilization, accumulated the knowledge and wisdom needed to distinguish between normal and abnormal human behavior? I believe it has, and I further believe that this total accumulation — ancient and modern, Eastern and Western, philosophic and scientific — includes sufficient methodological knowledge and a sufficient number of methodological techniques so that it can be integrated and made a basis for the humanization of humanity.

Human behavior — the subject-matter of observation and speculation by the greatest minds in all ages — has, it is true, changed enormously from age to age. Modern man's behavior, in form at least, is very different from that of medieval man; medieval man's from that of ancient man, and ancient man's from that of primitive man. The learned and acquired behavior of the man of the Modern West and man of the Old East; of the free man and of the subject of Communism or Fascism, of religious or military totalitarianism, is in many obvious forms different. But since every man's basic instinctual drives are the same, there are essential aspects of his behavior which are surprisingly constant. Man, in this respect, has not changed significantly in the milleniums since he evolved from *homo alalus* into *homo sapiens*. And because of this, the changes in his behavior dictated by difference in religion and law, culture and society, have been changes in form rather than in essence. What Socrates and Plato and Aristotle taught about behavior was based on the study of substantially the same phenomenon — the behavior of men upon the Earth

— as that which anthropologists, sociologists, economists, and political scientists today are studying. Even without the benefits of modern science, the first-rate minds of all time have more to teach modern man — particularly concerning the integration and evaluation of the wealth of knowledge now available — than most of our modern specialists in minuiæ equipped with all the latest instruments of science. There is need for digesting knowledge as well as accumulating it. To use all knowledge, both the traditional lore of the past and the scientific data of today, for the purpose of guiding mankind throughout life, it must be integrated and made usable by the individual by a mental process akin to the physical process of digestion.

I do not mean to suggest that we already know all that needs to be known. There are still enormous areas of knowledge about the problems of living unexplored and in need of scientific investigation. The more we learn about living, the more we discover what is still to be learned. But this does not mean that with the knowledge which we now have, we cannot set up norms which would help human beings to live with a degree of satisfaction immeasurably greater than is the lot of most individuals today. Nor do I mean to suggest that there may not be other methods — perhaps better, both in logic and scientifically — than those which I have used for the purpose of integrating some of this knowledge. All I am saying is that what is needed to establish norms of living is not so much new scientific discoveries, as research into the facts and figures which are already available and awaiting evaluation and integration by willing hands. All the major problems of living have been faced over and over again by the great minds of the past, and all the major solutions of the problems have been prescribed, and often tried over and over again, in the history of mankind. At this moment, evaluation and integration are probably more important than additional accumulation of knowledge.

The methods available for this integration and evaluation of knowledge about living — or rather about those units or intervals in living which I call actions — while necessarily not

as exact as those available for inquiries in the physical sciences, are still sufficiently logical and verifiable to make conclusions based upon them rational rather than arbitrary, scientific rather than dogmatic, objective rather than subjective. Practically every method of scientific investigation can be used, including the historic method, the deductive, the inductive, the statistical, the experimental, and the comparative. My confidence in the possibility of establishing genuinely scientific norms is based mainly on the use of four methods which I think of as (1) the praxiologic criterion, (2) the phycho-physiologic criterion, (3) the pragmatic criterion, and (4) the metric or homometric criterion.

1. *The Praxiologic Criterion* If we use the word criterion in its strictly derivative meaning, (the word *kriterion* in Greek means a method of judging), then what we are seeking are methods which will provide us with means for judging the validity of norms of living.*

The praxiologic method is inductive, but it is a form of induction so distinctive as to deserve designation with a term of its own. The methodological aspect of the method will be described in the next chapter in connection with the discussion of classification. It is not necessary therefore to go into any details about it at this time.

What became plain after I began to use this method was this: when human actions, *as they are* and *not as they should be*, are carefully observed in sufficient numbers and in sufficient varieties, and then classified in accordance with their essential differences, *value-judgments emerge*.

These value-judgments, it is true, are not norms of living. The classifications, from the standpoint of ethics, which I made of the eight thousand cases of human action finally resulted

* It is interesting to compare the definition and derivation of *method* with *criterion*. The dictionary definition is in essence, an orderly procedure or process of any kind. When such a method is used for the purpose of arriving at conclusions — instead of for the purpose of practicing some profession or vocation like medicine — what it becomes is a criterion which is orderly in nature. The word *method* also comes from the Greek; *methodus* is a combination of *meta*, meaning after, and *hodos*, meaning way.

in the emergence of three categories, which I called (1) moral actions, (2) amoral actions, and (3) immoral actions.

This classification is summarized in Chart I in Chapter 6; the classification is discussed in detail in Volume VII, which deals with the ethical problem.

But although these classifications consisted of three distinct value-judgments, they were not in themselves conclusive indicators of what was normal and what abnormal in human behavior. For this, the praxiologic criterion had to be supplemented, and the method which I found most useful was deductive — a method which I began to think of as the psycho-physiologic criterion.

2. *The Psycho-Physiologic Criterion*. If there is even one assumption which we can make about the essential nature of man of which there is not the slightest doubt, then we can use that assumption as a criterion by which to distinguish between what is normal and abnormal; we can use it to establish by deduction both norms of condition and norms of action. As we shall see, there are at least four inter-related assumptions of this kind which we can use. And by using all four of them, the validity of our deductions are increased geometrically rather than arithmetically. A condition, (like that of body weight), or of action, (like that of diet), which appears to be normal when tested by two of these assumptions, is at least four times as likely to be normal as when tested by only one; when tested by three of them at least nine times as likely as when tested by one; and when tested by all four, at least sixteen times as likely as when tested by one. If we can establish the validity of these assumptions scientifically; if we can establish their validity both in theory and in practice; and above all if the assumptions themselves are concerned not with fragmentary or secondary aspects of human life but with human life fundamentally and as a whole, then we can use these assumptions deductively as criteria to establish norms of living of all kinds with a high degree of confidence.

These four assumptions are psycho-physiological in nature. They are facts about the nature of man which have been estab-

lished by the scientific method. They deal with man's biological needs, though they are psychological rather than merely physiological in nature. But since they are the means by which *homo sapiens* governs and directs both his physiological and psychological activities, their use as criteria for establishing norms of human action justify calling this the psycho-physiological criterion.

The Four Assumptions of the Psycho-Physiologic Criterion. No assumptions about the nature of *homo sapiens* are more completely accepted and more thoroughly vindicated scientifically, than that man has two basic instinctual appetities, hunger and sex. Or as I think it more accurate to designate them, an instinctual drive for self-survival or self-preservation, and an instinctual drive for sexual gratification and race-continuation.

It is the inborn instinct for *self-preservation* which drives every human being to hunt, to work, and to struggle for the things which will keep him alive; which leads him to defend himself and if necessary fight for the goods he needs and desires, and which leads him co-operate with the members of his family and of society in acquiring whatever is necessary to the maintenance of what in his culture is considered the necessary standard of living.

It is the instinct for *race-continuation* which expresses itself in the drive for the satisfaction of the sexual appetite; which leads men and women to mate; which leads women to bear children; which leads men to fight for their women and children, and which leads both individuals and the groups they organize to make whatever sacrifices are necessary or incidental to the generation of progeny and the continuation of their families, their clans, their tribes, their nationalities, their races.

The argument for the use of the deductive method as a criterion for the establishment of norms of living might satisfactorily rest upon the assumption of the actuality of these two basic instincts alone; not, however, because I think there are only two, but for two reasons; because the inductive evidence establishing the existence of these two is so overwhelming, and because the two complement each other — self-

preservation being necessary for race-continuation, and race-continuation being impossible without the sublimation of self-preservation.

There is, however, inductive evidence almost as overwhelming, establishing the existence of not two but four of these instinctual drives. In addition to the instinctual drives for self-preservation and race-continuation, man has an instinctual drive for *self-expression*, for self-realization and self-perfection; he has, in Emerson's words "an instinct for perfection" which justifies taking this need of his into account in the formulation of norms applicable to his behavior.

Finally, he has also what Freud called the "death instinct", but which I think of as a *necrotic instinctual drive*, which justifies the formulation of norms of behaviour which will prevent this inborn and hereditary, innate and inescapable attribute of man from overwhelming his other instinctual drives.

If we can reasonably assume the existence of all four of these instinctual drives, it is possible to deduce far more accurate and far more comprehensive norms of living than if we restricted ourselves to the first two. If only the criteria of sex and hunger are used, the norms will be animal norms rather than human norms; if all four are used, the norms become prescriptions for human beings rather than for two-legged animals.

The evidence for the assumption of four rather than two basic instinctual drives is to be found not only in science but also in the arts and the humanities, in the folk-lore and traditions of mankind.

It is not rational but irrational to rely merely upon the evidence furnished by the physical sciences in this matter; man is an organic and not an inorganic entity. To establish the facts about his innate nature, the evidence of the biological and social sciences — of psychology, anthropology, sociology, economics and political science — must be those which are used. But it is actually irrational, in trying to form a true picture of the nature of man to rely upon the evidence which the

sciences can furnish. To make it possible to establish what are man's basic instinctual needs, the evidence furnished by unscientific studies must also be taken into account. History, biography, religion and philosophy, literature, poetry, music, the drama and the dance provide a body of facts about the nature of man in many ways more important than those furnished by the sciences.

It may be true that the forms of behaviour of both the individual and of mankind as a whole are acquired and not innate; that they reflect his education and the culture of which he is a part. But what concerns us here is not the question of form, but of essence; of the essential underlying facts of which the forms are merely changing expressions. The essential truth which emerges from the study of man as we know him in all of his activities, is that no prescriptions for his behaviour are rational if they aim merely at satisfying his drive for sex and survival, and if they do not take into account his exclusively human instinctual drive for self-expression.*

a. The Survival Instinct Self-survival, in contrast to race-survival, is an instinctual drive which man has in common with all living organisms however primordial. The psychological, biological, botanical and zoological evidence concerning this instinct is furnished by the life-cycles of all species of organisms ranging from single-celled protozoa such as the amoeba at one extreme, to mammals like *homo sapiens* at the other.

In the amoeba, and all similar single-celled animals, there is only one instinctual drive — that of hunger or survival. The amoeba is, for all practical purposes, nothing but a stomach. Sexuality, so far as we can tell, is non-existent. Reproduction,

* There is a branch of physics, mechanics and chemistry called energetics. Energetics treats of energy and its transformations. Energy being defined as that attribute of a body, or of a material system, by virtue of which the body or system can do mechanical work. Work, energetics defines as the overcoming of resistance through distance. It is, in other words, its power to move. This definition perfectly fits what I am calling an instinctual drive. Only it should be recognized as psychical and not merely physiological power.

or more correctly binary fission* (the splitting into two individuals of each original individual), is as definitely a part of the amoeba's nutritional cycle as defecation is part of the nutritional cycle of man and the higher animals. Binary fission into two amoebas becomes essential after the animal has successfully nourished itself for a period of time; if the original amoeba did not split into two, it could not survive. In all these low forms of life, there is duplication rather than reproduction; duplication takes place not only without any manifestation of sexuality but without the phenomena of parents and progeny. The next generation is simply the original amoeba split into two amoebas; both are at one and the same time their own parents and their own progeny.

The instinct for self-survival should not be confused with the instinct for race-survival. In asexual animals like the amoeba, self-survival and race-survival are one and the same. But in man this is not the case; self-survival may so completely dominate individual behaviour that the individual in effect contributes to race-suicide.

What I am calling the instinctual drive for survival was recognised as fact long before the development of modern science. In the Brahmanical scriptures it was called *Jiwan-akanksha* "desire for life"; Gautama Buddha called it *tanha*, "the thirst for life"; Schopenhauer called it "the will to live" in his Occidental interpretation of Buddhist conclusions about the nature of man. Freud called it "the libido" because he did not adequately distinguish between the survival drive and the sexual drive; all of man's drives he thought of as sexual or libidinal.

b. The Sexual Instinct. The sexual drive, in contrast to the drive for survival, is an instinct which man has only in common with those organisms which reproduce by fertilization.

* In the binary fission of the amoeba we have real monogenesis, with asexual reproduction. Asexual reproduction, which ought really to be designated asexual duplication, is a form of reproduction in which there is no prior conjugation of individuals or union of germ cells of different sexes; it is a form of reproduction found in species of plants and animals which generate not only by binary fission but also by multiple fission, spore formation, and budding.

In all animals in which fertilization or conjugation of two individuals is characteristic of their life-cycle, we find not only an instinctive drive towards survival; we find also a similar drive toward sexuality. In protozoa like the chilodon, a minute fresh-water infusorium, it is difficult to say whether conjugation is a part of its nutritional cycle and manifestation of its drive for survival, or a part of a sexual cycle and manifestation of an instinct of generation. For the chilodon duplicates itself, like the amoeba, for a considerable length of time by transverse division — by what seems like simple binary fission. But after a time it becomes physiologically necessary for the animal to conjugate; two chilodons place themselves side by side and partly fuse together; the nucleus of each divides into two portions; one portion passes each into the other to unite with the half-nucleus of the other. Thereupon a period of renewed activity for each individual ensues manifested by rapid growth and duplication by division, until weakening in the vital activities again creates the recurring necessity of conjugation. The impelling cause of conjugation, however, is still in all probability not much more than sheer individual cell growth, and sexuality is potential rather than actual.

Beginning with this first manifestation of sexuality — of bigenesis* as distinguished from monogenesis — it is possible to trace step by step in various plants and animals what ultimately becomes the distinct instinctive sexual drive which *homo sapiens* has in common with all the lowest and simplest forms of bigenetic life. In the much higher hermaphroditic animals, such as the earth-worm, the distinction between the two instincts is already much sharper. The earth-worm is sexual but its sexuality is monoecious,** in contrast to the amoeba,

* In all dioecious organisms — plants and animals with separate male and female individuals — reproduction is bigenetic and sexual and therefore requires cross fertilization or conjugation by two individuals of opposite sexes. In the lower forms of life, sexual reproduction may mean merely fertilization by the union of egg-cells and sperm-cells in some manner; in all the higher forms of life — including man — it requires physical conjugation by a male and female.

** Monoecious plants, which have both male and female flowers on each individual, are called monoecious, while monoecious animals, which have both male and female organs of reproduction on each individual, are called hermaphroditic.

which is monogenetic and sexual. In the life-cycle of the earth-worm we find not only a distinct nutritional cycle but also a distinct cycle, in contrast to the amoeba in which duplication is still part and parcel of its nutritional cycle. It is true that each of the two worms which conjugate to generate progeny is both a male-and-female; each has both testicles and ovaries; but, unlike the chilodon, conjugation with another earth-worm is an invariable prerequisite to generation. There is no fission; we have instead distinct parents and distinct progeny.

As we rise higher in the scale of life, dioecious* forms of life begin to appear; the egg-cells and sperm-cells necessary to sexual reproduction are produced by individuals of different sexes, and sexuality in the fullest sense of the word develops. The individuals which produce egg-cells, or ova, are real females; and those which produce sperm-cells, or spermatozoa, real males. And the distinction between the nutritional cycle and the reproductive cycle, and the drive for survival and the drive for sexuality, is sharp in the extreme. It sharpens more and more as we pass from fishes, in which fertilization takes place outside the mother's body, (the female fish lets her roe fall at favourable places, usually secure against enemies; the male fish swims over the roe or spawn and pours its semen or milt over it), to birds in which the male has an organ or penis for the introduction of the semen into the body of the female and in which fertilization takes place inside the mother even though the fertilized eggs are laid and incubated outside of her body. But it is sharpest in the mammals, in which, in addition to physical conjugation between male and female and fertilization within the body of the mother, (as in birds), the entire embryonic development of the fertilized ovum takes place in the uterus or womb in the mother's body.

In a sense we may say that the evidence of biology indicates that sexuality is a kind of sublimation of self-preservation. Within every animal, including man, which reproduces sexually,

* Dioecious plants and animals have male organs on one type of individuals of the species, (the male sex) and female reproductive organs on another type, (the female sex).

there is a conflict between the drive for race-continuation and the drive for individual survival. Dramatically in the life-history of certain species and spiders, (in which the males fertilize the females in spite of the fact that they are eaten in the act by their monstrous paramours); of fishes like salmon, (in which both males and females struggle and if necessary die in the effort to reach their native spawning grounds), of animals like deer, (in which the bucks often kill one another in order to possess the does), there comes a time when sexuality makes them perfectly willing to sacrifice life itself in order to generate progeny. In most animals, however, hunger is subordinated to sex only during the rutting season. But in man hunger can always be subordinated — sex sublimates hunger.

c. *The Instinct for Self-Expression.* The third instinctual drive which human beings alone among living organisms seem to possess in a form clearly distinguishable from hunger and sex, I think of as the drive for self-expression. This expressing instinct is the innate and hereditary characteristic of man which drives him to struggle to actualize potentialities peculiar to *homo sapiens*, and which leads him to devote himself to arts and crafts and literary activities; to science and inventions and discoveries of all sorts; to both altruistic and egotistic forms of endeavor; to the building of social and political institutions which maintain a balance between such altruistic and egotistic urges; to religious worship and the quest of immortality, of paradise, of salvation, of *nirvana* and *moksha*; and to philosophy and concern about the purposes to which life should be devoted.

In man, therefore, the evolution of the instincts goes one step further than in all other animals. Without turning to biography and history — to what furnishes a far better record of the characteristics which distinguish him from other animals than that furnished by science — there is ample evidence of the existence of this third instinct in the psycho-physiology of the life cycle of man.

The Sublimation of Sexuality. In the beginning, during lactation and infancy, man displays only one instinctual

drive, that of survival; he devotes himself to only one activity, the satisfaction of his hunger — the fulfilment of the nutritional cycle essential to sheer growth.

In early childhood — from infancy onward, according to Freud — he begins to show signs of sexuality and lays the foundation for the development of his second instinctual drive. Puberty is the culminating event in this development. At some time after puberty, in both men and women, this drive for the satisfaction of sexuality and for the fulfilment of the reproductive cycle, becomes, if anything, more powerful than that of survival.

But not long after he emerges from early childhood, he shows signs of the development of what I believe to be his third instinctual drive; he tries to express himself and begins to develop an individual personality. It is true that there is evidence of the development of personality in animals; all dogs, all horses, all cows do not have the same personalities, and even in a state of nature, without domestication, personality differences are found in baboons and in even lower species of animals. But only in man has self-expression developed characteristics so different from anything found among other animals, as to warrant recognition as an instinct as distinctive as those of survival and sexuality.

It is, of course, probable that Freud was right in calling attention to the evidence that these higher developments in man were intimately related to his sex-life, and in referring to them as the sublimation of sexuality.* But this really involves no denial of the proposition that self-expression is a distinct instinctual drive in man, any more than the sublimation of the drive for survival by the drive for sexual satisfaction.

* C. N. Patel here records a note of dissent; "I feel that Freud's theory that man's cultural life is a sublimation of sex energy gives an incomplete account of human nature. The cultural activities of man are not by any means merely the physical energy of sex which has begun to flow through mental and intellectual channels. It is when the unsatisfied physical sex energy is acted upon by some other principle that such energy becomes channelized into cultural activities. To discover the nature of that other principle which transforms surplus physical energy into moral, intellectual and esthetic gifts, is a far more complex task than modern psychology has yet realized it to be."

involves a denial of the existence of a distinct sexual instinct. If Freud was right in saying that self-expression involves the sublimation of sexuality, then it is equally correct to say that self-expression involves the sub-sublimation of the drive for survival.

This instinctual drive, (this sublimation of the sexual drive, if you will, or sub-sublimation of the drive for survival), manifests itself in many forms of man's creative activities of which the most important unquestionably has been the creation by him of the language in which he expresses himself.

There is really nothing new in the idea of attaching such great significance to the fact that man alone is capable of expressing himself in words. Countless scientists, philosophers, and sages* have called attention to the significance of this

* Many illustrations of this are found in religious writings of which Christian writings dealing with Logos are perhaps best known. Many interesting examples are found in less well known religious writings. For instance:

"And if thou desirest to have this intent (the grace of contemplation) lapped and folded in one word, so that thou mayest have better hold thereupon, take thee but a little word of one syllable, for so it is better than of two; for the shorter the word, the better it accordeth with the work of the spirit. And such a word is this word GOD or this word LOVE. Choose which-ever thou wilt, or another; whatsoever word thou likest best of one syllable. And fasten this word to thy heart that so it may never go thence for anything that befalleth. The word shall be thy shield and thy spear, whether thou ridest on peace or war. With this word thou shalt beat on this cloud and this darkness above thee. With this word thou shalt smite down all manner of thought under the cloud of forgetting. Inasmuch that, if any thought press upon thee to ask what thou wouldest have, answer with no more words than with this one word (GOD or LOVE). And if he offer of his great learning to expound to thee that one word, say to him that thou will have it all whole, and not broken or undone. And if thou wilt hold fast to this purpose, be sure that thought will no while bide." "That Cloud of Unknowing," in "The Perennial Philosophy," Aldous Huxley, p. 277.

Here was the Christian mystic, but the Mohameddan mystic attaches similar significance to the use of language:

"The shayk took my hand and led me into the convent. I sat down in the portico, and the shayk picked up a book and began to read. As is the way of scholars, I could not help wondering what the book was. The shayk perceived my thoughts." "Abu Sa'id," he said, "all the hundred and twenty-four thousand prophets were sent to preach one word. They bade the people say, 'Allah,' and devote themselves to Him. Those who heard this word by the ear alone let it go out by the other ear; but those who heard it with their souls, imprinted it on their souls and repeated it until it penetrated their hearts and souls, and their whole beings became this word. They were made independent of the pronunciation of the word; they were released from the sound of the letters. Having understood the spiritual meaning of this word, they became so absorbed in it that they were no more conscious of their own non-existence." — Abu Sa'id, *Ibid.*, p. 278.

In Hinduism, the word is OM — a spoken symbol that concentrates within itself the whole nature of ultimate reality as conceived by Vedant.

uniquely human attribute; it is not necessary to dwell at length upon the subject. It is sufficient to point out that while with other animals "speech" is reflexive, and consists only of signals, with man it is a means not only of communication but of abstraction.

Art. When the word art is used, not in its studio-meaning but broadly, with reference to the fact that so many of man's acts and activities are endowed with characteristics utterly divorced from mere survival or sexuality, we may say that man alone is capable of expressing himself artistically. Other animals act, but their acts either reflect mere impulse, or are preservative or genitive, (when they gather or fight for food, or court and build nests for their young). Man alone acts self-consciously for the sake of the good, the true and the beautiful; man alone reasons; men only are scientists and artists.

Finally, man alone is capable of expressing himself in possessions. Other animals, it is true, may be said to be possessive — the squirrel hides his nuts; the beaver builds his house; the bee stores honey and possesses its hive — but man alone expresses in his possessions, in his clothes, in the furnishings of his home, in the architecture of his institutions, that which satisfies needs and desires other than those of hunger and sex.

The sum and substance of the matter amounts to this: expression is a basic instinctual need of man; the individual of the species *homo sapiens* must express in his life the aspirations he clothes in words; he must try to actualize his ideas and ideals in his arts and in his possessions, or, to the degree in which he fails, he fails to be human; he ceases to act like a normal human being; he frustrates an inborn need.

As Cooley puts it; "The main need of man is. . . . self-expression."*

d. The Necrotic Instinct. Finally we owe to Freud the concept of a death-instinct, of what in this study will be called the necrotic instinct.

* C. H. Cooley, "Social Organization," p. 304.

Man, according to Freud, in the course of his life moves from response to what he poetically called Eros — from response to libido and to his sexual impulses; from the combining and constructive urges; from the pleasure-seeking and pain-avoiding instincts — to response to the destructive death-instinct. This is an unconscious drive toward effortlessness, inertia and disintegration; the human correlate of entropy — of the law of thermo-dynamics which describes the tendency of physical energy to dissipate itself at the lowest possible level. When the necrotic instinct triumphs over the instinctual drive for self-expression, self-reproduction, and self-survival, instead of a horror of death and aversion to extinction, there comes a consuming inclination to oblivion.

In human beings, this instinct drives the individual to seek "the peace of the inorganic world" and to "restore conditions to what they were before life by its emergence upset them." The parallel with the ancient wisdom of Hindu is perfect.* Atman seeks, ultimately, reunion with *Brahman*, the condition the individual soul enjoyed before it was separated from the Absolute and plunged into *maya*, the delusive drive for *tanha*. "the thirst for life and enjoyment."

Whether called an instinct or called something else, the fact is indisputable that man, in common with all animals, has an inherited attribute called dying and death. He inherits this just as truly as he inherits life; just as truly as he inherits his heart and lungs, his hands and feet, and every other faculty and organ of which his body is composed.

Every destructive and aggressive impulse in man, from alcoholism to war, whether directed toward himself or outward toward others, is an expression of the necrotic instinct.

* C. N. Patel comments; "No. The Vedantic conception of *moksha* doesn't correspond with 'the peace of the inorganic world.' It is described as 'Sat-Chit-Anand' — absolute existence, perfect consciousness, pure joy. Abiding joy is the essential nature of perfect consciousness, untouched by desire. The presence of desires is the index of an imperfect consciousness. The most natural concomitant of such perfect consciousness is universal compassion, and not the destructive impulses which lead to war. The aggressive impulses of man are not the result of what is metaphorically called 'the death instinct,' but of frustrations, of a repressed and tortured conscience, or may be of what the Christian world calls the cardinal sin of pride."

The wealth of evidence that man has a necrotic instinctual drive is overwhelming. Every time a man starts a habit — a habit like drinking or drugging — which leads to premature death, he is responding to his necrotic instinct. Every time a man turns away from the world and seeks the "living-death", as some monastic orders think of their regimen, in a retreat of some kind; or seeks the realization of *nirvana* or reunion with the Absolute while still alive in *samadhi* and trances, he is responding to his necrotic instinct. Every time an individual is overwhelmed by misfortune, or so completely frustrated that he no longer feels that life is worth living, that he ceases struggling to survive and permits himself to die or is actually driven to the extremity of committing suicide, he is responding to his necrotic instinct. And every time an individual seeks to escape from boredom or the perplexities of conventional existence, by deliberately embarking on war, he is responding to the necrotic instinct. All the great killers and conquerors of history — the Tambulanes, the Ghengis Kahns, the Alexanders the Great, the Julius Caesars, the Saladins and the Richards the Lion Hearted, the Gustavus Adolphuses and the Napoleon Bonaparts, the Benito Mussolinis and the Adolf Hitlers, the Joseph Stalins and the Mao Tse Tungs, and all those who voluntarily followed them to war — were individuals responding to the necrotic instinct.

Normally, the necrotic instinct begins to function only during the very last periods of man's life, and then it puts in its appearance in perfectly normal impulses to retire from active life. But when these impulses begin to appear prematurely, particularly when they take the form of pathological actions and morbid, habits such as drinking and drug-taking, it is *prima facie* evidence of frustration, of a life which has failed to implement and to fulfill what the basic instinctual drives call for; of the violation of norms of human behavior.

That man has basic instincts in common with all animals, is true, but the fact must not be forgotten that in man they are capable of variation to a degree impossible with other animals. In man all the instincts are malleable and plastic; they are self-controllable and self-directible; they can even be

frustrated and denied by the individual himself. In other animals it is impulse alone which controls and directs; there is no animal self or ego with the power of denying or frustrating them. If they are in fact frustrated, as of course they often are, it is by natural forces outside the animal itself, very frequently by that outside force represented by man. All the domestic animals, for instance, are examples of man's ability to control and direct, often to entirely frustrate the animal's normal instinctual behavior — as in the case of the capon, the barrow, the steer, and the gelding.

When human beings deny sexuality, as in genuine adult virginity, they do not destroy the sexual instinct, because they cannot; what they do is to frustrate its normal form of expression. *When a human being decides that life is not worth living and

* C. N. Patel comments as follows: "The fundamental problem of human conduct, as viewed from the religious point of view, is the extreme difficulty of maintaining a balance between the 'sexual' instinct and the 'expressive' instinct. Sexual gratification has a tendency to raise the intensity of desire to a point of excess, or — even when held within limits of moderation and physiological health — to make the individual self-complacent, and so to arrest the full development of his 'expressive' instinct. Most of the individuals in the world cultivate a sense of personality within a very limited range, remaining content with the pursuit of wealth, or position, or power in crude forms. To seek to follow ideals of truth, goodness and beauty, and yet not deny the legitimate claims of the body, is a rare achievement. How to seek such an achievement is the central purpose of the teachings of the Bhagavad Gita. If it is held that the achievement of such harmony is possible without reliance on the religious motive, the point needs to be made with emphasis and with a clearer statement of the points involved — that is, a statement of the assumptions of the religious view of life, and a critical discussion of those assumptions to establish the thesis that they are not false but unnecessary, that the problems of human conduct can be resolved through a reorganization of secular educational processes, with concomitant changes in our patterns of living, more effectively than through religious training."

R. B. "The issue to which Mr. Patel directs attention here is one which I think of as that between educational processes in which reason is the final arbiter, and educational processes in which religious revelation is.

"Both secular education and religious education have to deal with the metaphysical problem. Secular education, as I try to make clear, in discussing the Educational Problem, makes two kinds of assumptions with regard to the metaphysical problem. One is essentially Atheistic; it relies upon the evidence furnished by the phenomenological sciences, and upon that basis says there is no metaphysical world, and therefore no means of obtaining any knowledge about it. All so-called revelations about it, it considers illusionary. The problem of the secular educator is to equip human beings to live and to make the most out of living in wholly phenomenological world.

"But I believe there is ample evidence indicating that secular education can be Agnostic with regard to the metaphysical problem. Secular education of this

commits suicide; when we teach a soldier to expose himself to battle and to die; when a religious fanatic persuades himself to accept martyrdom, man does not establish that he has no instinct for self-preservation; what he proves is merely that in responding to ideas—to the manifestations of his expressive instinct, he has the power to frustrate it. It is this power more than any other of man's characteristics—a power which the plasticity of his instincts has enabled him to develop—which most definitely distinguishes him from other animals.

Using the psycho-physiological criterion to distinguish in the broadest possible way between what is normal and what is abnormal in human behaviour, the most fundamental of all the norms of human action might be phrased as follows: *All actions and activities which do not and cannot satisfy man's basic instinctual drives harmoniously, are abnormal; only those acts and patterns of action which involve no frustration of the basic survival, sexual, and expressive instincts are normal.*

This norm applies to both sexes and to all ages. But the task of formulating norms which take the psycho-physiological criterion into account must be pushed into much more specific prescriptions, as for instance in the following norm, which applies only to women, and only to certain forms of her activities—her sexual and maternal life; *Childless women are abnormal.* With this established as true, it is possible by further deduction to formulate norms dealing with all the problems in life with which women are confronted; for instance, the problem of their education: *Violent physical exercises for girls and young women, since they are injurious to their normal pelvic development, are abnormal.*

kind does not need to deny the possibility of revelation—of communication between man and some metaphysical Absolute — but it does, as Dr. Patel points out, have to establish that though it may not be false, it is unnecessary in right-education. Since it cannot rely upon revelation to vindicate its assumptions, it has to rely upon some such methods as I have tried to describe later in this chapter.

"In the final analysis, the two kinds of educational processes may have to be judged 'by their works.' But in making such a comparison the difficulty is that while it is possible to identify secular educational processes, there are no such things as religious educational processes — there are only educational processes of particular religions, Catholic, Protestant, Jewish, Muslim, Vedantic, Buddhist, and so on."

A further example of deduction from the same basic norm: Participation in any course of study which conditions the unconscious minds of girls and young women to feel that the fulfilment of their maternal function should be subordinated to other values and other occupations, is abnormal.

And a final example: *The identical education of boys and girls, of young men and young women, is abnormal.*

3. *The Pragmatic Criterion.* Pragmatically we can establish norms of living—norms of action rather than norms of condition—by determining, in one field after another, how alternative ways of living work; how well they succeed or fail in enabling the individual to maintain life and health, to generate progeny and satisfy his sexual needs, and to express himself like a human being.* We may sum up the pragmatic criterion by saying that it is a method for distinguishing between activities which are normal and those which are not, by the test of the way in which they work.

Superficially we are tempted to say that the dietary habits of the American people work; that they must represent an acceptable way of dealing with one kind of living problem, even if they do not represent a theoretically normal diet. It is a temptation to say that American diet is a good diet, if for no other reason than that we now live longer on the average than in the past before we Americans adopted our present diet composed mainly of refined and industrialized foodstuffs. Most of us are therefore tempted to dismiss people who talk about diet as cranks.

But if we consider what we can learn—which is difficult considering the mis-education to which we have been subjected by the advertising of our food industry—about the way in which that diet actually works, we shall be driven to conclude that the prevailing diet of modern man is manifestly not a normal diet;

* "The Wheel of Health," by G. T. Wrench, (C. W. Daniel Co., London, 1938), is an evaluation of alternative dietetic and other patterns of living, in which the normality of the pattern of one people—the Hunzas of India—is established in terms of longevity and health, (p. 26); in terms of heredity and virility, (p. 47); and in terms of craftsmanship and artistry. (p. 19).

that on the contrary, it must be an abnormal diet; for in truth it does not work well at all.* If life expectancy is increasing in spite of this, it must be increasing despite our dietary habits and not because of them. When we really examine the matter, we find that practically everybody in America suffers from constipation—most of the drugs in our drugstores consists of laxatives and purgatives. We find that the American people have very nearly the worst teeth in the world: that they nearly all suffer from colds and chronic catarrh; finally, that while there has been an apparently inexplicable increase in deaths from what are called degenerative diseases—heart disease, cancer, diabetes—it is not difficult, by careful analysis of data of this kind, all of which is directly or indirectly related to the dietetic habits of America, to conclude that diet is in fact abnormal.

To determine what is normal, not only scientific experimentation but also historical, anthropological, and geographic research is necessary.** If we find that the diet of people elsewhere in the world, or of some primitive people, or even the diet of our own ancestors at some particular period in the past, works or worked better than our present diet, then we have a basis for determining what is a more normal diet than our present day diet—a diet which represents what the food industry has persuaded us to consume, not for our good, but manifestly for its own.

If we find that a diet of whole wheat flour instead of white flour; of clean raw milk instead of dirty milk which has been pasteurized; of honey or molasses instead of white sugar, works better than our present diet; if we have less constipation, better teeth, fewer colds, and suffer less from degenerative diseases, we can begin to establish norms of eating. Even without turning to laboratories for scientific verification of what we have learned,

* An early study of the abnormality of the modern American diet will be found in "Starving America," Alfred W. McCann, 1918. a recent study of the subject is "The National Malnutrition," D. T. Quigley, Lee Foundation for Nutritional Research, Milwaukee, 1943.

** An excellent illustration of this kind of research is "Nutrition And Physical Degeneration," Weston A. Price, Paul B. Hoeber, Inc., 1939. The sub. title of the book is "A Comparison of Primitive and Modern Diets and Their Effects." It could have been called equally well "A comparison... of the way they work." 226.

we can then safely assume that a normal diet must consist mainly of whole and natural foods; that a diet consisting mostly of highly refined and processed foodstuffs is an abnormal diet.

It happens that we have an enormous amount of scientific verification for such a norm.* Establishing norms for eating is mainly a matter of integrating and evaluating what is already known about the way in which various foods and combinations of food work.

Mankind fortunately embarked on this important matter of establishing norms of living long before the development of modern science. From the beginning it established them pragmatically and embodied them in its traditional lore, and traditional folkways. It is perfectly ridiculous to assume that all this traditional lore must be discarded now that we enjoy the blessings of science. We have much for which to be grateful to science, but one thing for which scientists will have to answer is the headlong manner in which they have led modern man to discard a traditional way of doing something before that traditional way has been subjected to adequate investigation. We have in tradition as distinguished from fashion—even when the fashion is a scientific one—an epitome of the experience of mankind. Instead of discarding in toto prescriptions for behaviour based on tradition, we should discard only its errors and superstitions, and retain those parts of it which work until really better, (and not just newer) methods are developed. In addition, now that the thralldom of total tradition has ended, each individual can in his own life-time experiment pragmatically, first with the old and then, (if he can throw off the new thralldom of progress), with the new.

4. *The Homometric Criterion.* Finally we can establish norms of living metrically, or homometrically as I think of mathematical and statistical methods when applied not to the problems of science, of government, of pedagogy, much less of industry and engineering, but to the problems of man. We can establish both norms of action (as for instance with regard

* In "The Chemistry of Food And Nutrition," Henry C. Sherman, (Macmillan Co., 1937), calls such a norm the "principle of natural and nutritional wholes."

to eating) and norms of condition (physiological conditions, such as weight, and psychological states, such as sanity), and we can formulate these terms metrically. Instead of being satisfied with saying that fat men are over-weight and thin men under-weight, the metric method makes it possible for us to say that every man 5 ft. 6 in. in height who weighs less than 129 pounds is under-weight and every man of that height who weighs more than 157 pounds is over-weight. We would then be distinguishing between normal and abnormal conditions in magnitudes on the basis of a norm which ranges between 129 and 157 pounds for men 5 ft. 6 in. in height.* As we shall see, the metrical method may be used to formulate norms for dealing with all sorts of problems which are much more complex than that of body-weight.

Eating. A simple illustration will help make clear the manner in which statistics can be used to formulate norms of living.

Eating is an action. The diet of an individual, or of a family, or of a people represents a pattern of action. If all the time devoted to earning the money with which to buy food, to preparing and serving it, to the act of eating itself, and finally—in the case of modern man—to the time needed to pay for the medical consequences of eating the refined foods he has been taught to eat, is taken into account, not less than forty and often more than fifty per cent of the man's whole working time is devoted providing himself with food.

But the problem of eating in all but one period in the life-cycle of man is so complex, that its consideration would take too much time now when we are concerned not so much with normal eating as with methods of establishing norms of all kinds. Eating during infancy; eating only during what I think of as the lactation period of the life-cycle, furnishes a relatively simple subject for investigation. What light does the use of the metrical method throw upon the question of the norm of this particular aspect of the problem of eating?

* "Statistical Bulletin," Metropolitan Life Insurance Co., New York, June 1943, Vol. 24. On the basis of this study, the "ideal" weight of men with "small frames" 5 ft. 6 in. in height, ranges between 129 and 136; with "medium frames," between 134 and 144; with "large frames," between 145 and 157.

A statistical study* of the feeding of 20,061 infants in Chicago, unfortunately covering only the first nine months of their lives, showed that the death rate for those artificially fed was 8.4 per cent; for those partially breast fed, 0.7 per cent; for those wholly breast fed, 0.15 per cent. Here is a slaughter of innocents by women who follow modern fashions and who practise what they have been taught by advertising and salesmanship, fifty-six times as great as the death rate of the children of mothers who observe the norm confirmed by this study and embedded in the traditional lore of every people not yet subject to modern mis-education.

The study is, of course, inadequate. It is wrong on at least three counts: (1) it correlates premature death with three kinds of feeding methods, but does so for only nine months of the life of the selectees. It should show the relationship of premature death during the whole period of life affected by right or wrong methods of feeding during the lactation period. If this were done, the death rate for those artificially fed would be many times higher than indicated by the study. (2) Secondly, it does not take into account disease, both physical and emotional, during the whole period of life which can be traced to bottle-feeding and feeding of infants with artificial foods. (3) Finally, it does not take into account both of the individuals most directly concerned—the mother and child. Failure to use the mammary glands has profound effects, both physical and emotional, upon women. As a matter of fact, the woman aspect of the matter is the more important, for if we establish what constitutes the norm of behavior for woman, we automatically establish what is normal for her child.

Actually we are dealing not with one but with two problems: infant nutrition, and use of the mammary glands. A really adequate study would formulate the governing norm in terms not of how to feed infants but of how often in life a woman should use her mammary glands, (or how many children she should bear), and how long her breasts should be milked by a child

* Quoted from the League of Nations Committee on The Problem of Nutrition, Interim Report, Vol. I, in the "Wheel of Health," G. T. Wrench, p. 49.

each time in order to assure optimal longevity and health, (both physical and emotional), to both mother and child. The variations now practised in both regards are enormous, ranging from zero use of the glands in all truly modern women, to use of the glands a dozen or more times during the whole maternity span and for periods often of three years or more each time a child is born. Such a study would develop the normal range for this particular activity. And it would probably show that the normal range is from three to eight children, and lactation each time from 18 months to three years; that anything less than this, or more than this, is abnormal for both mother and child, for family and society, and for humanity as a whole.

Dwelling. Common usage equates the word dwelling with the word house. The word dwelling, however, is really the present participle of the verb *to dwell*. Dwelling, as it is here used, is not a thing; it is an act. Among the acts and pattern of action which revolve around the act of dwelling are sleeping, eating, resting and playing at home; for most men in the industrialized world, commutation between work and home; for most women, working at home; for children, (in addition to the common activities of the family), commutation between school and home. From the home the members of the family vote; from it they go to church; around the home revolves their social activities. The foundation act, which determines all the acts and habits which dwelling generates, is the act of choosing the place to dwell.

In the following illustration of the use of the material method, statistics about conditions (those of major psychiatric disorder*) are correlated with statistics about (those of dwelling in communities of different densities of population). While the explicit purpose of the original correlation was not the determination of what I call a normal range of behavior, it

* Major psychiatric disorders are defined as (1) mental deficiency — mental age below 10 years; (2) psychopathic personality — inability to profit by experience and respond in an adult social manner; (3) chronic alcoholism — habitual use to a point of social or physical disability; (4) psychoneurosis — conversion symptoms, hysterical paralysis, vasomotor disturbances, excessive concern over minor or imaginary bodily ailments, obsessions, compulsions, phobic manifestations, and emotional disturbances; (5) psychosis.

incidentally provided evidence for the establishment of such a range.

In 1944 Hyde and Kingsley made a study* of the major causes of mental rejections in 60,000 American selectees for army service in World War II, and of the density of the populations of the communities from which they came. All the selectees were examined by the same team of psychiatric examiners using the same criteria for diagnosis, at the Boston Armed Forces induction station during the winter, spring and summer of 1941-1942. The area from which the selectees came—the eastern segment of Massachusetts, within 35 miles of the sea-coast—includes wealthy suburban communities, cities with active industries, poor industrial cities of low economic status, towns and villages of less than 2,000 population of varying economic status, some isolated rural communities, and finally, city slums in which all the distressing features of extreme poverty were found. The area tested is not, of course, representative of the nation generally. Most of New England, and particularly this section of it, has been heavily urbanized and industrialized for many generations. Between emigration to the West, with its fertile land, and to the cities with their glitter, the smaller communities and rural regions of this region have been drained of their healthiest and most ambitious young people for almost a century. But even though the area is not a perfect sample upon which to base such a study, it is still representative enough to make its lesson portentous.

The age limits for the first 6,000 men were between 21 and 34, and for the remaining 54,000 between 21 and 44, inclusive. Most of the selectees were unmarried; no fathers with children born before the Japanese bombing of Pearl Harbor in 1941 were included. Here again, a perfect sample would have included a proportion of men, women, and children of all ages, and not only men considered suitable for military service. But though not perfect, the sample used is still sufficiently representa-

* "Studies in Medical Sociology," Major Robert W. Hyde, M. C., A.U.S. and Sergeant Lowell V. Kingsley, A.U.S., "The New England Journal of Medicine," Vol. 231, No. 16, Oct. 19, 1944; No. 17, Oct. 26, 1944; No. 18, Nov. 2, 1944.

tive of the population in general "to point a moral, and adorn a tale."*

The relationship of the percentage rejected for all major psychiatric disorders, to the density of the population of the communities in which they dwelt, was as follows:

Density per Square Mile	No Examined	Percent Rejected
Less than 500	2,856	12.1
500—999	4,478	7.5
1,000—1,999	6,340	8.5
2,000—4,999	8,056	9.2
5,000—9,999	13,322	9.5
10,000—19,999	14,108	10.6
20,000 or over	10,840	14.0

The rates for all communities with population densities of over 500 per square mile show a step-like increase in mental disorders, ranging from 7.5 per cent to 14.0 per cent, with each increase in population density. The sanest communities were those with population densities of between 500 and 999 per square mile. The worst, large cities with population densities of over 20,000 per square mile. On the other hand, the most isolated communities were almost as bad. What does all this mean, assuming that mental disorder is *prima facie* evidence of abnormality? It means that the normal range for dwelling is in communities with a density of population ranging between 500 and 999 per square mile. Dwelling either in communities or regions so isolated as to number less than 500 persons to a square mile, or so congested as to number over 1,000 per square mile, is abnormal.

But it should be pointed out that this study alone is not sufficient to establish a definitive norm of dwelling. The region selected for study is not sufficiently representative; the selectees are suggestive rather than really indicative of *homo sapiens* generally; above all, only one criterion of normality was used—the rate of mental disorder. To establish the true norm, the region would have to be really representative of all kinds of communities—rural and urban; commercial, and industrial and mineral; sea-coast and interior, plains and mountains. The

* Ibid, No. 18, p. 572, Table I.

selectees would have to be really representative of humanity as whole—old and young; men, women, and children. Above all, criteria falling into at least three entirely different categories would have to be used. Psycho-physiological criteria like insanity and longevity are perfectly good but by themselves not sufficient. In addition, entirely different criteria—economic criteria like wealth and dependency; moral criteria like larceny and homicide; educational criteria like literacy; esthetic criteria like art and craft. And these criteria of normalcy would have to be superimposed one on top of another, widening or narrowing the range considered normal, until it can be considered truly definitive.

Fragmentary as is this particular study, since it bases the norm of dwelling only upon psychiatric data, it nevertheless makes it perfectly plain that our failure to teach the norms applicable to dwelling involves mis-education of an almost criminal nature. In spite of this demonstration of the abnormality of both the over-centralization and over decentralization of population, American schools continue to teach, the American real estate and building industry continues to sell, and the American government—as for instance in using its taxing power to subsidize public housing—to use its power to persuade the people to abandon dwelling in small communities and rural regions, and to dwell in densely congested urban centres, the bigger the better;

At least four steps are involved in establishing definitive norms of living metrically: (1) Selecting a representative sample of mankind for study. (If the norm to be established deals with all of mankind, an adequate sample of the entire population; if with only one sex; a typical sample of the whole of one sex; if with only one period of the life-cycle, as infancy, or male adolescence, or the maternity span, a sample limited to selectees of that period only.)* (2) correlating statistics dealing with

* There are two ways in which it is possible to make the samples representative: one positive, using selectees representative of the total population, and the other negative, using selectees representative only of abnormality in the population. The second is the easier to use. The final result should be the same. For instance, in showing that 7.5 per cent of the population in communities ranging in population from 500 to 999 persons per square mile have major mental disorders, the fact was also established that 92.5 per cent of the people in such communities do not.

the kind of action or condition for which a norm is being established with conditions, in the case of norms of action, or with actions in the case of norms of condition; (3) superimposing upon one such correlation at least three criteria each of an entirely different nature; (4) establishing as the norm, the range of actions (or conditions) which multiple correlation establishes as common to all the criteria used.

Though this is multiple correlation, it is not the arbitrary, merely mathematical correlation with which it will be easy for lovers of statistics to confuse it. Its essence is not correlation but integration—integration of the fragmented data available in such enormous quantities in biometry, psychometry, sociometry, and econometry, in order to throw light upon how *homo sapiens* should live.

Confirmed sceptics, even if they might be persuaded to admit the possibility of using statistics to establish norms for such seemingly simple problems as those of eating and dwelling, may deny the possibility of using homometry for the purpose of establishing norms applicable to the much more difficult ethical and political problems confronting mankind. After years of experimenting with the method in every field covered by this whole study there is not the slightest question in my mind about two things: first, that this particular form of multiple correlation, can be used successfully in formulating norms of all kinds; secondly that there is sufficient statistical material available with which to begin the establishment of norms upon which to base the social, economic, and political re-organization—and the re-education and humanization—of mankind.

All the norms in this study have been formulated upon the basis of one or more of the four methods and criteria which I have described.

Unless the organization of education at every level, in every course, and every method of teaching is based upon norms of living established by such methods as I have suggested, it is almost certain to result not in right but in miseducation.

The Classificatory Method. Many of my friends have reproached me for starting a new, and even, superfluous, speciality. Since the proliferation of specialities has created the most difficult problem with which education is today confronted, any proposal to add to their number is properly suspect. But I insist that the distinction between a special field of knowledge and a methodology should not be ignored.

The distinction here being drawn between a speciality and a methodology is the same distinction which exists between the body of the knowledge called science and the methodology called the scientific.

A field of knowledge, like sociology, becomes a speciality whenever it begins to consider itself autonomous, whenever it maintains a vested interest in the field it has pre-empted, and whenever it develops a special vocabulary, a special methodology, and a special literature of its own.

A methodology, on the other hand, is simply a system for the orderly study, description, classification, development, evaluation, and arrangement of the subject-matter of any field of knowledge.

Sociology and the other social sciences, because their subject-matter consists of abstractions and not of objective facts, are not sciences in the same sense that physics and chemistry are sciences. It is because they have failed to solve the problem of reducing their subject-matter to entities the nature of which can be verified objectively that all of them tend to develop arbitrary methodologies of their own.

Since I attach such importance to this distinction, an attempt at briefly summarizing the method is justified.

1. The study of any social problem should begin with the most rigorously logical formulation of the subject-matter with which the problem is concerned. This is an obvious first step, frequently ignored or imperfectly formulated in the social sciences.

2. A variation of the case method should be used for making the basic observations of the activities, the events, the

things, and even the abstractions, which are involved in the problem being studied. A sufficient number of such specimen cases must be observed and recorded to make adequate classification of them possible, and to furnish a sound basis for generalizing about them. But in every instance, the basic observations must consist of cases of individual human actions performed by nameable individuals, on calendrically specifiable dates, during horologically specifiable intervals of time, at geographically specifiable places. The study of concepts and ideas, of terms and abstractions dealing with the human and social sciences is purely speculative unless their analysis is pushed back to individual human actions, and cases and classifications of cases furnish an objective basis for them. This is the essence of the method and it contrasts sharply at this point with the methods generally used today in the social sciences. These so-called sciences almost invariably begin with the study of a collective abstraction—with a hypostatization or operational fiction such as "a culture", "an economy," "a society", "a nationality." In sociological studies the failure to specify the case or particular social entity which is being studied, is obviously due to the fact that there is no such thing as a particular society which can be at one and the same-time named, dated calendrically, and bounded geographically. But even in those social sciences where a specified culture, economy, or nation is studied, there is almost never a sufficient number of different cultures, economies or nations included in the study to furnish universality to the conclusions drawn. The conclusions are not scientific; they are parochial and temporal; they apply only to the one particular nation or culture studied.

3. The specific cases thus observed are then classified into categories, divisions, orders, species and varieties on the basis of significant characteristics which each class has in common. Classification invariably reveals whether the number of cases are sufficient for purposes of generalization, and whether there are classes of specimens which have been overlooked. Valid generalization is obviously impossible if, as in the methods used in sociology, there are either no cases at all or so few as to make classification impossible.

4. Hypothecation on an object basis is thus made possible. It is virtually impossible to take steps two and three without forming theories about the solution of the problem being studied. But such theories, it should be noted, are inductive in nature; unlike the theories produced by the sociological method, which are almost invariably based upon the analysis of abstractions, they are not deductive.

5. The hypothetical solution of the problem is then ready for verification. Verification calls for analysis of the cases and of their classification by not one but many independent workers. It also calls for the use of statistics, of applicable historical and biographical knowledge, of analysis of current events and individual experiences bearing upon and presumably demonstrative of the hypothesis; and finally, whenever possible, of experimentation—of subjection of the theory to the ultimate test of experimental verification.

6. If, as a result of what seems adequate verification, conviction of the validity of the proposed solution of the problem develops, it is then permissible to use the conclusion deductively—to use it as a norm, principle or law for the purpose of evaluating specific kinds of human actions, of prescribing for the actions of others, and even of governing their actions if government is actually called for.

It is perfectly obvious that the use of this method requires drawing upon knowledge from every field of art and science, including the humanities, and every religion, ideology and school of philosophy, either for the purpose of furnishing cases, of verifying the principles developed, or of passing judgment upon the solutions which different religions, different philosophies, and different ideologies now offer with regard to the problem under consideration.

CHAPTER VIII

THE NATURE OF CLASSIFICATION: A NOTE ON METHODOLOGY

We should have a bewildering chaos of details, of forms, of things, and events, which no memory could grasp and recall unless thought could master the plurality of content by means of comparison and distinction; and could on the one hand recognize sameness and similarity, on the other estimate difference.... Such a process, if completely carried out, would lead to a comprehensive system of concepts, in which the whole content of the perceptible—of things as well as events—would be displayed in order of similarity and difference: to a classification extending over the whole sphere of knowledge and finding its expression in a well established system of notation in a scientific terminology.—Sigwart, "Logic," translated by Helen Bonsanquet. (Published in 1878).

An individual human action, like the murder of Abraham Lincoln by John Wilkes Booth, can be described. In the specification of the characteristics of such an action which justify its designation as murder, (specifications slowly developed by jurisprudence as a result of countless trials of individuals accused of homicide), the distinction between murder and other acts of homicide has been so clearly drawn that, once the facts involved are established, there is no room for doubt as to whether a particular killing involved the commission of the crime of murder, the crime of manslaughter, the pseudo-crime of excusable homicide, or the killings by executioners which the law calls justifiable homicide.

What is true of killing is true of every kind of human action. Human actions can be observed; they can be described. Essential to a rigorously scientific description are seven things: (1) the name or identity of the particular person who performed the act being described; (2) the particular place where it was performed; (3) the particular day, month and year when it was performed; (4) the interval of time during which it was performed; (5) the particular purposes for which it was performed; (6) the sequence of activities performed during the time-

interval of the whole action; and (7) the specific consequences which followed from it so far as society and the individuals involved in it were concerned. Obviously it is utterly impossible to obtain this information about every action, but it is possible to obtain it in a sufficient number of cases to make possible the scientific use of such cases for study. I have myself accumulated around eight thousand such observations since I began this study in 1940; so far as numbers are concerned, there is nothing to prevent our making just as many observations for the development of a science of human action as zoologists and botanists have made in laying an adequate foundation for these two sciences.

The first thing my observations revealed was the fact that it is possible to classify human actions on the basis of significant characteristics common to classes of them, just as in zoology it is possible to classify animals on the basis of the significant characteristics of particular species and orders — on the basis of whether they are vertebrates like apes or invertebrates like snails; on the basis of whether they are oviparous like turtles or viviparous like wolves; on the basis of whether they can speak and reason like man or can neither speak nor reason but only act tropically like amoebas.

Even though the observations and descriptions of human actions can never be as precise as those made in the concrete sciences; even though they will necessarily fall short of the precision of the observations and descriptions of matter and energy made by physicists and chemists; even though they will also fall short of the precision possible in biology, zoology and botany, they can nevertheless be made precise enough to transform the human, behavioral or social sciences from pseudo-sciences into real sciences. Finally, my own experiments establish conclusively that they can be made precise enough not only to make these sciences into genuine descriptive sciences, but also to make them normative — to make it possible not only to describe *how human beings act* but to prescribe *how they should and should not act*.

That they can be transformed into normative science is made possible by two facts: (1) the fact that analysis of the

acts of any individual is inescapably a study of the purposes and the consequences of his actions, and (2) the fact that when a sufficient number of human actions of essentially the same kind are classified on the basis of the purposes for which they are performed and the consequences which flow from them, *value judgments emerge* and objective generalizations about the harmony, the humanity, the morality, the validity and normality of each class of actions can be made.

In terms of the scientific method, the problem of classification with which we are here concerned, follows immediately after observation. Only if classification is possible can there be an adequate basis for induction, verification, and deduction, and only if there is a valid basis for the formulation of deductive judgments can there be objective, in place of subjective, prescriptions about the manner in which human beings should live, what they should and should not do if they are to live within the range of actions which are normal to *homo sapiens*.

The various kinds of acts which human beings perform; the various problems of which these actions are attempted solutions, and finally the various kinds of ideas, ideals, and ideologies developed by mankind about the manner in which human beings should deal with these problems, are infinite in number and almost infinite in variety. Unless we develop a scientifically valid method of classifying these actions, problems, and ideologies, dealing with problems of man and of society rationally and humanely — instead of impulsively, traditionally and dogmatically — will remain a matter of chance. In sum, no escape from the dilemma of modern confusion and amorality is possible, and no absolutes can be substituted for relatives without it. Without classification, we have nothing but impulse, tradition, and dogma to fall back upon.

It is at this point that the social sciences have most miserably failed to be scientific. I can speak with authority about economics, and I believe with almost as much authority about sociology and political science. What the social sciences desperately need in order to become scientific is not only some

such invention as binomialism* but also a taxonomy** of their own. Until they have both they will remain nascent if not pseudo-sciences.

In dealing with human and social problems, scientists, philosophers and educators have almost completely ignored the task of filling this gap in the sciences. That preachers and politicians should prescribe for human behavior without taking this into account, is understandable. After all, they do not profess to be scientists. But that educators and scientists should presume to speak with authority about human and social problems without first providing themselves with an adequate system of classification, is inexcusable. American educators, with whom I am most familiar, now that they are no longer religious dogmatists, are for the most part pragmatists — they shrink from the abstract and concentrate upon the concrete. Present-day philosophers, forgetting Aristotle, have surrendered the problem of classification to physicists and biologists, who do not deal directly with the problems of mankind at all. The social scientists, on the other hand, have done so little about classification and nomenclature as to render much of their work unintelligible even to themselves.

As a result, the situation in the social sciences today is one of hopeless confusion. The terminology of each special science is a foreign language to all but the initiate, and the relationship of the same term to the various meanings it might have, even in the same science, is vague and indeterminate. In applying what they feel they have learned, only specialists can qualify, and the specialists are for the most part safely immured in institutions of higher learning where they are far removed from the problems which confront the people of this troubled world.

* Binomialism is the system of nomenclature in which each class of plants or animals is given two names, the first being that of the genus to which it belongs and the second that of the species. This system, which was accepted almost from the beginning by zoologists and botanists, was first standardized by Linnaeus, though binary names were occasionally used by pre-Linnaean writers. All roses, for example, are *rosa*, but each class of roses has to be given two names, *rosa gallica*, being the French rose, and *rosa odorata*, the fragrant tea rose, and so on.

** Taxonomy is the system of classification, and the laws and principles governing it, used by zoologists and botanists.

In law, medicine, theology and pedagogy, the situation is not very different. Each of these disciplines is supposed to deal with life, but neither their vocabularies nor the organization of their knowledge will stand the test of rigorous logical and semantic analysis. As for integrating what they know, the situation seems hopeless. Yet the fact remains that life is integral, and that human actions are always wholes. Instead of dealing with problems of living as they are in their totality and integrity, each of our specialized disciplines is so specialized that integrating what it knows with the knowledge in others concerns virtually none of these who specialize in them.

Over a century ago, a remarkable genius, Peter Mark Roget, (1779-1869), showed that every idea about life and living can be classified. His "Thesaurus of English Words and Phrases" blazes a trail which educators, philosophers, and social scientists ought to have followed, much as biologists, botanists and zoologists built a broad highway to scientific truth by developing a century ago the trail blazed for them by Carolus Linnaeus (1707-1778), in his "Species Planetarium" in 1753 and "System Naturae" in 1758. Instead of recognizing that it was possible to classify ideas scientifically — including all the entities studied in human sciences — they have permitted Roget's essentially scientific and profoundly philosophic work, to be degraded to the status of a mere dictionary of synonyms and antonyms.

There is no really good reason why this should have happened. Roget himself makes clear that he saw the more profound implications of his work. His introduction is a brilliant essay on the subject of classification and makes it clear that ideas, not words, constituted the real subject-matter to which he was devoting himself. In the very beginning of that introduction he said.

"The present work is intended to supply, with respect to the English language, a desideratum hitherto unsupplied in any language; namely, a collection of the words it contains, and of the idiomatic combinations peculiar to it, arranged, not in alphabetical order as they are in a dictionary, but according to the ideas which they express.

“The purpose of an ordinary dictionary is simply to explain the meaning of the words; and the problem of which it professes to furnish the solution may be stated thus: The word being given, to find its signification, or the idea it is intended to convey. The object aimed at in the present undertaking is exactly the converse of this: namely — the idea being given, to find the word or words by which the idea may be most fitly and aptly expressed. For this purpose, the words and phrases of the language are here classed, not according to their sound or their orthography, but strictly according to their signification.”

In a footnote he expressly calls attention to the analogy between what he has done with ideas, and what has been done with terminology in the real sciences:

“The principle by which I have been guided in framing my verbal classification is the same as that which is employed in the various departments of Natural History. Thus the sectional divisions I have formed, correspond to Natural Families in botany and zoology, and the filiation of words presents a network analogous to the natural filiation of plants and animals.”

In another interesting footnote, Roget describes his search for prior studies of the kind which he had undertaken, and shows that long ago a few pioneers had ventured to explore the subject, and calls attention to one of his precursors in these words:

“The earliest of these, supposed to be at least nine hundred years old, is the ‘Amera Kosha,’ or vocabulary of the Sanskrit language, by Amer Sinha, of which an English translation, by the late Henry T. Colebrook, was printed in Serampoor, in the year 1808.”

But after describing it, Roget says: “The classification of words there, as might be expected, is exceedingly imperfect and confused, especially in all that relates to abstract ideas or mental operations.” Nevertheless he describes it as “exhibiting a remarkable effort at analysis at so remote a period of Indian literature.”

The problem with which we are concerned is not the development of a method of classifying ideas, but the development of a method for classifications of all human actions. If the method is sound, it will furnish us a method applicable to the subject-matter of every science which is in any way involved in human actions.

Roget used six final categories in the “Thesaurus,” abstract relations, space, matter, intellect, volition, and affections. In his second level of classification, he used twenty-four; in his third, about one thousand; his fourth brought him to particulars — to the particular words and phrases he was classifying, to the level of what I think of as “cases.”*

In the method used in this study there are not four but fifteen levels of classification, excluding the level of cases, (the level of particulars) though of course in the charts in this book only four or five of the highest levels in this ladder of classification can be included.

Aspects Versus Actions. Every human action, like the process of living itself, is in actuality a process, not an entity. It is a whole and integral process. What is usually called an action, and what in this study called an action, is in actuality only an aspect of the totality of the process taking place during a particular interval of time. No action is exclusively mental or exclusively physical, since that would assume the possibility of separating what is in fact not separable. No action for this reason, can be classified as an exclusively moral or an exclusively artistic act; no act can be classified as exclusively an act of labour or an act of play; none as an exclusively individual or an exclusively social act. The act in its totality is not classifiable because it is a continuum, not an entity; only its aspects during particular intervals of time can be classified, and it is to these aspects we actually refer when we speak of actions.

When we deal with an act or activity, such as working, as if it were in fact an exclusively economic act — when we

* All the figures I am using are based upon the edition of Roget's “Thesaurus” revised and enlarged by his son Samuel Romilly Roget and published in the United States by David McKay Company, Philadelphia.

legislate, for instance, and enact a statute limiting the hours of labor to forty per week—we are not legislating merely about labor, we are in fact legislating about every aspect of life. This is due to two important facts: (1) the fact that the action of working has not only economic but also individual and social, ethical and esthetic, mental and physical aspects, and (2) the fact that every action, no matter how little it has to do with working, has economic aspects. Acts which we do not think of as economic at all, such as the action of drinking beer, has as truly an economic aspect as has the act of working. For it is perfectly obvious, once we think about it, that the consumption of beer is as essential to the operation of the economic process as is the production of beer by workers in a brewery.

Conic Sections. Conic sections, which so fascinated Plato, furnish us a vivid analogy for what is here involved. The cone is an integral object in the same sense in which every action by a human being is an integral event and integral experience. If a wooden cone, for instance, were sliced through with a saw—if the cone were intersected by a plane—each different slice or section would reveal to us a different aspect of the cone. Bisecting it horizontally—parallel to its base—would reveal a circular aspect. Intersecting the cone at an angle to the horizontal, but not as steep as the pitch of the cone itself, would reveal an elliptical aspect; intersecting the cone at an angle exactly equal to the pitch of the cone would reveal a parabolic aspect. Intersecting the cone at an angle steeper than its pitch would reveal a hyperbolic aspect; and intersecting the cone vertically, through its peak or vertex, would reveal a triangular aspect.

Each one of these aspects differs from the others so greatly that the difference may be considered as one not of degree but of kind. With regard to each one of these geometrical aspects, problems different from those of the others develop. Yet however distinct these problems—however different, for instance, a circle is from a triangle—the cone itself is not any one of its aspects; no matter how many may be the aspects into which the analysis of the cone is divided, the cone itself will always remain an integral entity, an object quite distinct from each of the other aspects from which geometry views it.

So with every human action. Every action can be viewed from an innumerable number of aspects; each aspect may differ from any other; some will differ only *in degree*—as intersecting the cone horizontally near its apex produces a smaller circle than intersecting it near the base, but except for the difference in size, a circle nonetheless; but some will differ from others in *kind*—as all circles produced by intersecting the cone will differ in their essential character from all the ellipses which can be produced from it. Aspects which differ from each other in this way—in essence and not merely in form—present us with problems in analysis as distinct as that involved in analyzing the ethical aspect of a human action from its psycho-physiological aspect. But no matter how minutely we analyze the aspect from which we choose to view a human action, it does not lessen by a particle the fact that the action may be viewed, and may be analyzed, from any aspect which it may present to any human being.

Since the intervals in the whole continuum which constitute living—and which are in this study as well as colloquially called actions—do not all begin and end simultaneously, it is possible to classify each aspect, or each action so-called, in accordance with the characteristics which differentiate it from the other aspects which overlap it. It is possible to classify what is taking place at the same instant of time, as from one standpoint occupational, and from another psycho-physiological.

It is paradoxical, therefore, but nevertheless literally true, to say that working is not an act, that it is merely one aspect of what is being done by the individual during the time when he is working. If, on a day when an individual worked—let us say from eight in the morning until twelve at noon—he had breakfasted at seven o'clock, he would still be engaged in digesting his breakfast after he started to work at eight o'clock. From the occupational aspect, he would be working, but from the psycho-physiological stand-point he would be digesting his breakfast. But the two intervals would not be the same. Digestion would have begun immediately after eating at seven o'clock and before the act of working had begun; it would continue simultaneously until digestion was completed, (perhaps by ten

o'clock), but working would continue until he stopped for luncheon at noon. The mere fact of simultaneity does not prevent, therefore, our distinguishing between the two kinds of action; while the fact that the intervals are different, vindicates speaking of each of these two simultaneous activities, working and digesting, as two different kinds of human actions.

While he is working, he is *breathing*. His heart is *beating*. He is *sitting* on a chair, and sometimes *standing*, and sometimes *moving* about. Sometimes he is *speaking* and sometimes *thinking*. Each of these "actions," though each overlaps the time he is working and many take place simultaneously, do not begin and end at the same time; their durations differ, and each of them therefore can be properly dealt with as a distinct human action. For purpose of analysis—for the purpose of determining the validity or the wisdom of particular actions—each may be isolated from the totality of the continuum which constitutes living.

Not only in this study, but in ordinary speech too, what everybody calls an action is such an isolation of what human beings are engaged in doing from time to time as long as they live. This is the entity with which we are dealing in this study; and this is the entity, it is my thesis, which should be the basis for every social science and every science which deals with either the individual or the social life of mankind. Social sciences so developed would provide to the educator what he now lacks, an indispensable scientific basis for normative education of the right kind.

But all-important as that is, what it will mean to the educator is only one of the many things which it will make it possible for us to deal with rationally. To the moralist and disciplinarian, it will provide a rational basis for distinguishing between what is right and wrong; to the political and social and economic reformer, a rational basis for evaluating the reforms in which they are interested; to the legislator, a rational basis for evaluating existing statutes and enacting new one; to the judge on the bench, a rational basis for dealing with what are called cases but which in the final analysis is the parade of troubled human beings who pass before him.

CHAPTER IX

A PROGRAMME FOR THE CRISIS OF OUR TIMES

An army of principles will penetrate where an army of soldiers cannot; it will succeed where diplomatic management would fail; it is neither the Rhine, the Channel, nor the Ocean that can arrest its progress; it will march on the horizon of the world, and it will conquer.—Thomas Paine.

The title of this study is technically perfect; it describes its subject-matter; really deals with the problem of the humanization of humanity.

But it is also a study of planning. For all that I have so far said is but preliminary to the consideration of a programme, and programming and planning are merely different words which refer to the same thing.

But it is a study not of planning by all-powerful dictatorships—"proletarian" or Fascist or militarist; nor by almost equally powerful parliaments, congresses, or legislatures and their Planning Boards located in the capitals of nations. It is the study of planning, individual by individual, by the thoughtful, concerned, courageous and dedicated minority of mankind; of planning by this elite minority not of the economic and social and political life of their nation as wholes, but of planning for a better life and a better world by what individual men and women as members of their families, members of their communities, and finally as members of the whole of humanity can do.

It is a study therefore of individual planning and not of collective planning. And this planning, I maintain, must be based upon a clear understanding of why the humanization of humanity is the only genuinely rational approach to the resolution of the crisis of our times.

I have addressed this study specifically to the educators* of mankind. But the problem with which it deals; the challenge which it presents to them, and the response for which it calls from them, is the concern of every deeply thoughtful man and woman no matter what their vocation nor what their particular interest in life may be. For while it deals specifically with the problems of education, it does so instrumentally, as a means of rightly educating a generation of "superior persons" who will see that no civilized existence for themselves, or for humanity, is possible unless they provide the kind of leadership which would set mankind on the right road to the ultimate humanization of all of humanity. But for the failure of this minority—this elite—in the generation preceding our own to devote itself to some such long-term planning as I am here suggesting, the present crisis, like the periodic crisis in which mankind has repeatedly floundered because of the similar failure of its elite in the past, our generation would not be struggling leaderless in dealing with it.

As Edmund Burke put it, "The only things necessary for the triumph of evil, is that good men do nothing!"

Short-term plans will therefore not do; of necessity all short-term plans tend to concentrate on the immediate symptoms of what is wrong; they do not go to the roots of social evils and individual mis-behaviour; they do not deal with the causes of the crisis with which we are today confronted.

Yet this is an age of planning.

* There is no word in English which both connotes and denotes precisely the members of the "elite" which I have in mind. The word "intellectual" is manifestly inappropriate; not only intelligence but concern and courage and dedication is what those to whom this addressed must have. In French the word "clerk", it as was used by Julien Brenda in the original of his book translated as "The Treason of the Intellectuals", is far better. In ancient China, the word "scholar" had substantially the same significance as that which I attach to my use of the word "educators." Confucius called them "superior persons."

The *yogi* described in the Bhagavad Gita—the *karma-yogi* specifically—are the kind of men and women I have in mind. The *karma-yogi*, in the original Sanskrit, was not a mere mystic who had renounced the world for a life of meditation; he was a self-dedicated soul who had both knowledge and wisdom, who had both concern and compassion, he was above all an individual *who acted*. He was a man of deeds and not of mere sentiments, who had engaged himself not only to lead a good life but to help make possible a good life for all mankind.

Planning has gripped the imagination of mankind. But the plans for remaking society as a whole about which so much is said—these five-year plans as they come up one after another in nation after nation—all begin wrongly. The wrong thing is being planned for first. Planning for the nation, planning for the aggregation, is always put before planning for the individuals and for the families of which all nations and all aggregations are composed. Human beings are the pawns of these planners, instead of being the planners of their own lives and their own destinies. So the roof, the walls, the windows, the doors, even the interior furnishings for society are being planned before the foundation has been laid. The foundation is not being planned, because our bureaucratic planners cannot plan for that. For the foundation consists of millions of individuals like you and me.

But those to whom this book is addressed, the elite minority, an elite which has equipped itself for leadership, are more than the foundation, they are the cement without which the whole of civilization periodically crumbles to the ground. What this elite will do, if it takes on long-term planning; what the men and women who are "superior persons," do with their lives, the examples they furnish, the leadership they provide—these will determine whether the finished structure itself will stand; not only whether it will stand, but what it will be like; whether it will be harmonious or disorderly, beautiful or ugly, shoddy or resplendent.

Planning, therefore, should begin just the other way, with the individual, not the conglomerate. And of course this kind of long-term planning cannot be done either by professionally trained planning architects and engineers, much less by politically trained planners, (no matter how well-intentioned they may be, no matter how certainly they know what is good for a city or a state). It has to be done by individuals, one by one, family by family, village by village, and these individuals need to be taught how to plan both personally and socially by humanized educators, instead of being taught to leave all planning to the professional graduates of our schools of planning.

Because of planning, the engineer is "king" to-day. But the political "engineer" who has made all other engineers mere tools for the carrying out of his plans, is in reality a kind of monster. He has lost sight of ends, and is concerned only with means; he has put society before man; the city and state before the individual human being. Present day professional planning began with the planning of cities. It necessarily accepted cities, forgetting that cities are means not ends, and that so far as living is concerned, not very good means at that. As a result, when the concept of planning began to be expanded to deal with national planning, it was only natural for planners to put the social and the collective before the human and the individual. As with the cities with which they started, the planners therefore accepted nations as fixed and unalterable facts, when planning for a humanized world called not for the enrichment, the strengthening and the glorification of nations, but for their complete abolition.

Curiously enough — the planners of today to the contrary notwithstanding — planning is nothing new. Society has always been planned. The history of mankind, is the history of one blue-print after another about how life should be lived and society organized. Every prophet like Moses was a planner; every law giver like Solon and Manu was a planner. But neither the planners of the past, nor the planners of to-day, seem to have begun by facing the need for developing norms of living before beginning to formulate plans for the world. There were only three important exceptions, that of Manu, that of Confucius, and that of Plato,* but unfortunately all three of them appeared before the dawn of modern science.

Yet despite all the economic and political planning by modern planners for a full generation, the world is still a very badly planned world, even in the Communist States in which

* Plato's vision of a society dominated by philosopher-kings, involves an essential self-contradiction; to make the philosopher the ruler, is to deprive the philosopher of the role which he should play—that of an impartial and objective critic and evaluator on one hand and that of a disinterested and unbiased planner and educator on the other. The Hindu sages who planned Hindu society were wiser—they separated the functions of the philosopher and those of the rulers, the first they called Brahmins, the second Kshatriyas.

planning is supposed to be total. Nothing proves this more conclusively than the fact that in all the planned states of today, and in the world generally as far back as the history of planning goes, that the planners have — with the three exceptions which I have mentioned — planned that the leadership in their planned societies should be provided not by educators or by such an elite as I have tried to describe, but by the power-seeking, power-exploiting rulers of mankind. For a long time in India, the prestige of the Brahmins furnished an exception. The legacy which Confucius left to China, in which to a surprising extent the "scholar" and the "superior person" dominated society, provides another exception. Plato's scheme of a society dominated by philosopher-kings was, of course, never anything more than a utopian vision. But today there is no state anywhere in the world in which the masses of mankind have not been "planned" into according to their rulers the highest of honours, and to their educators the lowest.

The three most important occupations in my considered view are neither governing nor engineering, as most men believe today, nor business and money-making, as most men believed yesterday. The three most important occupations are educating, homemaking, and farming; the first because it is the educators of mankind who either humanize or fail to humanize both man and society; the second, because it creates the environment in which the young are either rightly or wrongly prepared for living like normal human beings, and the third because it makes most directly for collaboration with Mother Nature, for man's co-operation with the living soil, the living plants, and the living animals of the Earth.

In terms of the language of planning, this study is an essay in human engineering; planning for human beings not by political planners but by educators about individual and family life, and about the organization of the society of which he is a part.

Planning in the broad sense in which it is dealt with in this study, falls into two areas; planning the manner in which to deal with the personal problems with which life will con-

front us, in the various "ages" through which we still have to pass; and planning for the public, for the social, economic and political problems with which we have to deal as a citizen and as a member of the whole human race. *Planning for man: planning for society.*

This is the crux of the response for which the crisis of our times is calling.

In planning for the humanization of humanity individual by individual, we must not overlook the fact that we must use some instrument and institution which can deal with both the humanization of the individual and the humanization of culture and civilization. The institution which lends itself to this need most effectively is neither the State nor the Economy; it is Education. It is the educational system which this elite minority must use if planning of the right kind is to take the place of planning of the wrong kind.

The members of this elite are either already professional educators, or graduates from the school system, or engaged in some vocation or profession for which the school system has equipped them. Those who are already in education must take on the task of transforming their schools, colleges and universities into effective instruments for graduating individual "planners" of the kind I have described; those who are not already in the system must cooperate with the "cells" in the system, and both create public opinion to demand, and themselves demand, that the school system take on the dual task of educating both the individual and the culture. Startling as this may sound when thus boldly proposed, it is in fact merely making adult education of the right kind as important a function of the school system as juvenile education now is.

The first part of this dual task we shall consider at length in Volume XIV, which deals with the education mainly of the individual; the second part we shall consider in Volume XV which deals mainly with the re-education of the culture — which treats the institutional problem not descriptively, as anthropologists treat it, but normatively in terms of how to reform what is wrong in the culture and how to conserve what is right in it.

Both these tasks must become part of the functions of the school system; the organization of the various schools which comprise the system as a whole, of the curriculum and the teaching methods, must provide both for the education of the individual and for the re-education of the culture. Right-education of the individual, important as it is, is not enough, because the rightly educated individual when confronted with the problems of living may be almost completely frustrated by a badly planned, badly organized and badly educated culture.

To realize these ends, to ultimately humanize the whole of humanity by right-education, two things are essential, the development of the normative sciences so that they provide the educator with objective norms both about human behaviour and about the organization of society, and second, making these norms the basis of all education.

Without this educational planning, social and economic and political planning is like putting a perfectly designed automobile into the hands of a completely untrained driver. Just as there is no fool-proof automobile, so there is no fool-proof social and economic and political plan. Indeed, the situation is worse in the case of social planning than it is in the case of the automobile, for the social planners would not only have to produce social plans which are fool-proof but social plans which are also man-proof.

It is this error in planning which I believe responsible for the crisis of our times. Science has put into mankind's hands powers which make the powers of the Jinns in the Arabian Nights seem pigmy-like. And what we have done is to ignore the fact that the greater these powers, the more challenging becomes the problem of producing a generation which has been taught their proper use.

What we have done is to ignore what Confucius called attention to more than twenty-five hundred years ago. "Men of superior minds," he said, "busy themselves first in getting at the root of things and, when they have succeeded in this, the right course of action opens to them."

Section II

THE PROBLEM OF EDUCATION

Shame, Shame, Shame — that is the history of man. —
Friedrich Wilhelm Nietzsche, "Thus Spake Zarathustra."

Throughout the whole world, both in the East and the West, there is an acute feeling of discomfort among thoughtful and concerned men and women about the problem of education. In America, in spite of the multiplication of schools of all kinds, from nursery schools to universities, the more thoughtful and the more concerned leaders of education nevertheless feel that something is seriously wrong.

But the situation is no different as I write these lines here in India. At a huge public meeting on May 1, 1959 at Chandigarh, the capital of the State of Punjab, at which the governors and ministers of education of two States were present, Acharya Vinoba Bhave, the spiritual successor of Mahatma Gandhi, made an extraordinary proposal. He sharply criticized the existing system of education; characterized it as "absolutely wrong," and appealed to the "brains of India" to close down all educational institutions for six months and evolve a system suited to the needs and genius of the country.

Fifteen years before, in 1944, on the other side of the globe in America, Robert M. Hutchins, the Chancellor of the University of Chicago, one of America's greatest universities, speaking to the faculty of an institution with twenty thousand students, made an equally startling statement. He called upon them to lead a crusade by which "the whole scale of values by which our society lives" would be reversed. Yet this was said in the nation which had not only the most expensive system of education in the world, but which was enjoying the highest scale of living in the whole world.

It is easy to dismiss what both these distinguished figures in the modern world have said to busy ourselves with the immediate problems which we face in our classrooms. But

to do this is to commit a kind of treason to the profession to which we educators belong. My whole plea for considering these drastic criticisms is based upon my conviction that the kind of world in which we live demands the most radical re-appraisal of what we have been doing. For it is neither a humane nor a peaceful world. It is not a world free from threats to such civilization as we have thus far been able to develop. It is a world actually under siege, with besiegers under the name of revolution outside, and masses of besiegers inside the city-citadels which we consider the proudest products of civilization.

This then is the real problem which we educators must face, the fact that what we are now doing in our schools and colleges and universities is not measuring up, and that there is no time to be lost to begin doing what education must do if it is to resolve the real problem which it faces.

The educational problem, however, like all the basic problems of mankind, is a complex, not a simplex. Unless the whole complex is at least taken into account, the best prescriptions for dealing with a part of the complex may do little to help, and may in fact make matters worse.

Since the principal aim of this introductory chapter is merely to make clear the fact that the problem is a complex, I shall try to deal with this important aspect of the whole problem very briefly, and leave it to subsequent chapters to spell out what is involved in detail.

Man, so far as his education is concerned, must be considered an animal which shares in common with other animals one characteristic: at birth, he is endowed with a set of inherited instincts. Some of these instincts, like that of survival, he shares with all living things whatsoever. Some, like his instinctual sexual drive, he shares only with bi-sexual animals. One of them, his instinct for self-expression, is peculiarly his own; no other animal has any such hereditary endowment.

The second characteristic of man with which his education is concerned is the fact that he alone is born with a distinctive capacity for acquiring characteristics with which he is

not born — characteristics which he acquires by learning in the broadest signification of that term. No other animal is born with this capacity. In all other animals, the instincts are so fixed and inflexible that they limit and predetermine every characteristic it will display and every action it will perform as long as it lives. This is not the case with man. Man's instincts are plastic. They assert themselves, it is true, but this does not prevent him from acquiring non-instinctual characteristics ranging all the way from learning how to make a fire and how to cook food, to learning how to write a play like "Hamlet, Prince of Denmark," and how to design and build a monument like the Taj Mahal.

In terms of biology, man has two kinds of characteristics, one inherited and the other acquired.

The real educational problem is that of ensuring the acquisition by him of learned characteristics which will make him behave like a man and prevent him from behaving like an animal. The problem begins not when he begins his schooling, it begins at birth. And it ends, not when he graduates from school, but at his death. It remains a problem even if, as is the case with so many human beings, they arrive at a stage of development when they no longer can learn, when they can no longer acquire new characteristics of any kind. Unless the whole of this problem is adequately dealt with, the most elaborate system for dealing with a part of it, will prove disappointing. The real educational problem is not schooling; it is not juvenile or even adult education; it is the education in this broad sense of the individual so that he will not only make the most of his potentialities as a man but so that in the course of his life he contributes to the re-education and humanization of the culture of which he is a part.

A digression here is justified to consider a question which anticipates what will be discussed in detail later, but since it is the key to the organization of this study of the educational problem, this cannot be avoided.

The question is, why does the fact that he alone in the animal kingdom acquires characteristics by learning, make right-

education so necessary? Why does this fact make his humanization, rather than his enculturation, the proper function to which education should devote itself? Why is it that humanization is the one essential function a properly organized system of education must provide?

There are, of course, many different ways in which to answer these questions. My problem, however, is not that of answering them but of selecting out of all the evidence which I might submit with regard to the matter, some body of evidence which most clearly and most convincingly establishes the truth of the proposition that the very biological nature of man makes humanization the primary purpose to which every particular educational institution, every particular curriculum, and every particular method of teaching should be related.

Nothing, in my judgement, more clearly and conclusively establishes this than the long sanguinary history of man and of mankind. "Man's inhumanity to man" is no mere poetic generalization; it is the sad lesson which is taught by human history, whether it be the biography of individuals or the history of whole populations. History, except for temporary exceptions, is little more than a record of individual greed, stupidity, and crime, and of collective folly, collective fanaticism, and collective warfare. Man kills, unlike the lower animals, not for food, not to protect himself, not to propagate, as do animals, but for glory, for religion, for power, for wealth, for patriotism, for ideology.

History, it is true, is a record of human progress; but no matter how much mankind has progressed; no matter how glorious have been man's achievements in science and in art; no matter how sedulously he has so far educated himself, it has not made him less cruel or greedy. On the contrary, the record of the most progressive nations; of those which are most literate, of those which have developed science most highly, is bloodier than the record of primitive and barbarian man. In terms of bigotry and fanaticism, modern man has changed the form in which he expresses these bestial traits, but not their essence. In place of religion, he wages war and persecutes and oppresses in the name of ideology. In the 18th Century, he thought that

science would usher in a golden age of peace and prosperity, of justice and freedom. But the nations which have bathed the world in blood and tears and indulged in the greatest wars of all time have been precisely those in which science has been most highly developed, and in which education from top to bottom has devoted itself to the development of modern technologies of all kinds. Creed and cruelty and crime exist in every nation but there is just as much, and often more, in the developed than in the underdeveloped nations of the world.

The gospel of Progress, the belief in Materialism, the devotion to Hedonism, the cult of Nationalism, the doctrine of Centralization — these are some of the ideological germs with which modern man has been infected by those who teach and lead him.

Current history, with its world wars and world revolutions; with its neuroticisms and fanaticisms; with its erosion and waste of the natural resources of the Earth, represents only the symptoms of the mis-education of which modern man is the victim.

With ape-like ingenuity modern man has built himself a machine civilization, but with sub-human stupidity he has failed to teach himself what to do with the ingenious and devastating toys with which he has surrounded himself. Whether he can be prevented from destroying himself with them depends on whether those who teach and lead him can be persuaded to do the adequate thing in humanizing him — to do what is in the final analysis their personal responsibility as leaders and teachers.

Man has not learned — and it is my thesis that this is because he has not been properly taught — how to behave like a genuinely humane being. Literacy is no substitute for this; neither is technology. Having been deprived of control by rigid instincts when he took to the use of language, he has failed to acquire substitute controls over his behaviour. The need, therefore, is not more education of the kind which has thus far failed to humanize him, but education of the kind which will.

This is the challenge which seems to me to face those of us who are concerned about the crisis of our times. The defect from which man and mankind still suffer, it is my thesis, is a defect in his education; and this is a defect to which we make no adequate response by merely multiplying literate and merely increasing the number whom we graduate from colleges and universities.

What the situation calls for, if the lessons of history are not to be ignored, is the substitution of humanization for enculturation, and general for special education, as the primary goal to which education is devoted.

The question which should be our first concern is what must be taken into account with regard to the whole problem of education to ensure that what the educator and the school system does contribute to the solution of the real problems mankind faces today.

I have divided this study of the educational problem into two parts, each a complex of problems of its own: (1) the problem of function, and (2) the problem of organization.

I. The first part is mainly devoted to the definition of one thing: the nature of education's functions.

The first problem with which the definition of functions confronts us is the definition of education itself.

The second is the definition of mis-education.

The third, the definition of right-education.

The fourth, the definition of re-education.

But in a very real sense, re-education is more than a problem in definition. It is what throughout this study I am calling a crucial problem. It is crucial because by the time an individual or a culture arrives at the time when right-education can begin to resolve the educational problem, all the individuals in the culture are already educated, and most of them for the most part mis-educated. The real problem, therefore, is not that of dealing freshly with completely uneducated individuals and a completely uneducated culture, but with already educated and already mis-educated individuals and cultures.

II. The second part deals with the organization of the curriculum, the organization of the educational system, and finally the organization of teaching. The consideration of the curriculum is three-fold: the curriculum (1) for physical education, (2) for intellectual education, and (3) for emotional education. The consideration of the educational system is also three-fold: consideration (1) of the school, (2) of the home, and (3) of the culture; finally, consideration of teaching methods is likewise three-fold: (1) logical teaching methods, (2) illogical teaching methods, and (3) alogical teaching methods.

The difficulty of dealing with these concrete problems today begins with failure to recognize the fact that schooling is only one of many necessary means of education. On one hand, the school system has taken on too much, on the other ignored problems which it dare not. It is all-important to recognize that there are and will always be other means of education, and that if schooling is used for what cannot and should not be done in the school, and means of education outside the school which have to be and should be used are ignored by educators, nothing in the schools will ever be able to offset the evils caused by the failure to deal with the educational problem as a whole.

If the educational problem is thus studied as a whole, and not only in terms of the technical problems of formal schooling, what we may do to change the existing system of education has a better chance of representing what should be done, than if the problem is approached in terms of schooling only.

CHAPTER II

THE NATURE OF EDUCATION

There is nothing so monstrous to which education cannot form our ductile minority; it can lick into shapes beyond the monstrosities of Africa. — Joseph Glanville, "The Vanity of Dogmatizing."

Consideration of education, however special and specific the particular aspect with which we are personally concerned, must begin with consideration of its essential nature. To establish its essential nature, and distinguish it from the various forms of education which we think of when we ordinarily use the word, we must first of all distinguish between what I think of as spontaneous informal education, and the planned, organized and formalized education provided in schools, colleges and universities.

Its essential nature, in contrast to the myriad of forms it takes, has its genesis in biologic facts, the full significance of which has been overlooked — the plasticity of the impulses and sensations in *homo sapiens* and the consequent variability of his behaviour. That this was true from the very beginning makes it clear that education existed long before schools and teachers were invented. But man, during most of his long history, was a spontaneous and not a self-conscious educator. Today, in spite of the organization of education, most of his education is still the end-result of spontaneous and not of formal education. Unplanned education of this kind was the means by which he transformed himself from a mere two-legged animal into a being approximately human, and today it still remains the most important means by which he is either humanized or dehumanized.

Education, therefore, is the most important invention of mankind — more important than his invention of tools, of

* What I refer to as the plasticity of man's impulses and sensations is the form in which what biologists call irritability presents itself in man. Biologic irritability is the characteristic which all living organisms display in responding to the stimuli of their experiences. In man only is biologic irritability cultivatable and intensifiable.

weapons, of machines; in a sense, more important than his invention of language, since language itself was a product of his education. Without education he would still be living like an animal on a level lower than that of the most primitive savages. For the very lowest forms of human life which anthropologists have studied already reflect the influence of education.*

It was the plasticity of the impulses and sensations in man that made it possible for him, from the moment he evolved into *homo sapiens*, to educate himself, and it is this plasticity which makes man's education so important and makes it so necessary for us, who devote ourselves to education, to give careful consideration to the manner in which we organize and operate the elaborately developed system of education which we have concocted for him.

Animal behaviour, unlike human behaviour, is instinctually determined. Everything animals do, from birth to death — except in so far as man interferes with them by "educating" or domesticating them — consists of an almost automatic response to the impulses of hereditary and inborn instincts.** Isolate a dog from all other dogs, and it will nevertheless bark precisely like all other dogs. Isolate a man in the same way; fail to teach him how to speak, as in the famous case of Kaspar Hauser,** and his instincts will do nothing for him comparable to what instincts do for a dog.

But not only cannot man rely upon his instincts to equip himself with the elaborate languages he uses, he cannot rely upon them to equip himself with a single distinctively human

* The presence among the most primitive tribes of *homo sapiens* of a language consisting not merely of signals but of symbols is evidence of the fact that education was playing its role in formulating patterns of behaviour from the very beginning of man's history.

** There is, of course, some degree of plasticity in the responses which all living organisms make to the stimuli of their experiences. But even in the case of man's nearest mammalian relatives, the apes, its extent is extremely limited.

*** Kaspar Hauser, as he was arbitrarily named, (1812-1933), was a foundling who was discovered on the streets of Nuremberg when he was already past adolescence. He had evidently been confined in a room without any contact of any kind with the keepers who fed him, and was unable to speak a single word. He was utterly bereft of any traits other than those which he developed instinctually during the many years of his imprisonment.

characteristic. Man's economic behaviour, for instance, is not instinctively determined. He has, it is true, an instinctual drive for survival, and to survive he must somehow or other obtain his economic needs — his necessities of life — but unlike all other animals, he cannot rely upon his hereditary endowment to determine the form his economic activities take. The form of his economic behaviour like all his behaviour, is educationally determined. If rightly educated, no man will behave like a mere animal and satisfy his hunger by snatching the food which another is eating. That is the way dogs behave, and to the extent to which man is humanized, he ceases to behave like a god. The very lowest of primitives, those still on the economic level in which food is obtained by appropriation, may have behaved like mere animals, but the moment education and humanization entered the picture, and herding, farming and barter became means for satisfying economic needs, instinctual determination of behaviour ended, and educated behaviour took its place.

What is true with regard to man's economic needs is true of all his needs, and of every one of the activities in which he engages to procure them. Not instinct but education determines the manner in which he deals with every one of the problems with which living confronts him. It is the plasticity of his instincts, and the fact that he cannot rely upon them to determine his behaviour, which makes it essential that he be properly educated.

In dealing with the educational problem, we educators must begin by recognizing that we are dealing an animal which is not only uniquely ductile and malleable, but an animal whose behaviour is a reflection of both heredity and environment, of both instinctual drives with which he is born and of environmentally determined characteristics all of which he acquires after birth.

All his acquired characteristics are learned.

Each and every one of them is the result of what somebody, unconsciously or deliberately has taught him, or what he has discovered for himself and so taught himself. Everybody

therefore acquires some sort of education, even if he has never spent a day in school, because all his acquired characteristics are the products of experiences and activities which are educational in nature. In its broadest signification, the educational problem is the problem not of teaching him special acquirements such as reading and writing, but of teaching him all the characteristics which he should acquire to live like a normal and civilized human being.

In shaping each individual life, in shaping the totality of behaviour in every society, and in effect shaping the destiny of mankind, it is these acquired characteristics which determine both the physical and the psychological behaviour of man. It is even acquired, and not instinctive, behaviour which shapes the instinctual endowments of future generations. Exogamy produces one kind of future generation; endogamy another. Modern man is not born with an instinct for exogamy; he is taught that he should not mate with members of his own family, just as primitive man, when similarly educated, was taught not to mate with the members of his own phratry, or totem. Nothing proves more conclusively that this important area of human behaviour is educationally determined than the fact that in some cultures, as in the highly civilized culture of ancient Egypt, incestuous marriage and endogamy were not only considered moral but were actually prescribed as a virtue.

In this process of endowing modern man with acquired characteristics, the professional educator in the formal educational system not only plays a special part, *he should play the leading part.*

It is my thesis that he must play a leading part for two reasons. The first is sufficient in itself. He cannot play his special part as a teacher properly if he takes no initiative in dealing with the spontaneous educational activities of institutions like the home and the culture. The notion that it is possible to organise a school system, select a curriculum for it, and adopt teaching methods which will graduate properly educated men and women into society, without regard to the characteristics implanted in them by the educational activities of their homes and their cultures, is fallacious. Willy

nilly, the educator is driven to take the initiative in dealing with the extra-mural world if he would succeed in what he does intra-murally.

The second reason grows out of the fact that the educator cannot graduate properly educated specialists of any kind, if he does not take the initiative in dealing with every educational influence which produces the whole man. He cannot limit himself to what he does in his classroom to produce the literate man, or the business man, professional man, bureaucrat, farmer or mechanic; or to produce a thinking or intellectual man — one whom he has "taught to think"; or a liberally educated man; or an organization man; or a religious man; or a modern man. He must take the initiative in dealing with every educational activity whatsoever, which in any way contributes to the production of the whole man.

CHAPTER III

THE NATURE OF EDUCATION'S FUNCTION

Naked have I seen both of them, the greatest man and the smallest man; All too similar are they still to one another. Verily, even the greatest found I all — too — human. — Friedrich Wilhelm Nietzsche.

I begin with a very simple proposition as to the truth of which there can be no dispute: *education has a function.*

But this creates for those who are concerned about the educational problem, a problem in definition which must be disposed of if the significance of this proposition is to become clear. Education can be, has been, and is used for all sorts of purposes. But it is all-important not to confuse the purposes for which education is used with the function for which education should be used. Purpose here refers to one thing, function to another.

Education today, for the most part, is used for the *purpose* of teaching people to become this or that kind of specialist; to become a lawyer or a doctor; to become an engineer or a scientist; to become a teacher, a business man, a farmer, a nurse, a stenographer. The purpose of such education is vocational.

Education is used for the *purpose* of teaching children to read and write; to add and subtract; for the purpose of familiarizing them with the geography and the history of their own country. The purpose of such education is enculturation; it is to adjust the child to life in the culture into which it is born.

Education is used for the *purpose* of teaching people what brands of food to eat and what style of clothes to wear; what make of cigarettes to smoke and what brand of beer to drink; what toothpaste to use, what automobile to drive, what gasoline and oil and tire to buy. Such education, it is true, takes the form of advertising, but the schools do nothing to inoculate people against it, and it is the schools which educate the advertising men and the business men who are responsible for it.

Education is used for the *purpose* of teaching people what to believe — to believe in God, and to worship God, and to worship God as the Roman Catholics, for instance, insist. *He* should be worshipped; to believe in Communism; in capitalism; in Democracy; to believe in Nationalism. The purpose of such education is indoctrinal; it is in effect, ideological propaganda.

Education can be, has been, and is being used for almost every imaginable purpose, within the school system and outside it; and the problem of those of us who are genuinely concerned with what is right and wrong in education today, is first of all to determine which one, or which collection of purposes, is the proper purpose — which is the function — for which education should be used, and with which no special purpose should be permitted to interfere.

Unless we first determine what this function is we have no rational basis for evaluating the present purposes of education, or for determining which of them belong in, and which should not be included in, a proper system of education. We have no mean, in sum, of deciding how to go about the business of organizing education, of organizing a proper system of education; of determining whether some of the schools, colleges and universities we now have do or do not belong in such a system, and whether we have failed to include other "institutions" which should be properly included in it. We have no rational basis for organizing the curriculums of our various schools, nor of organizing the methods of teaching that should be used in them.

It is my contention that there is a describable basic human problem, and a describable basic educational purpose to which education should be devoted; and it is this basic proper purpose which constitutes what can alone be designated as the function of education. I further contend that this function is not arbitrary; that it grows out of the very nature of man and of man's problems and out of the very nature of education; and that until we recognize and accept this, the sort of schools we organize and the sort of teaching we do in them — no matter how effectively they achieve the special purpose to which we devote them — will not solve the educational problem, and

will not contribute what is essential to the creation of a really good life and really good society for mankind.

What the nature of the educational problem indicates this function to be is the *humanization of mankind*.

It is a complete misconception of its nature to assume that its function is merely the education of our young. It is a complete misconception of its nature to assume that its function is to train successful specialists or to produce human cogs for a highly complex mechanized society.

But if such a phrase as "the humanization of mankind" is not to become just another glib, rhetorical expression like the often-used phrase, "the education of the whole man", it must have a content which can be used to make it a basis for educational action. It is the purpose of this study to give it such content, and to describe that content sufficiently completely so that it can become the basis for the organisation of our educational institutions, and the curriculums and methods of teaching used in them.

If we who are professionally dedicated to education are to deal with the educational problem as a whole, instead of with the specialized fragments to which custom and convention today decree that we devote ourselves, the relationship of education to the ideal of the whole man, and to the social system as a whole, must be taken into account. If man is to be humanized, education must be organized at every level, from the home to the culture, from the common school to the university. And that cannot be done without formulating valid concepts both of what the wholeness of man implies and what an ideal social system should be. Without a basic conception of what man should be and what society should be, it will not be the educator, but those who happen to control the state and the social system at a particular time or in a particular place, who will decide what the role of the educator shall be and what he shall teach. The educator is thus, willy nilly, driven to become both a philosopher and social scientist; he is driven to formulate norms for both individual and social behaviour to become not merely a social scientist but a social philosopher.

It is essential not to lose ourselves, however, in the discussion of the problem of man, or the social problem as a whole. It is sufficient to consider only what is necessary to justify the acceptance of two scientific axioms; (1) *that man is normally a whole, and that his education must therefore be whole and not partial*; and (2) *that every social system, even those as different from each other as Communism and capitalism, is composed of leaders and followers, and that we can accept, at least hypothetically, this principle of social organization — that every social order not only does but should consist of leaders and followers.*

The history of mankind is, in a sense, a long record of changes in the nature of leadership and followership — the substitution of chiefs and warriors for priests and believers; of nobles and commoners for monarchs and subjects; of capitalists and labourers for lords and serfs, masters and slaves; of dictators and proletarians for politicians and citizens.*

What the concept of the humanization of mankind implies is that we educators accept this fact and act on the principle of it; that we recognize that the educability of man will always vary from individual to individual and group to group; that the organization of education must take this into account and provide both for the education of leaders and of followers; that the educational system must provide differently for the education of the masses and for the education of the elite; that while both must be humanized, humanization of the elite calls for kinds of education and kinds of schools very different from those needed for the rank and file of mankind. Finally, it calls for recognition of the fact that the humanity of the social system will be determined by the kind of elite, or the kind of leadership, to the creation of which we educators devote ourselves.

The concept of the humanization of mankind is thus a dual concept, and the function of education can be more specifically stated as *the humanization of a determining minority of thoughtful, concerned, courageous and dedicated men and women; and the humanization of the masses, who are less educable because they are less thoughtful, by such a properly educated elite.* Ideally, therefore,

* It is ironic that Marxists should talk about the ideal of a classless society, yet embody the principle of leadership and followership in the concept of a "dictatorship of the proletariat."

the educator should aim at the right education not only of the masses but of a class of professional men and woman who, even if not teachers by profession, are teachers in fact. If all lawyers, all physicians, all ministers, if all writers and journalists; all dramatists and actors; all painters, all sculptors, and all architects and engineers were educated and humanized into thoughtful, concerned, courageous and dedicated men and women, and would accept their rightful roles as the teachers and leaders of mankind, the humanization of the less educable masses of mankind would inevitably follow.

If the educational problem is to be solved, there must be no confusion in our minds as to what the members of such a humanized elite should be morally, esthetically, and intellectually, and no confusion as to what the humanization of the rank and file of men and women whose educability is for some reason limited, calls for. Unless we see clearly this dual aspect of the educational problem it is not only impossible properly to organize society, it is impossible for the minority of thoughtful, concerned and dedicated members of any society to live a really good life. For even if a fortunate and privileged minority could in a measure live good lives, their sympathies would be harried by the life of the masses breeding like maggots around them, and their very existence threatened by the vulgarities and often the brute violence of their de-humanized fellow human beings.

The classic study of this dilemma is that made in our times by Ortega y Gasset* in his "Revolt of the Masses", and the classic study of the failure of educators to create this minority, is that made by Julien Brenda in his "Treason of the Intellectuals."

The Nature of Humanization. Humanization,** very briefly

* Ortega y Gasset was a Spanish philosopher; Julien Brenda a French philosopher. Both dealt extensively with the dilemma created for modern man by the disintegration of traditional values under the impact of modern science and technology.

** The term maturation, which has in recent years been popularized by the writings of Harry Overstreet, a distinguished American philosopher and educator, refers to much the same thing as the term humanization. "The Mature Mind", which Overstreet discussed in one of his most popular books, is the mind of a humanized human being. My own preference for the term humanization is due to the fact that I prefer a term which applies not only to adults but which is applicable to every period in man's life-cycle. It is possible to speak of a child or an adolescent as being humanized or dehumanized; it is possible to speak of the young as being immature; but it is impossible to speak of them as mature without doing violence to the English language.

defined, is the process by which human beings are taught to live and to act like normal human beings. But for this definition to become meaningful, the concept of "normal" must be defined in all the detail which its importance warrants. This I have attempted to do in the first volume of this study; in the discussion of "The Humanization of Humanity" chapters 7 and 8 deal with the formulation of norms of living.

Because we have no vocabulary worthy of the name for discussing education, a certain amount of arbitrariness in the adoption of a terminology for his study is unavoidable. All that I can do is try to make as certain as possible that each apparently arbitrary term used is adequately defined.

In order to avoid a lengthy digression, I shall limit myself at this time to this brief definition of the humanization. For it is necessary to make clear that humanization is not being dealt with by modern education. It is necessary to make clear that enculturation is not humanization. For enculturation is the prevailing, though mistaken, answer being made by educators to the problem of the function of education.

Enculturation. By enculturation I mean the process by which the young are equipped with the language, the beliefs, the purposes, the values, the customs, the traits, the techniques, the vocations, the methods of supporting themselves, and of discharging their civic responsibilities — "the mores and folkways," in Summer's* famous phrase — of the particular culture in which they are born, and in which the vast majority of them will live. Enculturation is simply indoctrination with the ideologies of a given culture, and as such is a necessary part of education. But unfortunately, while enculturation makes for patriotism it also makes for jingoism; it makes for racial pride but also for racial bigotry; for partisan devotion but also for partisan prejudices; for cultural pride but also for cultural arrogance; for religious conviction but also for religious fanaticism. And education to-day, as for ages past, is primarily

* William Graham Summer, (1840-1910), was an American political economist whose writings not only in his own special field but in related fields were original and provocative in the extreme.

devoted to enculturation, however fantastic, irrational, and inhuman the culture may be.

Humanization. What I am calling Humanization transforms all these various parochialisms into normal human beings. It creates not Sectarians but Humanists.

Enculturation is an absolute necessity; man, being a gregarious animal, must learn how to live with the group to which he belongs. But because so many cultures are either dominantly or in part irrational and inhuman, humanization must take educational precedence over enculturation. For man is a member of the human race before he is a member of any particular culture, any particular race or religion, any particular social, political or economic ideology, movement or party; any particular nationality or empire.

Nothing illustrates more clearly the validity of the priority I am according to humanization than does education with regard to race. Enculturation makes for racial consciousness: in white nation it tends to include the belief in white supremacy; in China, the belief that all non-Chinese are barbarians; and so on *ad infinitum*. Humanization, on the other hand, gives priority to recognition of the fact to which Stringfellow Barr* called attention in his widely circulated essay, "Let's Join the Human Race". It aims not at adjusting the individual to his own particular nationality, but adjusting him to the problems involved in living as a member of the whole human race.

Humanization calls for both intellectual and emotional education. It is impossible to produce it without dealing with both its intellectual and emotional aspects. In order to deal with its intellectual aspect, both have to be taken into account.

Man is not born human. At birth he is human only physiologically, and that is the least human thing about him.

* Stringfellow Barr, formerly President of St. John's College in Annapolis, is one of the group of American educators who lead a revolution against existing methods of college education by substituting the study of the great books of the Western tradition for the disintegrated curriculums being used in American colleges. Others in the group include Robert Maynard Hutchins, formerly Chancellor of Chicago University, Mortimer Adler, and Scott Buchanan.

And the fact that he is an infant and not an adult of the species makes it difficult to call him human in any respect at that early time. For a long time after conception, the foetus of man is indistinguishable from that of the lower animals. Even after parturition, he is not much more than any other infant mammal. He is, in sober fact, merely a two-legged mammal, unable even to use his legs like legs—a mammal, however, with enormous capacities for the development or mis-development of his mind. Whether he is eventually humanized, whether he achieves the minimum mental development which will mark him as human, or falls short of it, is determined solely by one thing—his education.

Every infant of the human species begins at birth with only one desire, the desire to satisfy its hunger; and exhibits only one purpose, growth. For nine months in the darkness and security of its mother's womb, its hunger had been automatically satisfied. But although hunger remains its dominant desire for a considerable period of time after birth, by the time it has had its first feeding, the first step in its humanization or dehumanization has taken place. If at that time it is breast-fed; if it feels the warmth, the security, and the love of its mother from the beginning, the first step in its right-education and humanization has taken place. But if, on the contrary, this does not happen; if, for instance, it is bottle-fed and thereby deprived of almost constant loving contact with its mother, and even if it is left to the hygienic care of a scientifically trained nurse, its mis-education has begun.

Humanization, therefore, begins emotionally and not intellectually. The education of this potentially human infant, during this all-important period of its life, is entirely in the hands of its mother and its family. The school can do nothing directly to educate the child properly at this time. But it has an enormous responsibility, nevertheless, and it is not entirely helpless even if the complete solution of the problem calls for a plan looking ahead for generations, rather than planning for the schooling only of those who happen to be living at this time.

What it cannot do directly to humanize the individual during infancy and childhood, it can do indirectly by re-educating

and humanizing the parents—by providing a system of adult education whereby the parents can learn not only their responsibilities in this all-important matter, but what science and the accumulated knowledge and wisdom of the ages has to teach about the educational functions of the home.

The enormous importance of the first few years of life is something we have become fully aware of only since Freud demonstrated that mistakes made during this period make such a powerful impression on the unconscious mind that they continue to affect human behaviour into full adult life. Nothing that the school can subsequently do can eradicate them. They become a medical rather than a school problem. The school should not aggravate deficiencies in humanization, but it can do little to correct infantile dehumanization except to gloss it over or repress it, with no assurance that infantile mis-education will not later burst out into what is called juvenile delinquency in youth, and perversion and crime in adult life.

What is important from the standpoint of the educator and the school, is recognition of the fact that this early process of emotional education is not a school but a family function. No institution, not even the best managed boarding school, can do what the evidence indicates only the mother, the father and other members of the family can do educationally for the child during its first years of life. Failure to recognize this means usually two things: the school attempts a role that it cannot fulfill, as in the case of nursery schools; and it relieves the parents and family of a responsibility they have no right to evade.

A second important problem in humanization develops when the child begins to feel the first stirrings of sexuality, with the onset of puberty. It continues throughout the whole period of schooling, and ends when mating has satisfactorily taken place. And here, at the age of puberty, the school has a definite role to play in humanization.

This problem is not solved unless during this period the young have learned how to control and how to sublimate their surplus sexual energy. Man, like all other organisms, is equipped with far more sexual potency than he needs. Nature cares nothing for man, as man; it cares only for the survival of the

species. The basic fact with which education has to deal in providing for this problem is that man is not equipped, as are the lower animals, with inbuilt instinctual controls for his sexual behaviour. The plasticity of his instincts calls for the substitution of conscious control for instinctual control. If education of the right kind for dealing with this problem is not provided in the school as well as in the home, animalization and not humanization is the result. Failure to deal with it not only stimulates masturbation at the very least, but all kinds of sexual perversion at the worst. The problem cannot be ignored by the school, if for no other reason than that failure to educate properly with regard to sexual behaviour is almost certain to produce students who do not want to study.

It can, however, set up a system which makes the situation worse: by taking children out of the home too early and putting them into nursery schools; but particularly if they are taken out completely, as in the British public schools for very young boys. Frank Harris,* in his biography of Oscar Wilde,** insisted that the prevalence of home sexuality such as Wilde's, in Britain's upper classes, was due to the fact that children were sent to boarding schools at seven and eight years of age, when they were still in great need of mothering. Depriving the young of a normal outlet for their love, he insisted, promoted homosexual expressions of it.

All this is simply an attempt to suggest the many areas involved in the concept of humanization. I mention it only to make it clear that instruction alone in the academic specialties which now constitute almost the entire curriculum, no matter which ones are selected, cannot possibly humanize our young.

* Frank Harris, (1856-1931), though an American, was the editor of "The Saturday Review" in London, a leading literary journal at the turn of the century. He was the discoverer of George Bernard Shaw and H. G. Wells, and the sponsor of Oscar Wilde. He wrote a biography of Wilde which is a revealing account of the demoralizing effects of perversion upon a great talent, and of the bigotry with which Victorian Puritanism treated such matters in England.

** Oscar Wilde, (1856-1900), was an Irish poet and dramatist. He was the leading playwright of the London stage at the time of his arrest and conviction for homosexuality, and because of the high social standing of those involved in the scandal, the case was a *cause celebre*. His "Ballade of Reading Gaol," written during his imprisonment, is one of the most moving poems in English.

In higher education there has been traditionally a feeling that humanization is provided by the study of the humanities. But this is not true. The liberal arts, far more humanistic though they are than the sciences, are after all special subjects. These subjects tend to produce the cultivated, rather than the humanized, man. Humanization is not properly dealt with unless the school provides a course, or a whole series of courses, which will provide the young with a humanistic philosophy of life. Such courses, or educational activities as they might more accurately be designated, must have not only an intellectual but also an emotional content.

It is my thesis that the intellectual aspect of humanization should be dealt with by a course of study of the fourteen basic problems of man and society. This matter is discussed at some length in Chapter 8, dealing with intellectual education; and in greater detail in Chapter 4 of the first volume of this study. The emotional aspect of humanization, which is almost completely neglected in the modern school system, is discussed at length in Chapter 9 of this volume. It is my conviction that if the concept of humanization is examined in depth, two facts will emerge: that humanization is the proper function of education, and that education today is not providing it.

CHAPTER IV

THE ORGANIZATION OF EDUCATION

What is organization but the connection of the parts in and for a whole, so that each part is, at once, end and means — Samuel Taylor Coleridge.

Two terms — function and organization — which have recurred again and again in this study, need definition. Not because their general meaning is unfamiliar, but because I am using them not vaguely but specifically with reference to matters about which there ought to be no ambiguity.

Purpose. Every activity and every undertaking, every project and every enterprise, can be analyzed in terms of its purposes and of the methods used in trying to realize them.

Purpose, in the sense in which it is here used is *that condition which an individual sets before himself, or a group of individuals set before themselves, to be realized as a result of the execution of a project or the operation of an enterprise.* Even when the purpose is unformulated—when it has not been put into words and formally reduced to writing—when the actions of an individual, or the activities of an enterprise, reflect merely the customary purposes for which individual in a culture acts, or the various enterprises in that culture are conducted, it is still possible to analyze projects and enterprises in terms of purpose.

All purposes' may be divided into two categories, functional and non-functional, in accordance with whether the end-result is or is not in accord with the essential nature of the enterprise involved. Central to the whole thesis of this study is the assumption that the function of education is the humanization of humanity. Once this is granted, it follows that the proper purpose to which an educational system should devote itself is to prepare those who are taught in it to live like normal human beings; to teach them to deal with both their personal and their social problems like rational and humane beings.

This is the system's function. If any part of the system—any school or college included in it—is devoted to purpose which does not educate in this sense of the term, its purpose is non-functional.

In Dicken's famous novel, "Oliver Twist," Fagin conducted a school in which a group of urchins picked off the streets of London were taught how to pick the pockets of people. It is obviously ridiculous to speak of the condition of those who graduated from Fagin's school as educated; they were, it is true, trained and skillfully taught what Fagin purposed they should be taught, but the final condition of his graduates was violative of something essential to the nature of a normal human being. The purpose to which his school was devoted was positively non-functional.

The condition of those who graduate from conventional schools need not violate so drastically what is essential to living like a normal human being, and yet, by merely omitting to include in their activities something which is essential in this sense, the schools fail to fulfil their functions; they are negatively instead of positively non-functional. Our schools today may not aim at producing pick pockets, but by failing to deal adequately with the problem of education as a whole—by omitting for instance, what is essential to proper ethical education—they are in fact creating juvenile delinquents in terrifying numbers. To fulfil their proper purposes, and to realize their functions, schools, colleges, and universities cannot be satisfied with producing partially educated graduates. Failure to educate wholly, is failure to educate properly.

An educational system, then, if it is to realize fully its functional purpose, must be organized—as Coleridge described organization—so that each of its parts and the system as a whole are at once ends and means. The term "parts", in this sense, refers not only to the various schools and colleges which constitute the system, but to their curriculums and methods of teaching. Every part, in this broad sense, must contribute to, and in no way interfere with, the realization of the system's function.

Organization. Every activity and every enterprise, including of course that of education, can be analyzed not only in terms of purpose but also of methods used in trying to fulfill them.

Method may be defined in its broadest sense as the procedure followed in doing anything—the way or manner in which a thing is done.

All methods, like all purposes, may be divided into two categories, *organized* and *unorganized*; into processes which reflect prior thought and prior planning, and so can be said to be organized; and into activities which are impulsive, thoughtless, disorderly, planless, and so unorganized.

Organization in its most fundamental sense is the act of planning every part, every activity, and every thing essential to the fulfilment of a chosen purpose more efficiently than if the parts, activities, and things used to conduct the enterprise were unplanned. Organization is a cause of which efficiency in the fulfilment of purpose is the effect. We organize, however, not for the sake of efficiency but to ensure that the intended purpose becomes in fact that purpose which is realized. Efficiency enters into it merely to ensure that the purpose intended is realized more rapidly in point of time, and less wastefully in point of costs in labor and materials.

All this applies to an educational system as it applies to enterprises and institutions of all other kinds.

Organization is an immensely complex problem, of which the organization of administration is only one part. To avoid a detailed discussion of school administration, as the school system is now organized, we shall confine ourselves here to what seems to me the three most important organization problems which education faces at this critical time: the organization of curricula which, at every stage in the system, will contribute to the realization of the humanization of mankind; (2) the organization of a system of education which includes every institution and every kind of "school" necessary for the fulfilment of that function; and (3) the organization of teaching so that it too contributes to the realization of that end. What study of organization for the fulfilment of function reveals, in contrast to study for the mere administration of schools, is that we shall have to include, or if already used to some extent, utilize, teaching methods the importance of which are now minimized because

they aim at character-building and not at the acquisition of techniques and knowledge; we shall have to include institutions like the home and the culture which are not "schools" at all in the conventional sense of the term; and finally we shall have to include in our curriculums, disciplines (I prefer that term to subjects, if the term problems is to be eschewed), which are almost completely ignored in present day curriculum-building.

The consideration of organization, however, involves a danger—the danger that we develop an organizational disease I have called Institutionalism. With Institutionalism, means and ends are inverted; with Educational Institutionalism the student body exists for the benefit of the institution, not the institution for the benefit of the student body. The efflorescence of courses dealing with administration in the best teachers' colleges in America, is a symptom of this disease. In schools and colleges suffering from this educational disease, the principal or president who devotes himself to administration is more important than the deans in charge of teaching; the administrative staff is more important than the teaching staff; the administrators have not only greater prestige, they are also better paid than the teachers!

If this educational disease is to be avoided, organization must never lose sight of function. And since organization is in itself a means to, and not the end of, education, those who devote themselves to it—though essential in the conduct of over-large schools—are in fact less entitled to prestige than those engaged in teaching. Ideally, of course, the administrator and the teacher should be one and the same. But this would be possible only if decentralization were to replace centralization of schools and colleges, and administrative problems reduced to a minimum. In the one-room school of rural America, before the movement for centralized schools urbanized them, the one teacher was also the one administrator, and organization and teaching became, in the words of Coleridge, "at once, end and means."

One digression is called for before this definition of organization is ended, but its importance justifies the space I shall give it. I have said something about costs in the discussion of the

part efficiency plays in the organizational problem. Costs are important in education even in rich America. As the system has become more and more centralized, and as schools at every level have become larger, costs per student have mounted to fantastic heights. But costs in America, important as they are, are unimportant in comparison with their importance in poverty-stricken India. If a system of education on the Western pattern, to which India aspires for its half million villages, is to be created, it may take many decades to install a "modern" school in every village. While to equip India with an adequate system of higher education on the Western pattern, might take even longer.

However, consideration might well be given to the possibility of dealing with this problem by a revival, and modernization of, the ancient Indian *gurkula* system. With this system, a single competent teacher—the guru—could organize the teaching of 150 or more students. This system called for a hierarchy of student-teachers. As the students advanced from "grade to grade", they devoted part of their time to the teaching of the students in the grades below them. The *guru* himself, aside from checking on what was taking place in the lower grades, devoted himself only to the teaching of those in the highest grades. He did not, so to speak, waste his time on the most elementary kind of teaching.

The system has two obvious advantages: it costs very little in comparison with the system we have developed in the West. Even more important, it forces the student to master what he has learned in order to pass it on to those he is called upon to teach. Enlisting him in the task of teaching, is the best kind of review of what he has learned; and gives him a far better goal than just passing an examination—the goal of being able to teach what he has learned to those younger than himself.

Even in higher education both these advantages would continue. Professors with doctoral degrees would not devote themselves to teaching freshmen and sophomores. Doctors would teach masters; masters teach bachelors; bachelors teach seniors; seniors, juniors; sophomores, freshman. At all levels, it would mean substituting for the present factory system of "mass" education, with one teacher trying to teach a whole

class, what amounts to a tutoring system, with teacher-tutors available at no cost to provide a tutor for every two or three students.

For the West, this suggestion may seem outrageous, in spite of its obvious possibilities for both better teaching and better learning. But for India, it seems to me a possible solution for what is now—with the Western system and with the resources now available—insoluble.

CHAPTER V

THE ORGANIZATION OF THE CURRICULUM

To everything is a season, and a time to every purpose under the heavens. -- Ecclesiastes, 3: 1.

The times are rotten ripe for new practices in education. — R. T. Fleweling, "Twentieth Century Philosophy," 1943.

The first and most important task of education, I hope I have made clear, is not enculturation; it is not the task of adjusting and preparing the young for life in the culture in which they happen to be born; it is not instructing them today in techniques and equipping them with knowledge which will enable them to "earn a living" in the industrialized civilization which has spread from England all over the world.

The first and the most important task of education, is to humanize humanity—to "educate" the population everywhere as nearly as possible into normal human beings. This fact must dominate consideration of the content of education; it must dominate our consideration of the organization of the curriculum—the curriculum, which so far as the school and college goes, is to provide that content. It is here that there is most disquiet among educators. And it is here, therefore, that we must first seek for what may be wrong, or what may be missing, in education today.

Diagnosis of this problem, and prescriptions for its resolution, go back to the very beginning of thinking about education. Socrates and Plato and Aristotle wrestled with the problem in ancient Greece. And since their time, every thoughtful student of the problem has in one way or another accepted the idea that education must "educate the whole man." But if this principle expresses the truth about the curricular problem, then the curricular organization which educates a part of man only, however effectively, is not a partial but a total failure.

The real curricular problem is therefore less a matter of diagnosis than of prognosis. It is at the point of organizing a

CLASSIFICATION OF EDUCATION OF ALL KINDS

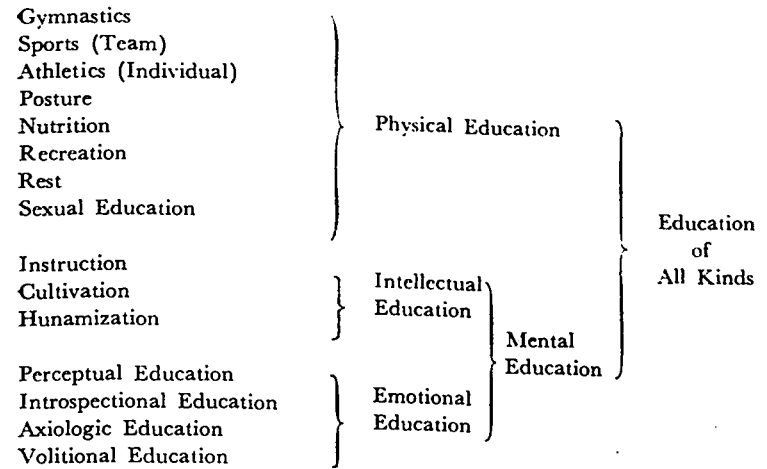


CHART I

curriculum to educate the whole man that the problem lies. It is my contention that curricular dissatisfaction today is due not to our ignorance of the principle involved, but failure adequately to define what we mean when we glibly speak of "the whole man". Failure to organize the curriculum to implement this principle begins with failure to define the nature of man.

It is an absurdly inadequate disposition of the curricular problem to say that the curriculum should create "a healthy mind in a healthy body." It is an even more absurdly inadequate way to dispose of it by saying that it should "teach the individual to think." The whole man is much more than a thinking machine. If a choice must be made between these two methods, the first is preferable because it does happen to be true that education as a whole has to be physical and mental. But the education of the mind is much too complex a problem to be disposed of by the phrase "a healthy mind". A perfectly sane man can be very badly educated; he will have a healthy mind but it will not be a very intelligent one.

But even the education of the whole man is not the whole of the problem with which the organization of the curriculum must deal. The educational problem in its wholeness is twofold: the education of the individual, and the re-education of his culture. Both must be taken into account in curriculum-building. I have, however, so far stressed the education of the individual because, if the individual is rightly educated, he will have learned what part every individual—and particularly the professionally educated individual—must play in the re-education of his culture.

Physical Education. Those who assume that the answer to the problem is "teaching the individual to think," plainly ignore the fact that there can be no education of the whole man if physical education is left out. It is sufficient for our purposes at the moment to record the fact that it must not be left out, but at the same time to emphasize the fact that "gym" and sports are poor substitutes for the sort of physical education which will prepare the student to deal with whole of his psycho-physiological problem. What this basic problem makes clear is that

physical education which is limited to exercises, sports and athletics, is inadequate; that physical education must include, for instance, useful, productive and creative work. The arts and crafts movement, and of course rural life, are rich in curricular suggestions for the right kind of physical education. It is interesting to note that in Gandhi's concept of basic education, useful work was an integral part of the educational curriculum.

Mental Education. The second basic area of education is inadequately defined by saying that it should educate the mind, and even more inadequately by saying that it should educate the intellect. There are two great areas of mental education so important and so different that they call for distinct approaches in the organization of the curriculum, (1) intellectual education, and (2) emotional education.

1. *Intellectual Education.* It is merely stating an obvious truism to call attention to the fact that it has been the cultivation of man's intellectual powers that education, from the beginning of its development as a profession, has primarily devoted itself. Yet it is equally obvious that if man is to be wholly and not partially educated, all his mental faculties must be cultivated. Curriculums today are organized as if man's mind consisted of an intellect alone. Yet if adequate consideration is given to what we know of psychology today, and particularly to the contributions which Freud and Pavlov have made to our understanding of the enormously important part which the unconscious mind plays in all of our activities—is plain that education of "the whole man" is ignored when education is intellectual only.

2. *Emotional Education.* Of the mental faculties, if the concept of wholeness is not to be ignored, none is obviously more important than that which is the source of the feelings of love and hate, of fear and rage, of antipathy and sympathy. Emotions cannot just be taken as given. Man, it is true, inherits the faculty of feeling pain and pleasure; these responses to his sensations are inborn, not acquired; they are instinctual reactions, not the products of learning. But all his other emotions are learned; they are susceptible of cultivation; they must be educated if he is to live like a humane and not a bestial being; they

must be taken into account in curriculum-building if the principle of wholeness is to be observed. There are at least four kinds of emotional education which ought to be taken into account: perceptual, introspectional, axiological, and volitional.

a. Perceptual Education. In trying to define emotional education so as to provide ourselves with a frame of reference for curriculum building, we find ourselves breaking new ground in form, if not always in substance; in terminology, if not always in content. In assuming in curriculum-building that man has only one mental faculty which needs education, and that one intellectual in nature, we underestimate the enormous significance of the fact that he perceives before he reasons. Important as is the part which the intellect plays, the validity with which it plays its part is wholly dependent upon the validity of man's perceptions. These perceptions can and must be educated if the whole man is to be made a genuinely rational, rather than a merely rationalizing, animal.

b. Introspectional Education. The data with which the intellect deals does not, however, consist of percepts alone. In spite of the prevalence of the belief that all knowledge begins in sensations only, education dare not ignore the fact that an enormous part of all the concepts with which the intellect deals consists not of percepts, but of what I have come to think of as incepts and introspects—concepts which cannot be traced to the operations of any of man's five senses; that do not originate in sensations but have their source in institutions and inferences in which the senses play no part. As I hope to prove, introspection is just as susceptible to cultivation as is perception. Curriculum-building, if it is to educate wholly, must take introspectional education into account.

c. Axiological Education. Emotional education, if it fails to include axiological education and the cultivation of values, becomes the cultivation of methods of stimulating action without the cultivation of the direction at which the methods should aim. If axiology is ignored in curriculum building, not humanization but mere indoctrination and enculturation is inevitable.

d. Volitional Education. Finally we come to volitional education, to the cultivation of that mental faculty which I am driven to call the will in spite of the predilections of modern psychology for treating it as if no such faculty existed. The fact is that all human action above the level of unthinking impulse and unthinking habit involves the making of choices, and when choices are acted upon contrary to habit and contrary to impulse, what is exercised is the faculty traditionally called the will.

That the will can be and is cultivated, is demonstrated every time man acts contrary to instinct. He instinctively shrinks from danger. Putting him in a uniform, giving him a rifle, and calling him a soldier, does not eliminate his inborn tendency to fear. But by drilling him, (which is but another word for educating him), we can make him ignore his fears and face dangers even when he is fully aware of the fact that they involve the risk of death. What is true of the education of the will of the soldier, is true with regard to all men's actions in which the will is or should be exercised. Education of the whole man plainly calls for inclusion of education of the will in the task of curriculum building.

It is a mistaken interpretation of my meaning to construe these four kinds of education as subjects or specialties that call for special courses in which they are to be taught. That would intellectualize all of them; they are already recognized intellectually in such courses and subjects as psychology and anthropology, philosophy and esthetics as material to be added to the student's stock of intellectual knowledge. But they are not recognized as practices to be acquired and habits to be embodied in all of the student's activities, and so are ignored as elements essential if emotional education of the right kind is to be provided. What is called for is not additional courses, but different treatment of existing courses.

Emotional education, of either the right kind or the wrong kind, is involved in every course which is taught. It is involved not only in what a teacher says, but in the way he says it. It is involved in his very bearing before his students, in all his relations with them, in the problem of disciplining them, in what is

demanding of them when they enter the classroom, in the way they address the teacher, and treat one another. Traditional rites and religious liturgies have been developed for the purpose of arousing desired emotions. Everything which takes place in a school, from the lowest to the highest level, must be in effect ritualized for the purpose of the right kind of emotional education.

As we shall see, when we come to the consideration of the basic problems of man and society in which all these areas of education are involved, the situation calls not so much for additions to the curriculum as for their incorporation in every course and every activity in school in which they are involved.

CHAPTER VI

PHYSICAL EDUCATION

The good soul improves the body.—Plato, in "The Republic."

What Plato said long ago, that "the good soul improves the body," was a prescientific formulation of what science has now come fully to accept, that soul and body, or mind and body if one prefers to avoid the use of the word "soul", are inter-related to such a degree that modern medicine is becoming less and less "Materia Medica" and more and more "Psyche-Somatica."

Physical education, little as it has to do with the classical liberal arts tradition, is an accepted part of the curriculum at every level of schooling today. For the most part, however, it takes the form of calisthenics and gymnastics, and competitive sports and games of various kinds. But this is again a failure to recognize the educational problem in its wholeness, a failure to see that the problem of maintaining health and of teaching the maintenance of health is not solved by muscle-building alone.

This conventional approach has been severely criticized by F. Matthias Alexander,* and especially with regard to women by Anthony M. Ludovici**, and by many educators who deprecate the fantastic lengths to which competitive sports have gone in both schools and colleges in the United States.

Alexander has roundly condemned many of the exercises which are used in our schools. The right kind of physical education, he insists, calls for teaching the individual how to walk, how to sit down and rise, how to stand and how to sit, and not only how to hold his head but specifically how to hold it when

* "The Use of the Self," by F. Matthias Alexander, with an introduction by John Dewey.

** Anthony M. Ludovici is an English sociologist who has written extensively on this subject. His criticism of the present programme of physical exercise, particularly as it relates to girls and young women, will be found in his book "The Truth About Childbirth".

speaking. If this kind of physical education were made an essential part of every course and every activity in school, time now devoted to exercises could be greatly reduced; while if it were incorporated in arts and crafts—in singing and dancing, and in the study of manual crafts—the time devoted to sports and athletic competitions could be with profit reduced.

Alexander's emphasis has been on posture, in contrast to muscle-building exercises, and this is an interesting endorsement of the emphasis *hatha yoga** places on *asanas*. The way students walk and seat themselves, for instance, if Alexander is right, is more important to the maintenance of health than gymnastic exercises; and the way they breathe similarly more important if *yoga* is right.

Alexander's condemnation of excessive muscle building and excessive devotion to athletics in schools and colleges, is supported by all those educators who have come to recognize that physical exertion at this period in excess of what will normally continue during mature life, results in "athlete's heart" and other physical defects which make for illness and premature death. Ludovici condemns all the violent sports and games in which girls in school and college are now taught to indulge, and furnishes evidence which it is difficult to ignore about its effect upon the pelvic structure and all the muscles and organs used in child-bearing. If he is right, it is a crime to prescribe identical physical education for men and women. Both sexes need exercise, it is true, but those for women should take into account their maternal function, while those for men can obviously be more strenuous.

Equally important to physical education is adequate instruction in the newer knowledge of nutrition. This calls for much more than instruction in the elements of nutrition; it calls for a course of right-education to offset the gross mis-education (I should say shameless and inexcusable lying) which ignores the harmful effects of the use of modern industrialized and chemicalized foodstuffs. It would take us far afield to go into details

* *Hatha Yoga* is the first of the six forms of *yoga* described in Patanjali's class system. *Asanas* are postures designed to develop all the parts and organs of the body.

about this, but if the school is to be an institution devoted to "the truth, the whole truth, and nothing but the truth," the truth should be taught about white rice, white flour and white sugar; about the cumulative effect of the ingestion of minute quantities of toxic chemical preservatives, and what it means to eat hydrogenized fats and similar processed and chemicalized foodstuffs which are lacking in essential minerals and vitamins. As Sherman* has made clear, the evidence is conclusive that only by eating whole foods can mankind be certain of obtaining the minute quantities of the trace-elements essential to the maintenance of health.

One thing of outstanding importance I must mention because of its peculiar importance during the period the young are in high school and college: sex education. There is already a considerable amount of sex-education in many American high schools; there are some very good texts for use in the courses dealing with the problem. But again it does not go far enough. It should not be merely a description of an aspect of life about which the young are to be informed, just as they are informed about geography and history. Sexual education must be *normative*, and not merely *descriptive*. It should aim at providing them with a regimen for dealing with this tremendously powerful instinctual drive. If no good regimen is provided, they will adopt a sexual regimen of some sort clandestinely, and this is almost certain to be a bad one.

The problem is not only psycho-physiological; it is also moral and religious. There is still a great deal of Puritanism in many families and religions, and Roman Catholicism, curiously enough, is in this respect the most Puritanical of all the Christian denominations. With Puritanism, innocence is equated with ignorance, and all sexual knowledge is considered shameful. This fact creates one of the difficulties for secular sex-education, for in teaching what is the present day scientific

* Henry C. Sherman, of Columbia University, is one of America's greatest authorities on nutrition. In his book "The Chemistry of Food and Nutrition" he refers to the norm applicable to this matter as the "principle of natural and nutritional wholes."

consensus about its truth, the educator has to take into account the rights of the student's parents as the true guardians of the young. In this area of his teaching, as in all others, the educator must avoid driving a wedge of hostile feeling and behaviour between the student and his parents. Obscurantism, however, must be avoided; if the parents do not believe in evolution, the teacher's obligation to teach the truth is greater than his obligation to respect the ignorance of the parents. There is no reason why the truth about evolution should not be taught merely because the parents take the Biblical account of creation as literal truth; fundamentalist Christians should not send their children to a secular school.

So in the case of sex education. Since the truth must be taught, all that can be done is to forewarn the parents and to give them an opportunity to send their children to a school which teaches what they want the child to learn and not learn about the subject. This whole difficulty makes it doubly important that what is taught in secular schools is in fact demonstrable truth. But it must be not only scientifically but also morally, the demonstrable truth. Masturbation, for instance, many psychologists insist, is not an act which should be condemned; they maintain that it is a normal form of behaviour, at least for young males. Yet the fact that nature provides for any excessive development of seminal fluid by means of nocturnal emissions, makes it dubiously valid to provide boys with rationalizations for impulsive action in this matter. Similarly, sexual relations between boys and girls in high schools and young men and women in colleges is a fact, and will still remain a fact however fraught with danger, particularly for girls, until the sublimation of this tremendously powerful impulse and overwhelming temptation is made a part of the education of every student. The danger of a superficial approach to sex education is that its moral aspects may be ignored and only its physical aspects taken into consideration.

The problem of physical education is plainly not a simple one. If the whole man — and woman — is to be educated, it must include not only these neglected aspects of the subject;

it must make a distinction between physical education for men and for women; it must be co-ordinated with the student's emotional education; it must introduce him to the study of the whole psycho-physiological problem, including its four most important aspects, eugenics or beautiful birth, eugenics or beautiful living, eugenics or beautiful aging, and eugenics or beautiful dying.

CHAPTER VII

INTELLECTUAL EDUCATION:
INSTRUCTION versus CULTIVATION

Shall I tell you the secret of the true scholar? It is this: Every man is my master in some point, and in that I learn from him.—Ralph Waldo Emerson, "Letters and Social Affairs: Greatness."

To realize the ideal of educating the whole man, the mind must be wholly, and not partially, educated.

To realize the ideal of educating the whole mind, not one but all the mental faculties must be developed, of which the intellectual faculty, important as it is, is only one.

In spite of this fact, when curriculums are examined, it becomes plain that the education of the whole mind is almost completely ignored; curriculums are organized on the assumption that the mind consists of an intellect alone; that man is a reasoning animal only, as if the fact that he is an emoting rather than a reasoning animal was not one of the best demonstrated of all scientific truths. We begin with consideration of intellectual education, not because it is the only important kind of mental education, but because it is to the education of the intellect that the modern educational curriculum almost entirely addresses itself.

At the very outset, two important distinctions must be made: the distinction which French educators make between instruction and education; and the distinction made in the opening chapter of this book between the education of the elite and the education of the masses of the population, between the education of the highly educable minority which is able to benefit from higher education, and the education of the masses whose educability intellectually—or as it used to be called, academically—is strictly limited.

In this study, since the word education is used to refer to every aspect of education, we shall substitute for the word education as the French educators use it, the word cultivation. The distinction on which they insist then becomes that between (1) instruction, and (2) cultivation. In considering both these aspects of intellectual education, we shall distinguish between instruction for the elite and instruction for the masses, and cultivation for the masses and cultivation for the elite.

1. *Instruction*, Most of what I think of as education of the intellect in the modern curriculum is devoted neither to cultivation nor to humanization, but to instruction. We have developed instruction today until it has become in our schools for teachers and our schools of education, a sort of science. From the elementary school to the university, instruction consists mainly of equipping the student with facts and formulas, data and techniques. The teaching of reading and writing is education of this kind—it equips the student with a technique. But so is the teaching of medicine, of law, of engineering—it equips the medical student, the student of law, and the engineering student with the facts and formulas he should know, and the techniques for using this knowledge.

Adjustment of the student to living in our industrialized, urbanized, specialized, and technicized society does, it is true call for vocational instruction. Even when the merely symbolic disciplines are taught, they are taught primarily as instrumentalities to make vocational instruction more effective. The student is taught to read and write not because this opens the door to knowledge and wisdom, to the enjoyment and the riches to be found in books, but because reading and writing are essential if he is to earn a living at anything above the most animal-like kind of manual labour.

At every level of schooling today, even the highest, instruction predominates. The medical student, for instance, is provided

* French education still reflects the idea which Ernest Renan, (1823-1892), expressed when he said that there was terrible danger in organizing a system of education which provided "a considerable popular instruction without any serious higher education."

with facts about the bones, the tissues, and the organs of the human body when he studies anatomy, and facts about the digestive system, the vascular system, the respiratory system, the generative system when he studies physiology. And these facts, for the most part, he studies in terms not of health but of disease, because the profession for which he is preparing himself is devoted to restoring the sick to health. All this, even though it takes place in a university, is still instruction as that term is here being defined. It is education addressed mainly to the intellect, though training in manual skills becomes a part of medical instruction in so far as surgery, for example, is called for by the formulas prescribed for dealing with accidents and with diseases of various kinds.

The parallel between vocational instruction for the professions and vocational instruction for the crafts—for a craft like printing, for instance—is exact. The printer has to be able to read and write, but he also has to master the manual skills of his craft; and every craft, even such a craft as bookkeeping, has some kind of manual skills which have to be mastered.

Instruction, whether professional or commercial, industrial or agricultural, calls inescapably for specialization. Each vocation and each body of knowledge, becomes a speciality of its own, and each is taught as a special subject, in a special course, by specialized specialists. In contrast to what is called for in educating the whole man—educating *homo sapiens* in contrast to *homo faber*—instruction today is primarily intellectual education.

It is, of course, an enormously important part not only of intellectual education but of education as a whole. I want to emphasize this as strongly as I can. I do not want to be thought of as minimising its importance simply because I am insisting that our neglect of other aspects of the education of the whole mind is so disastrous. Vocational instruction is important because it is an essential means to living, particularly in our modern specialized world. But it is a means only, and means will be properly utilized by man only if he is taught the ends for which the means should be used. It is the ends which are involved in cultivation and humanization, and it is to this

neglected aspect of curricular organization today that I particularly address myself.

But first something must be said about instruction for the masses and instruction for the highly educable elite. Both, of course, must master the essential symbolic disciplines. Instruction in the three disciplines, "reading and writing and arithmetic", is something which everybody must receive. But long before the end of schooling, the academic sheep can be distinguished from the academic goats, and from that moment instruction for the mass must be different from for the elite. The elite must be permitted to move ahead as rapidly as their talents permit; *it is a social and educational sin to hold them back in the name of a false Egalitarianism.* It is, however, not only an injury inflicted upon the educable elite, it is also an injury to the academically ineducable mass. Instead of boring the "ineducable" into truancy and delinquency, they should be instructed in the crafts, challenged by the difficulties of mastering them, and made to feel pride in what they can do well, rather than inflicting upon them the humiliation of requiring them to pursue academic studies for which they are intellectually or temperamentally unfitted.

It is at this point that the ideal of the education of the whole man collides head-on with the acceptance by the modern world of the industrialization of every craft and every field of production. If every man is to develop his potentialities to the utmost, his work must not be work which actually frustrates him. To condemn a potentially skilled Kashmiri artist and craftsman to working on the assembly line of an automobile factory or to the routinized clerical work of a big commercial office or government bureaucracy, is to blight him spiritually.*

This is one aspect of education today which, if the whole man is to be educated, calls upon the teacher to transcend his work in the classroom. To deal with this problem he must become a leader in the revival of the art and crafts; he must condition not only his students, but the public generally, to

* To explore this problem adequately would lead into a digression which I must resist; I explored the problem at length, over thirty years ago, when I wrote "This Ugly Civilization."

loathe the vulgarizations of modern industry; to cultivate in everybody (beginning first of all with himself) a love of those innumerable forms of beauty which do not lend themselves to mass-production, and so create a revival in the demand for the products — and the performances — of the manual craftsman and the manual artist. Mass-production must be limited to its proper function. To use it to fabricate electric wire and steel pipe, is to use it properly. To use it to produce any product in which artistry is involved, is to promote the degradation of labour; it is to stultify the potentialities inherent in the masses who have academic and intellectual limitations, but who could live useful and happy lives if a demand were created for what they could produce as artist-craftsmen, and their artistry and craftsmanship developed to the utmost.

With his amazing insight, Mahatma Gandhi sensed all this, and what he called basic education — while from my standpoint an inadequate expression of the idea — is an attempt to provide instruction for the masses in contrast to the present attempt to provide a uniform, low, dead level of instruction to everybody.

Pushed to its fullest implications, this would probably call for a revival of education by apprenticeship, and for the restriction of schooling above the level of the common school to those who are academically educable to an unlimited extent. It would probably mean a completely new approach to the organization of the high school curriculum, particularly in America, where vast masses of students, whose personalities are positively injured by being forced to stay in high schools, would be educationally provided for outside of the present formal school system.

2. *Cultivation.* What we have been doing in trying to make everybody into the robots* for which mass-production furnishes employment, and the specialists required to operate an industrialized society, has been to substitute an *instructed*,

* From Franz Kafka's famous play, "R.U.R." Kafka, (1883-1924), was a Bohemian novelist and dramatist. Robots were imitations of human beings manufactured in a great factory, each robot being able to do one kind of work only.

for a *cultivated*, elite. The result has been to create a society rich in proficient and competent men, but poor in cultivated and cultured men. The distinction is real and it is important. With instruction, information and "know-how" are primary; with cultivation, evaluation and good taste.

Liberal Education. There is no substantial difference between what is here called cultivation and what used to be called liberal education. From my standpoint, when American education began to abandon liberal education for scientific education, what was in fact being abandoned was the cultivation of the highly educable minority for the fulfillment of the role which they ought to play in any genuinely humanized society.

The change in American higher education from the ideal of liberal, to the ideal of scientific education, was responsible for the issuance of an impressive report by the Carnegie Foundation for the Advancement of Teaching in 1956. The report took at face value the fact that the liberal arts were still a part of the curriculum of most American colleges. They still are today. But the liberal arts and the humanities, unfortunately, have been reduced in most colleges to mere specialities. Philosophy, for example, is no longer philosophy in any meaningful sense of the term. Over a century ago, when the handwriting on the walls of our educational institutions was discernible only to someone with the prophetic vision of Thoreau, he said: "There are nowadays professors of philosophy, but not philosophers." What the rightly educated man needs is not an academic introduction to the great historic schools and the great historic figures of philosophy, but a philosophy by which to live. This is essential if we are to produce that properly educated minority of cultivated men and women without which the humanization of mankind is impossible. A few courses from the traditional liberal arts, still required so as, at least, to make obeisance to the ideal of general education, will not provide such an elite.

A liberal education — cultivation, in my terminology — the Carnegie report maintained, should seek to instill in man knowledge of himself, of others, of mankind's achievements and heritage; it should promote in him the capacity for clear

and rational thought, and encourage in him a sense of curiosity, criticism, judgment, and tolerance. This is admirable. But to realize this the liberal arts must be taken much more seriously than the report suggests. In the race for "practical" knowledge, for specialized training, and for vocational success, these broad objectives have been lost, with the result that even in institutions which boast of being liberal arts colleges, where one might expect the liberal arts to flourish, they are neglected. "There is no reason," the report says, "why the specialist should not or cannot be an informed and cultivated citizen." There certainly isn't, especially if Robert M. Hutchins is right in his statement in a recent book that "the waste and frivolity of the educational system are so great that it would be possible through getting rid of them to give every citizen a liberal education and make him a qualified specialist, too, in less time than is now consumed in turning out uneducated specialists".*

To produce the highly cultivated minority which is essential to the humanization of the whole population, much more than a mere revival of the traditional liberal arts curriculum is needed. In that curriculum, not only is philosophy inadequately dealt with, but so are the arts. Literature is, of course, featured; tradition calls for that. But music, and the plastic and graphic arts are neglected. *Even worse, what remains of the liberal arts curriculum aims at producing appreciative, rather than creative, men.*

What is needed is a curriculum which will produce not only a minority which reads great literature, which appreciates

* This sweeping statement, coming from one of America's most distinguished educators, is a statement of the utmost significance. That the system is full of waste, for both students and faculty, and that it is burdened with frivolous courses of all kinds, is perfectly true. Dr. Hutchins is right in maintaining that if this waste and frivolity were omitted from the curriculum, both competent specialization and liberal education could be provided in much shorter time than is now devoted to producing partly educated specialists only.

But I find it necessary to record a caveat about his statement that it is possible to provide this to "every citizen." I believe the evidence that only a minority of the whole population is educable to the extent demanded by the cultivation of the liberal arts, is incontrovertible. Some degree of good taste can be cultivated in everybody, and some philosophy of living given to all, but that everybody can become, in the classic meaning of the term, a liberally educated man is, I am convinced, not true.

music and painting, but also a minority which is able to write, in the language of the past "clearly, forcibly, and elegantly", at least the kind of letters and journals which most educated men wrote before the Industrial Revolution. But even this is not enough. It must produce a minority of amateurs with a mastery of many arts, including many individuals who have a professional mastery of particular ones. The arch-model of such an artist was Leonardo da Vinci who was not only a painter, but also an engineer; the arch-model of a writer, Thomas Jefferson, who could not only write an essay such as the American Declaration of Independence but who was also an engineer, a gardener, a farmer, but above all else, both a social philosopher and a philosopher of living.

Philosophy. If cultivation is built into the curriculum for the purpose of producing whole men, philosophy — but not mere academic philosophy — must become central to all intellectual education; it must be considered more important in curriculum building — and given more prestige — than any kind of instruction, including that in any of the sciences. Philosophy must become an integration of all knowledge and wisdom, an essential prerequisite for rational and humane resolution of the problems with which every man is confronted by life. It must not only make him familiar with the history of philosophers, and their philosophies, it must equip every student with a philosophy by which he will live.

If philosophy is to contribute its share to the humanization of mankind, it must not be approached from the standpoint of intellect only; it must be dealt with, as we shall see, emotionally. It must be emancipated from the epistemological curse with which Kant infected it; it must not only acquaint the student with Epistemic values, it must make him feel them. It must not only make him understand intellectually the nature of the values essential to living like a normal human being, but it must also cultivate in him a love of truth and hatred of error, a love of beauty and hatred of ugliness, a love of goodness and hatred of evil, a love of devotion to the humane in life, and a hatred of purposes which are bestial in nature.

This part of the curriculum for intellectual education must include sensitizing his epistemic, telic, esthetic, and ethical potentialities; it must include equipping him with criteria for the evaluation of these values; it must include the cultivation of a conscience which makes him react to all his experiences in life as a thoughtful, considerate, courageous and dedicated human being.

Ethics. Ethical education must be stressed in this connection. The wholly educated man must be a moral and not amoral person. This must be born in mind when cultivation is discussed. Many highly cultivated men — even geniuses — are not morally wholesome persons. They may not have become criminals, but the very fact that great geniuses in the past were not merely highly cultivated but highly creative persons, has been used to justify amorality. The slogan “art for art’s sake” can be used to justify complete indifference to moral considerations. Highly cultivated men like Wilde in England, Proust in France, Ovid and Catullus in ancient Rome, were highly cultivated men, but decidedly unwholesome persons. Lenin and Trotsky in Communist Russia, Goering and Goebbels in Nazi Germany, were cultivated men, but they were grossly inhuman none the less.

Integration of Knowledge and Wisdom It is into the part of the curriculum devoted to intellectual cultivation that the study of the basic problems of man and of society falls. The cultivated man must not only know philosophy academically, he must acquire an adequate philosophy by which to guide his own life, and this is what the study of these problems makes possible.

If higher education is to equip modern man with the knowledge and wisdom needed to deal with the problems with which life will confront him, its most difficult problem is the integration of the knowledge and wisdom scattered about in the arts and sciences, the religions and the philosophies not merely of its own nation or even its own culture, but of all the great cultures of the world. Integration of all this in some manner is essential for the reason that without it there can be

no assurance that the curriculum adopted will produce the wholly educated man. Yet integration of the knowledge in the courses of a single college in America alone, has baffled American educators. As a result, the graduates of our schools of business administration know almost nothing of what the graduates of our theological seminaries know; the graduates of our schools of medicine know equally little of what the graduates of our schools of arts and humanities know; the graduates of our schools of science and technology, know little of what the graduates of our schools of law or of our schools of government know, and *vice versa*. Subject-centered education, which is what education today has become, completely ignores this problem.

Of the need for integration there is general recognition among most thoughtful and concerned educators. But if the many efforts at meeting this need are carefully examined, it is not an exaggeration to say that what they seem to prove is the impossibility of integration. There are just too many subjects to be integrated. When an effort is made to find what is common to all the various subjects and specialities — common, for example, to electronics and theology — the net result is either something so abstract as to be virtually valueless, or a mechanical aggregation of necessarily superficial fragments from each subject, with proponents of each subject clamoring for greater recognition of the importance of the special subject which they are teaching.

Integration of every special field is, it is true, impossible; but integration based upon the basic problems of man and of society is not. Integration in such a frame of reference provides a rational means for excluding all those subjects and all those fragments of a subject which are not essential to an understanding of basic problems.

In the final analysis, every field of knowledge, every art, every science, every religion, and every philosophy has been developed for the purpose of resolving some one, if not all, of these basic problems. To deal with these problems, no attempt need be made to include something from every subject which is now included in our overloaded curriculums. If the problems are clearly defined, the individual is equipped with a

means for fitting everything that he learns — and every special subject that he studies — into its proper place in a total philosophy of living. That is what I mean when I speak of integration in terms of mankind's basic problems. What must be included in the curriculum dealing with the instruction and cultivation of the intellect, then, is a programme which will lead the student to make an objective and logical examination of his beliefs, his values, and his activities; and, if such self-examination shows that some of them consist of mistaken pre-judgments and prejudices, persuade him to abandon them and replace them with beliefs, values and programmes of action appropriate to living like a rational and humane being.

The basic problems of mankind with which every individual everywhere in the world is confronted — the problems which are universal and perpetual, and not local or momentary in nature — should be the basis for equipping the individual to meet the challenge of these challenging days. In contrast to parochial and immediate problems — problems which apply only to oneself, one's own group or one's own nation; which are only, of the day or week or month — these are the basic problems, the problems with which man has always had to deal, is dealing now, and will always have to deal. Solutions both of personal and of current social, political and economic problems, in the absence of clear comprehension of these basic problems, are more apt to be wrong than right, and to lead to mistaken, rather than to right action.

Such an addition to the curriculum, however, cannot be just one more addition to the thousands of courses now listed in our college and university catalogs. It has an entirely different purpose to fulfil. It must be set apart from all other courses in such a manner as to make certain that it fulfills the purpose intended. It must also underlie the planning of the curriculum in every level of education, but especially on the high school and the college levels. And it must be not only a course but an experience, both intellectual and emotional, in which every educable student takes part.

What a philosophy of life must provide, in contrast to the scholarly knowledge of philosophies which the usual courses

in philosophy provide today, are *principles of action*. "An army of principles," said Thomas Paine, "will penetrate where an army of soldiers cannot; it will succeed where diplomatic management would fail, it is neither the Rhine, the Channel, nor the Ocean that can arrest its progress; it will march on the horizon of the world, and it will conquer". To provide principles, the course must be normative and not merely descriptive; it must aim not at the cultivation of philosophic scholarship and erudition; it must aim at resolving the problems with which living confronts every human being, and with imbuing the student with the determination to live in accordance with the principles for which this calls.

The study of the basic problems of man and of society should begin the moment the student has developed an adequate level of understanding. It should be quite an important part of the curriculum in secondary education; a most important part of college education, and predominant in post-graduate education.

If the study of the basic problems of man and of society is used as part of a programme for cultivating the student — if it is used for the purpose of orienting him in his studies, for helping him survey the whole field of learning, for giving him a philosophical attitude, and above all, a philosophy by which to live — two problems emerge: at what level should study of all the problems begin, and which of the problems should be included in the curriculum on the primary and the secondary levels, assuming that all fourteen cannot be properly taught together. On the basis of my experiments, I suggest that (1) on the primary level, only two problems be used, the educational problem and the occupational problem; (2) on the secondary level, six of the fourteen: the educational, the occupational, the political, the anthropic, the ethical, and the psycho-physiological, and (3) on the college level, all fourteen.

The educational problem, I believe, is called for from the beginning as a means of making the student aware of what education of the right kind can mean for him; the importance of adopting a philosophy by which to live, (or if you prefer, principles by which to live), and how the study of these problems can help him to form such a philosophy.

The many experiments I have conducted with the study of these problems since the first course was given at the Graduate School of Theology at Oberlin University in 1940, have all been with adult and graduate groups. The problem of using them with under-graduates and with students below the college level calls for experimentation.

But for use in colleges — where they are most desperately needed because it is here that specialization is doing its greatest damage — I have two suggestions to make: one based upon the fact that at the beginning of his college career the student should be given a kind of philosophic chart and philosophic compass with which to guide himself in his studies; and the other upon the fact that in his last year of college work, he should make an intensive study of both the personal and social problems which will confront him after he graduates and commences his life in society at large.

What makes the problem difficult, is the problem of how to include such a course in the curriculum without making it necessary to eliminate subjects which are essential to the student's field of major concentration. The two suggestions I have to make take this difficulty into account.

Introduction to Scholarship. During the first year of college, at the very beginning of the student's, college career, I suggest that at least one whole week, and if possible two, be devoted to a sort of introduction to real scholarship and higher education. This would do for the students what survey and orientation courses now used in many U.S. colleges try to do in a course spread over either a full semester or a full year. The emotional impact of a week of such concentration, I have found in my experiments, is tremendous. And it would come before cynical fellow-students or indifferent instructors could dull the hopes and anticipations of the freshman student. The student could be introduced to all the basic problems at that time. If the week were properly organized to make the experience an inspiring one, the student would be provided with both a chart and a compass to help him in relating each of his courses to the whole field of learning. As a friend of mine at Ohio

State University once expressed it, "it would provide him with a series of fourteen boxes in which to file anything and everything he learns for the rest of his life."

Introduction to Wisdom. During the last year in college, much more time should be given by the student to the study of these basic problems. Their study should provide him with a humanized philosophy of living; it should introduce him to the wisdom of mankind as embodied in its arts and sciences, religions and philosophies; it should persuade him to try to deal wisely, and not merely impulsively or conventionally, with the problems which will confront him outside the ivory-tower world of the college classroom and college campus.

Since I am suggesting, in connection with emotional education, the devotion of a whole morning once a week throughout the whole period of college study to an inspirational service, I am going to suggest that the senior students, after taking part in the regular weekly service, devote the rest of the day to a seminar course in the study of these basic problems. As a matter of fact, my experiments indicate that the discussion of the problems can be made the central theme of the weekly inspirational service itself. If an outside lecturer makes the principal address during the service, he should not only be asked to discuss the basic problem which is up for consideration by the senior class that week, but should himself be selected because he can make an especially effective and especially inspiring contribution to its discussion.

Ideally, the necessary intimacy between teacher and student that is called for in such a course, can only be provided in seminars in which the number of students does not much exceed twenty. But if the senior class is too large to break down into such seminars, a lecture could be given to the whole class, stating the nature of the problem and the alternative ideologies developed for its resolution; the class then breaking up into small discussion groups, each with a competent leader, to discuss the problem intimately among themselves in seminar fashion.

In the right organization of the course, intellectual cultivation and emotional education become virtually indistinguishable. The presentation must be logical and scientific—it must be framed in terms of the reasoning faculties; but it will fail of its objective if the student is not made to feel as well as to understand, for the subject matter is not academic; the problems have to do not only with what he should think but with how he should live. All the means suggested in Chapter 9 for making emotional education effective, have a proper place in the conduct of the course.

This fusion of intellectual and emotional education was called for twenty-five hundreds ago by Confucius in ancient China when he said:

“If a man loves honesty but does not love study, his shortcoming will be a tendency to spoil or upset things.

“If a man loves simplicity but does not love study, his shortcoming will be sheer following of routine.

“If a man loves courage but does not love study, his shortcoming will be unruliness or violence.

“If a man loves decision of character but does not love study, his shortcoming will be self-will and headstrong belief in himself.”*

* From “The Meeting of East and West,” F.S.C. Northrop, The Macmillan Co., p. 324.

CHAPTER VIII

GENERAL EDUCATION

In India we have turned the University graduate into a waste-paper basket of odd bits of information. . . . Education in these days is not the “leading forth” of the inmost personality of man, but the imposition of cast-iron alien thoughts upon him. We are mechanised and regimented by it. . . . Our curiosity is satisfied. . . . We are walking frauds. We have intellect divorced from will, belief in ideals which are not beliefs in life. . . . modern man does not feel humiliated by the fact that his mind is divorced from speech, his speech from action. This two-fold divergence is accepted as inevitable — K. M. Munshi, “Bhagavad Gita and Modern Life.”

Before ending our consideration of intellectual education and turning to the problem of emotional education, a considerable digression is called for.

The unsatisfactory state, today, of that part of intellectual education which I have called cultivation, has been the point of origin of the movement for general education. The distinguished sponsorship for this movement; the character of the educators who see in general education the answer to the present unsatisfactory state of higher education, are such that the subject of intellectual education cannot be dismissed without considering what it is that general education has to offer. Before attempting to do this, however, it is necessary to go back to what has created the problem for which general education is supposed to be the remedy.

If we look back and ask ourselves, “What during the past hundred years has most radically changed the methods of educating mankind?” the answer would have to be, modern science.

Modern science dethroned religion and destroyed tradition. It secularized government; made the divine right of kings appear ludicrous; obliterated the distinction between nobility and

commonalty. It destroyed cottage and custom production and made the factory system supreme; it provided mankind with its present all-embracing machine technology. It substituted Capitalism for Feudalism, and if Marx proves himself a true prophet, is making inevitable the substitution of Socialism for Individualism. Above all, so far as moulding and shaping the generation to which we belong is concerned, it substituted the study of science for that of the liberal arts.

The purposes and methods of education have been transformed. Specialization has replaced humanization. From top to bottom, our schools have become pre-vocational and technical training institutions in which means are apotheosized; ends ignored. Physical science reigns supreme — a supremacy disputed only by business, administration. The study of the humanities, the liberal and fine arts, philosophy and religion, above all the whole field of ethics, has been archaized.

As a result it was possible for Dr. Henry P. van Dusen, President of the Union Theological Seminary in New York, to make this extraordinary, but unfortunately true, statement: "Right, morals, and ethics are almost wholly absent from the working vocabulary of this generation. Their lips would hardly know how to frame and utter these words; they are as foreign a speech as Swahili... This is not the silence of reaction... This is the silence of absence. These words and ideas have absolutely no meaning for them."

No wonder we of the free world are a generation unequal to the challenge of the times.

If science, as our educators still insist, is the answer to the problems of mankind, science has not been scientific. What the schools call science is too often nescience, or so largely nescience as to render the application of science to the problems of living maleficent. Our physicists and mathematicians, who are unquestionably the representatives of what is most scientific in the modern world, have hatched out atomic fission, and are now dumbfounded to discover that the generation upon which they have conferred this boon is utterly unequipped mentally and spiritually for the proper use of the knowledge and power they have placed in its hands.

It is the contention of this study that this tragic consummation of the Enlightenment, this strange denouement of our devotion to science, is due mainly to a dual educational sin: a sin of commission — concentration upon physics and technology; and a sin of omission — failure to put the study and development of the human sciences, (the mis-called "social" sciences), first. Of these human sciences, I rate some of those ignored by, and even unknown to, most social scientists — sciences like axiology and praxiology — as having an importance in inverse relationship to their lack of popularity.

Of these two great fields of learning — the physical and the human — our schools concentrate upon the less important. As a result we have made ourselves masters of the physical world, and rendered ourselves masterless of ourselves.

It is not technology, it is behaviour which is our problem. The sickness from which modern man is suffering, is neither economic nor political; it is philosophical. *What the graduates of our schools need is not more scientific knowledge, but more wisdom.* And wisdom, we must remember, is not a collection of physical facts or mathematical equations. Wisdom is the application to man's behaviour of that which is good, that which is true, that which is beautiful, and that which results in humane living. This is the positive aspect of right education. Negatively, if the sickness is to be cured, it calls for the recognition of evil, of error, of ugliness, of mistaken goals. The whole content and method of education must aim at the realization of these positive and negative ideals. If modern man is to be saved from his mistaken preoccupation with the material, a radical revolution in education is called for. Scientific knowledge must be treated as a means, not as an end. The scientific method must not be restricted to the mastery of physical techniques; the scientific method must be applied by a newly converted and envisioned generation of scientists mainly devoted to the normative study of the basic problems of man and society. Science must be made a means for the realization of the humanization of humanity.

Nearly half a century ago, as he recorded in "My Confessions", Leo Tolstoy discovered what is even truer today, that the study of what we call science has furnished no real answer to the real problems with which living confronts man.

"...My personal problem, 'What am I with my desires?' remained entirely unanswered. The sciences were very interesting, very attractive, but the definiteness and clearness of these sciences were in inverse proportion to their applicability to the questions of life: the less applicable they are to the questions of life, the more definite and clear they are; the more they attempt to give answers to the questions of life, the more they become dim and unattractive. If you turn to that branch of those sciences which attempts to give answers to the questions of life — to physiology, psychology, biology, sociology — you come across an appalling scantiness of ideas, the greatest obscurity, and unjustified pretense at solving irrelevant questions, and constant contradiction of one thinker with others and even with himself. If you turn to the branch of knowledge which does not busy itself with the solution of the problem of life, but answers only its special, scientific questions, you are delighted at the power of the human mind, but know in advance that there will be no answers to the questions of life. These sciences directly ignore the questions of life. They say: We have no answers to what you are and why you live, and we do not busy ourselves with that; but if you want to know the laws of light, of chemical combinations, and laws of the development of organisms, if you want to know the laws of the bodies, their forms, and the relation of numbers and quantities, if you want to know the laws of your mind, we shall give you clear, definite, incontrovertible answers to all that ... Experimental science gives positive knowledge and manifests the greatness of the human mind only when it does not introduce the final cause into its investigation. ... Experimental science need only introduce the question of the final cause, and nonsense is the result."

Nearly fifty years later, after a proliferation of science and of education which would have staggered Tolstoy, Sorokin,* in a book dealing with "The Crisis of Our Age", could say:

"The more economists have tampered with economic conditions, the worse they have become; the more political scientists have reformed governments, the more governments are in need of reform; the more sociologists have tampered with the family, the more the family has disintegrated... only after a reconstruction from top to bottom will the social sciences be real sciences, independent, subservient to no other values."

If we cease ignoring what Tolstoy said so long ago — and what Sorokin says to-day — a new approach is needed.

To what extent does general education provide an adequate remedy for the staggering problem which modern science has created for education? It is impossible to weigh the suggestion made in this study for dealing with this problem without stopping to consider whether programmes for general education may provide the integration which is called for.

In 1945, a committee appointed by the President of Harvard University to study this problem, finished what they said was really "A Study of American Education." The Committee's report was published in a book entitled "General Education in a Free Society". Within a few years this book went through a dozen editions. It is not only a comprehensive study of the educational problem; it is also a recommendation for dealing with what is wrong with it.

The Harvard Committee began by referring to the fact that since the outbreak of World War II, acute searching of the heart by those interested in education, had "precipitated a veritable downpour of books and articles dealing with education," and by calling attention to the fact that there was hardly a

* Pitirim A. Sorokin was head of the Sociology Department of the University of St. Petersburg before he came to the United States and became head of the Sociology Department of Harvard University. Most sociologists recognize him as the dean of the profession today.

university or college in America which had not set up a committee to consider basic educational questions and to make drastic plans for revamping their curriculums.

"General Education in a Free Society" has exercised influence not only upon American education; it has exercised real influence upon education in the whole English speaking world; is exercising influence here in India today.

The work is addressed mainly to professional educators. Although it is addressed to them, it raises questions which go far beyond the technical problems of professional education. Unfortunately in dealing with the educational problem only in terms of schooling, it has ingored the problem of the role of the school and the teacher, the college and the professor in a society which is so abnormal that adjustment to it is in effect adjustment to abnormality. With becoming modesty, the authors of the study admit that there is "something of illogic" in their failure to prescribe for the broader aspects of the problem, and in restricting themselves only to what the high school and college presumably needs to do.

But these critical times justify no such limitations upon serious consideration of the educational problem by professional educators. Typical of the consequences of this indifference to the broader problem is the fact that they call the study "General Education in a Free Society." While it is true that in comparison with Communist Russia, American society is still free, emphasis upon it as free ignores the fact that year by year it is less and less a society, in the words of Lincoln, "of the people, by the people, and for the people," and more and more a society of bureaucrats and politicians for bureaucrats and politicians. Just as fifty years ago professional educators were indifferent to the fact that at that time America was a society not of plutocrats, but certainly a society by plutocrats for plutocrats,* so today they are indifferent to the fact that

* Upton Sinclair, American novelist, social reformer and Socialist, spelled out the facts about this so far as education was concerned in two books which created a sensation at the time they were published, "The Brass Check," and "The Goose Step."

they are grappling with the problem of how to adjust the young to life in a society of power seekers, run by a power elite, for the benefit of those in places of power.

The authors of the report define education as two-fold. "Education," they say, "seeks to do two things; help young persons fulfill the unique, particular functions in life which it is in them to fulfill, and fit them so far as it can for those common spheres which, as citizens and heirs of a joint culture, they will share with others." Accepting this, they define the educational problem as that of "the right relationship between specialized training on the one hand, aiming at any one of a thousand different destinies, and education in a common heritage and toward a common citizenship on the other."

Then they say, "Illogically enough, such being its purpose, (this study) fails to deal with the primary school, and still more illogically, with infancy — surely the time of life when education is nothing if not general." Then they make this amazing statement about professors in connection with infancy, that period in life which modern psychology has proved so important in determining the mature individual's fitness "for those common spheres which, as citizens and heirs of a joint culture, they will share with others." "As for infancy", they say, "it is doubtful whether a group of professors would show at their best on that subject."

It is not surprising, therefore, that when they come to prescribe a solution for the problems which they so carefully analyze, they restrict themselves to what schooling alone should do, and even further, to what only high schools and colleges should do. The tremendously important period of infancy is ignored; primary education and adult education are both ignored. They ignore the home, which they admit plays an important part in education, and they ignore the culture, which they also admit plays an important part. Finally, since the high schools and colleges devote themselves almost exclusively to intellectual education, their recommendations deal only with this aspect of the whole problem of education. The fact

that the mind of the student does not function intellectually alone, but functions both intellectually and emotionally, is ignored, and the fact that he must be both intellectually and emotionally educated — if education is to deal with the problem of educating the whole man — is entirely ignored.

As a result of this conception of the educational problem, and of these restricted means for dealing with it, they ignore the possibility that no matter what improvements may be made in the curriculums of high schools and colleges, the basic problem of education may not be solved. As a matter of fact, they ignore the possibility that if the whole problem is not properly envisaged, their diagnosis of what is wrong in the high school and college may prove to be a mistaken one, and their prescription for solving the problem aggravate rather than correct what is wrong.

Analysis of the Harvard recommendations for curricular changes shows that while they will not make matters worse, they will not correct what is wrong.

Basic in their recommendations is a sharp distinction between courses aimed at the speciality in which the student will major and which he studies in preparation for his vocational and professional life, and those which are to equip him with a general education. Of the sixteen courses required for the bachelor's degree, they recommended that six should provide general education, and ten provide special education. It is at this point that they are confronted with the real dilemma of today's highly specialized system of education: the six courses recommended for general education are to be selected from a prescribed list of special courses in science, the social sciences, and the humanities. General education is to be imparted by a change in the specialities studied!

General education of this kind is a misnomer. To be general in any meaningful sense of the term, it must begin by recognizing that no mere change in the specialities studied will provide it. No collection of special subjects selected by curriculum committees for the purpose of trying to redress the imbalance of which students today are the victims, however

ingenious the selection, can avoid remaining a collection of specialties, and being specialties, they will still fail in producing the wholly educated man.

It is true that by insisting that students take specialties outside their fields of major concentration, they will have something of balance intellectually which they would otherwise lack. But this is wholly insufficient to provide the kind of general education which is really needed "for those common spheres which, as citizens and heirs of a joint culture, they will share with others." The approach, even in terms of providing balance intellectually, is inadequate.

The Harvard ideal of providing students with what they need intellectually to adjust to life in their own culture, is itself inadequate. For all men are first of all "citizens and heirs" of the whole of humanity, and what the students need is a philosophy which will prepare them for such citizenship. The usual academic courses in philosophy — studies of the history of philosophy and the writings of philosophers — will not provide this. They need, rather, to be provided with means of integrating the sum total of knowledge and wisdom so that they are provided with a philosophy of living which will enable them to meet the problems of living not only in their own culture but as members of the whole human race.

The whole approach in terms of special subjects, is mistaken. Even if by some miracle the perfect combination of subjects to provide for integration intellectually could be found, so long as the education remained intellectual only, it would not equip them with the philosophy of living which they need. Man is both a mind and a body; he is not only an intellectual but also a feeling animal. It is the fact that integration around his basic problems makes it necessary to cultivate him both intellectually and emotionally, which makes me feel that what is here proposed offers a way out. At any rate, what my teaching experiments with the fourteen basic problems of man and of society have demonstrated, is that no solution of the problem which proliferation of the sciences has created for education, which concentrates on its intellectual aspects and does not deal

adequately with its emotional aspects, will prove an adequate solution of the problem.

What the situation calls for is what I have called humanization. And this involves a repudiation of one of the premises implicit in the Harvard Committee's study of the problem. The problem is not to equip the young "for those common spheres which, as heirs of a joint culture, they will share with others." This assumes as a premise, enculturation. It assumes that the problem is how to equip the young in America "for those common spheres" which they will share in American culture. It assumes that the problem in Britain will be to equip them for British culture; in France for French culture; in Germany for German culture, and in India for Indian culture, and so on *ad infinitum*. Whereas the crisis which this generation faces is precisely the opposite; it is how to equip Americans, and Britains, and Frenchmen, and Germans, and Indians, not to live merely in their own cultures, but how to live as members of the whole human race.

The issue is one of priorities. Which comes first, equipment for membership in the whole human race, or equipment for membership in one's particular nationality?

The real challenge, which not only the Harvard but the prevailing approach to the problem of general education avoids, is the question of how man should be educated when there is a conflict between what is prescribed by the institutions of his own culture — and particularly by those institutions which are taken for granted because they are assumed to be in the national interest — and what is called for by mankind's humanization. It is because of this that I insist that in formulating the study of the basic problems of man and of society, they must be dealt with as universal in nature, and not national, and dealt with in terms not of what is temporarily expedient but of what is perpetually good, true and beautiful.

CHAPTER IX

INTEGRATED EDUCATION

If the mind is in chaos, defeat meets us everywhere; if the mind is disciplined, the whole world is conquered. ("Man hare jag har hait; Man jite jag jit.") — From the Sikh Scripture "Guru Granth."

The problem of integration in education requires us to take a bird's-eye view of the immense accumulation of specialized scientific knowledge of which we, in the Western World, are so proud. As a result of this mistaken pride, our colleges and universities too are immensely proud of the number of specialized courses they can list in their catalogues. But the sad fact is that neither the specialized knowledge nor the specialized courses have contributed very much to equipping those who graduate to deal rationally with the basic problems with which they have to deal as private persons on one hand, and as members of the body politic on the other. The moment they get away from the subjects in which they majored and on which they concentrated, or from the profession for which this specialization prepared them, they are confused; their "mind is in chaos, defeat meets (them) everywhere," as the Sikh Scripture "Guru Granth," tells us.

In its present form our specialized scientific knowledge is able to tell us with amazing efficiency *how to do things* but is wholly unable to tell us *what we should do*, and *why we should do it*. If we are to escape from this dilemma; if we are ever to apply what we have learned to what I think of as our real problems of living, and to substitute progress in living for progress in production, we will have to escape from the evils created by the fragmentation and compartmentalization of all our knowledge. If planning and implementation, if organization and institutionalization, is to contribute to a better way of living and to the development of a better social order, integration of all this knowledge is essential.

Specialized studies of the fragments of a total and integral problem, such as that of health, are almost worse than no knowledge at all. We are immensely proud of the fact that modern medicine has virtually eliminated infectious diseases like diphtheria and typhoid, like smallpox and yellow fever, but we do not hang our heads in shame when we contemplate the staggering increase in degenerative diseases like diabetes, cancer, and heart-disease.

A half-truth is often a poorer basis upon which to deal with a problem than frank realization of ignorance.

To deal with a basic problem like health — which I call the psycho-physiological problem in this study — we have to study many subjects other than medicine, and this is what I think of as the natural process of integrating knowledge from many divergent special fields of knowledge. Not one of these basic problems can be adequately discussed without taking into account not only what various arts and sciences but what various philosophies and religions have had to say about their nature and what should be done about them.

Integration, but a natural and not an artificial scheme of integration, is what the situation calls for.

It is to Comte's* great credit that he foresaw the importance of this long before the various scientific specialities had proliferated to their present appalling dimensions. If a scientific, or Positivist, basis of living was to be substituted for the various religious and philosophical basis of the pre-scientific past, Comte said the sciences would have to be integrated. This is the reason that the classification of the sciences occupied so prominent a place in the thinking of thoughtful educators for more than a generation after his death. This interest bourgeoned into an immense literature dealing with Pantology, the scientific classification of all knowledge, which ironically ended with only one still living contribution to modern life — the

* August Comte, (1798-1857), was a French philosopher who insisted that a scientific religion must replace religion and pre-scientific philosophy; he was the founder of the philosophy of Positivism, and there are still Positivist "churches" based upon his teachings.

Dewey decimal system for the classification of books. "All knowledge", the Pantologists in effect concluded, "is found in books; a scientific classification of books will be a scientific classification of all knowledge."

Comte's principle of integration was based upon the assumption that every science is dependent for its development upon antecedent sciences. His synthesis was based upon a hierarchy of sciences — mathematics, astronomy, physics, chemistry, biology, sociology. The more specific and complex sciences, he maintained, are dependent upon the simpler and more general. Sociology, being more complex than biology, is dependent upon biology; biology upon chemistry; chemistry upon physics, physics upon astronomy, astronomy upon mathematics. Sociology, on this ingenious theory, cannot be positively developed until all the others have reached a high stage of perfection. In effect, he said, mankind should not have tried to live rationally until all the antecedent sciences were developed to a point which made it possible for human beings to obtain guidance from the last and most important of all sciences.

Spencer* demolished Comte's theory by the simple expedient of proving that the scientific specialities had not developed in any such succession as Comte presumed to be the case. All the sciences, he said, are interdependent. No one of them, he pointed out, is actually as self-sufficient, either logically or historically, as Comte assumed. Buckle** put his finger on the real truth when he called attention to the fact that no science is really scientific in its own center, but only at its periphery where it impinges upon other sciences. Unfortunately, the attempt to integrate all the sciences seems to have died with Pantology; even Comte's critic, Spencer, when he undertook to provide a universal synthesis, understood it in terms of a new specialty — evolution.

And since Comte's time, what has happened? The business of specialization, fragmentation and compartmentalization

* Herbert Spencer, (1820-1903), the English philosopher, produced a veritable encyclopedia of the sciences based upon organic and social evolution.

** Henry Thomas Buckle, (1821-1862), was an English Historian; his most important work was "The History of Civilization in England."

has progressed beyond the wildest dreams of Comte. More than thirty years ago, the League of Nations International Committee on Intellectual Co-operation held a conference. The conference did not aim at Comte's significant goal; it merely attempted to define and delimit a sample science, biology, alone. In order to do this, it had to establish seven large sub-divisions of biology*. In all the seven sub-divisions thus delimited, the conference found that 50,000 original contributions were being made annually. How to integrate all this mass of new with the old contributions, was the problem which we in the modern world face not only with regard to biology but with regard to all the sciences, for the situation in all these other sciences is just as frightening.**

But if specialization in biology and all the concrete sciences produces such a terrifying volume of undigested knowledge, what shall be said of specialization in the much more complex social sciences? The accumulation of specialized knowledge here not only deprives even well-educated individuals of knowledge bearing upon their personal and social problems, but deprives mankind as a whole of the help so desperately needed from science in dealing rationally with its social, economic and political problems. On this point it is worth quoting some one who took part in the efforts made to integrate the sciences under the auspices of the League of Nations:

"Here (in the social sciences) the process of delimitation, however necessary for working purposes, can be an active agent of mischief unless it is regarded as purely provisional.

* There are, of course, many more than seven biological specialities. The most important are generally designated systematics, physiology, botany, zoology, morphology, anatomy, genetics, embryology, biochemistry, immunology, pathology, endocrinology, blood-grouping, biometry, and bionomy or ecology.

** Some idea of the magnitude of the problem can be obtained from the fact that when I was working on this study in 1948, a single American institution of higher learning, the Massachusetts Institute of Technology, listed 1,008 courses specifically organized for the training of engineers. Included were 45 courses in the single subject of chemistry alone. The degree to which this results in specialization may be seen by the fact that another American university, Ohio State University, which does not specialize in engineering, offered ten degrees in engineering alone: agricultural engineering, chemical, ceramic, civil, electrical, industrial, welding, mechanical, metallurgy, and mining.

History, we are told, is a science. So is economics. So is politics. So is sociology. So is geography, and the whole train of ancillary disciplines. There are even, we would not be disposed to deny, sciences of comparative literature, comparative art, and comparative music. The application of the scientific method to each and all of these domains has no doubt greatly advanced human knowledge and revealed many valuable truths. But is there not a danger that, in thus prosecuting a minute analysis into these different activities, human science will degenerate into a riot of abstractions and Man himself be forgotten? The problem here is different and more subtle than that which confronts the worker in the exact or natural sciences. The physicist, the chemist, and the biologist, may have lost their relationship with the larger developments of their study but, within their own field, their judgment remains sound and sure. But in the human sciences this is not the case. An economist who knows not politics, a sociologist who knows not history, a historian who knows not geography, is not a scholar but a laughing stock."

Zimmern* puts the matter far too lightly. An economist who knows no politics or sociology history or anthropology is no mere laughing stock; he is a positive menace not only to the individuals whom he mis-educates and so mis-leads, but even more, he is a contributor to the catastrophe toward which the whole of modern scientific civilization is progressing. If we finally produce that "Brave New World" which Aldous Huxley described so mordantly, or that "Animal Farm" which George Orwell satirized, it will in large part be due to the mis-education of mankind by the specialists of whom we are so proud today. For it is my contention that the specialist is always confused if not when he is dealing with the "center" of his specialty, (to use Buckle's expressions), the moment he comes to the important "periphery" when his science comes into relationship with other sciences. And this weakness of his specialization, may even introduce an element of confusion into his knowledge of his own speciality.

* Alfred Zimmern, "Learning and Leadership," Oxford University Press, 1929; p.p. 92-93.

But from the standpoint of the educational problem, a programme of integration of the sciences alone, as if that was all that needed integration, is scientific arrogance and impudence beyond all belief. It assumes that the whole of knowledge, or at least of valid knowledge, is restricted to these bodies of knowledge we call the sciences. This approach to the problem of integration ignores the fact that there are immense bodies of knowledge — many of them of the greatest importance in dealing with the problems of living — which do not answer to the designation of sciences. It ignores, for one thing, the vast bodies of knowledge accumulated by the high civilizations of the Eastern World, the civilizations of Persia, India, China, and Japan. It is at the very least provincial for Western science to ignore the fact that without a trace of modern science, and with only such non-scientific knowledge as they had succeeded in accumulating, they produced civilizations in many respects higher than those of the Western World.

It ignores also the vast bodies of knowledge represented by mankind's accumulation of belles lettres, poetry, biography, fiction, and in fact arts of all kinds. It ignores philosophy and theology. It is ridiculous to dismiss all of philosophy because of its metaphysical speculations, and all of theology because of its accretions of superstitions and dogmas. Finally, it ignores the enormously important bodies of knowledge represented by the wisdom of mankind simply because that wisdom has not been systematically and scientifically analyzed.

All these bodies of knowledge, and not the sciences only, call for some natural and logical form of integration so that they can be utilized in right-education. My experiments with the seminars I have conducted on the fourteen basic problems of man and of society at various colleges and universities, confirms what my study of these problems revealed — that they created a demand among the members of the seminars for the very integration which I personally found necessary in trying to formulate the problems themselves.

Let me illustrate this with the problem we are considering in this volume — the educational problem. Take the very

first problem in the educational complex — that of function. To establish what is the true function of education it is necessary to turn not merely to psychology but to biology and to find what each of these sciences has to contribute to the solution of this particular problem. To deal with physical education properly, psychological, physiological, medical, sexual, nutritional, and even sociological knowledges have to be integrated. To deal with emotional education, literally dozens of fields of knowledge, ranging from depth psychology to *yoga*, have had to be integrated. But to deal with intellectual education, an effort at the integration of all the sciences and arts, all the religions and philosophies had to be attempted. This, surely, makes clear why I insist that study of the basic problems results in a natural and logical integration of virtually every field of knowledge of sufficient importance to contribute light upon the problems themselves.

And what is true of the educational problem, is true of all the others.

CHAPTER X

THE BASIC PROBLEMS OF MAN AND OF SOCIETY

Man is born not to solve the problems of the universe, but to find out where the problem begins, and then to restrain himself within the limits of what is comprehensible.—Johann Wolfgang Goethe.

The basic problems of man and of society, which are central to the whole of this study of the educational problem, differ in one crucial respect from the subjects with which our present courses in schools and institutions of higher learning deal: to discuss any one of them, knowledge not from one "subject" but from many "subjects" must be used. To describe the problem itself, and to consider the alternative solutions of it, knowledge from many fields of knowledge—not only from the sciences but from art and philosophy and religion—must be used. No real understanding of any of them is possible unless this is done. To master most of the subjects which are now studied, there is no necessity for delving into any subject other than the one which is being studied. To study the subject of mathematics, mathematics alone needs to be studied. But to understand the epistemic problem, in which mathematics plays a part, knowledge from dozens of subjects must be taken into account.

The nature of the fourteen basic problems have been fully discussed in Volume I in our consideration of the "Humanization of Humanity." Here it will be sufficient to make clear the distinction between a mere problem and what I mean by a basic problem, and to summarize the discussion of all the fourteen basic problems by making clear what is shown in the classification of these problems in Charts II and IV.

A problem, as the term is used throughout this whole study, is the situation in which an individual finds himself when he is confronted by the possibility of choosing between two or more alternate courses of action, two or more alternate values, or two or more alternate beliefs.

Most of the problems with which individuals have to deal are of personal, of local and of temporary importance only. This is the form in which they of necessity in the ordinary course of events present themselves. But underlying their form, there is always the essence of each problem, and it is this essential or basic problem which is of universal and perpetual importance. It is a purely personal problem which is involved in deciding whether to order chicken or roast-beef in a restaurant. But it is a universal and perpetual problem—it is a basic problem—which is involved in choosing a diet which will maintain physiological and psychological health for everybody.

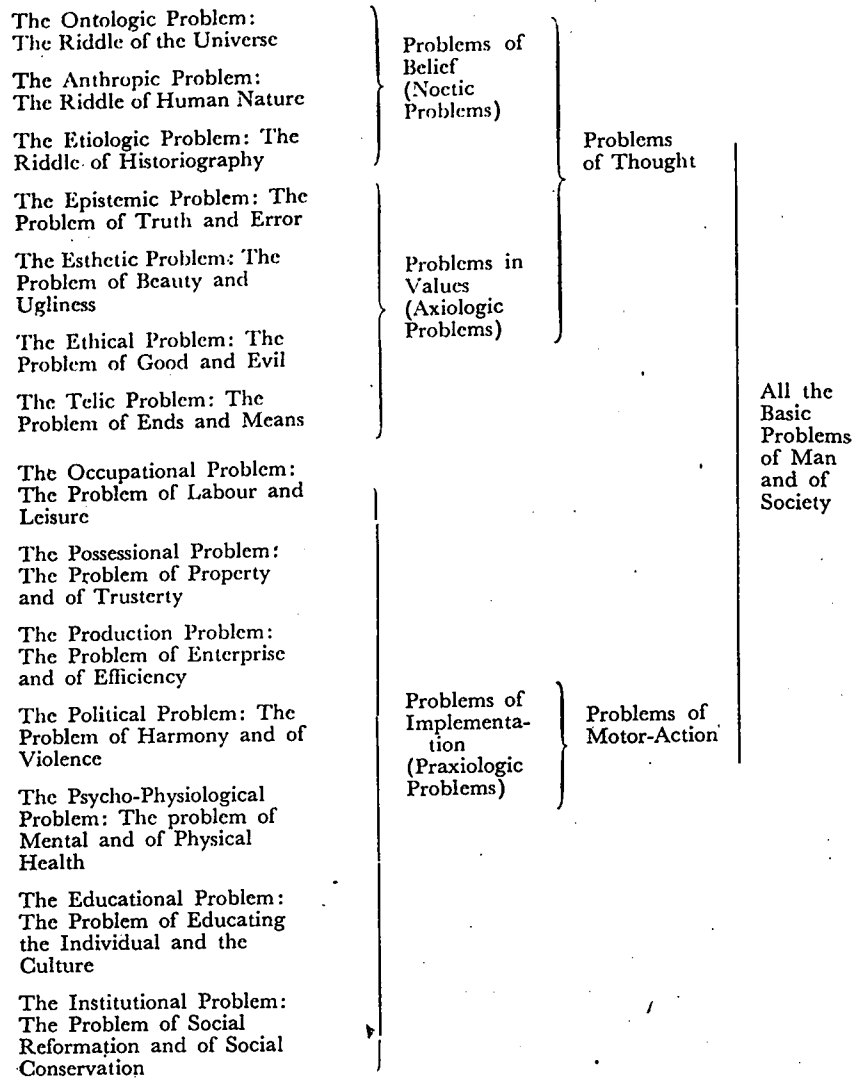
The years of painstaking classification of all sorts of problems, since I began this study in 1940, has resulted in reducing every imaginable problem to fourteen categories of basic problems, as listed in Chart II. These fourteen categories in turn can be reduced to three super-categories, (1) problems of beliefs, or noetic and intellectual problems, (2) problems in values or axiologic problems, and (3) problems of implementation, or praxiologic problems. And these three in turn can be reduced to two super-categories, one of which I think of as (1) problems of thought, and the other (2) problems of motor-action.

All these basic problems are old; they date back to that moment in the pre-history of mankind, perhaps fifty, perhaps a hundred thousand years ago, when *homo alalus* lost his animal-inheritance of inflexible instincts, and developed that plasticity of instincts which make it necessary for him to choose how he shall deal with his problems. In order to survive, since he could no longer rely upon his instincts to choose for him, he had to find some sort of solutions for his problems. If his solutions were good, he survived; if bad, he either suffered some of accident or contracted some kind of disease and as a result died prematurely; if a whole tribe used similar bad solutions of any important problem, the tribe as a whole tended to die out.

Solutions of basic problems are therefore just as old as are the problems themselves.

When we examine these solutions, we find that none of them consist of single ideas which can be accepted by themselves; we

CLASSIFICATION OF THE BASIC PROBLEMS OF MAN AND OF SOCIETY



find that they are always dependent upon and often embodied in a whole body of ideas, sometimes religious, sometimes artistic, sometimes scientific, sometimes philosophic, sometimes customary, and sometimes traditional in nature. Each solution in effect requires consideration of related beliefs, related values, and related practices. It is these bodies of ideas, which have this much at least in common that each consists of a body of ideas, which are here called ideologies.

CHART II

CHAPTER XI

BASIC IDEOLOGIES AND BASIC PROBLEMS

Every idea is an incitement. It offers itself for belief and if believed, it is acted on unless some other belief outweighs it or some failure of energy stifles the movement at birth.—Justice Oliver Wendel Holmes in his dissenting opinion in *Gitlow vs. the People of New York*, 1924.

Whenever we examine the manner in which mankind deals with its basic problems, solutions will always be found in the ideas, ideals, and ideologies it has developed. No education is complete which does not provide the individual with an intellectual instrument for evaluating these conflicting solutions of problems about which he cannot avoid doing something, and about which he may do the wrong thing if he does not learn how to choose the right thing.

The nature of the ideas, ideals, and ideologies which embody these solutions are discussed fully in Volume I. Here it is sufficient, to avoid duplicating that lengthy discussion, simply to make clear that an ideology is neither esoteric nor obscurantist in nature. It is unfortunate that the use to which Marx put the term has had a tendency to invest it with an aura which has nothing really to do with the derivation of the term. An ideology is simply a more or less consistent body of ideas and ideals, usually developed around some central idea. The concept as thus defined is absolutely essential if knowledge is to be integrated. It provides us with a term which includes all the sciences, all the religions, all the philosophies, all the arts, and all the folklore of mankind. And when these are properly classified, it furnishes us a means for comparing them, evaluating them, and determining which of them seem valid and which invalid.

Such a classification of the results of my studies of mankind's ideologies is summarized in Chart III. The forty-two

CLASSIFICATION OF BASIC IDEOLOGIES OF ALL KINDS

Spiritual Ontologic Ideologies Psychic Anthropic Ideologies Supernatural Etiologic Ideologies Noumenal Epistemic Ideologies Devotional Esthetic Ideologies Dogmatic Ethical Ideologies Transcendental Telic Ideologies Ascetic Occupational Ideologies Poverty Possessional Ideologies Magical Production Ideologies Theocratic Political Ideologies Exorcist Psycho-Physiological Ideologies Evangelical Educational Ideologies Conversion Institutional Ideologies	} Supernal Ideologies	} Basic Ideologies of All kinds
Materialistic Ontologic Ideologies Somatic Anthropic Ideologies Naturalistic Etiologic Ideologies Phenomenal Epistemic Ideologies Sensual Esthetic Ideologies Egotistic Ethical Ideologies Gratification Telic Ideologies Chrematistic Occupational Ideologies Prosperity Possessional Ideologies Centralist Production Ideologies Hegemonic Political Ideologies Mechanistic Psycho-Physiological Ideologies Sophistic Educational Ideologies Impositional Institutional Ideologies	} Hylistic Ideologies	
Pluralistic Ontologic Ideologies Pluralistic Anthropic Ideologies Pluralistic Etiologic Ideologies Intellectual Epistemic Ideologies Inspirational Esthetic Ideologies Nomologic Ethical Ideologies Satisfaction Telic Ideologies Hygienic Occupational Ideologies Adequacy Possessional Ideologies Decentralist Production Ideologies Liberal Political Ideologies Vitalist Psycho-Physiological Ideologies Philosophical Educational Ideologies Suasional Institutional Ideologies	} Cognitive Ideologies	

CHART III

BASIC IDEOLOGIES AND THE BASIC PROBLEMS OF WHICH THEY ARE SOLUTIONS

Spiritual Ideologies	}	Ontologic Problems	}	Basic Problems of All kinds
Materialistic Ideologies				
Pluralistic Ideologies				
Psychic Ideologies	}	Anthropic Problems		
Somatic Ideologies				
Pluralistic Ideologies				
Supernatural Ideologies	}	Etiologic Problems		
Naturalistic Ideologies				
Pluralistic Ideologies				
Noumenal Ideologies	}	Epistemic Problems		
Phenomenal Ideologies				
Intellectual Ideologies				
Devotional Ideologies	}	Esthetic Problems		
Sensual Ideologies				
Inspirational Ideologies				
Dogmatic Ideologies	}	Ethical Problems		
Egotistic Ideologies				
Nomologic Ideologies				
Transcendent Ideologies	}	Telic Problems		
Gratification Ideologies				
Satisfaction Ideologies				
Ascetic Ideologies	}	Occupational Problems		
Chrematistic Ideologies				
Hygienic Ideologies				
Poverty Ideologies	}	Possessional Problems		
Prosperity Ideologies				
Adequacy Ideologies				
Magical Ideologies	}	Production Problems		
Centralist Ideologies				
Decentralist Ideologies				
Theocratic Ideologies	}	Political Problems		
Hegemonic Ideologies				
Liberal Ideologies				
Exorcistic Ideologies	}	Psycho-Physiological Problems		
Mechanistic Ideologies				
Vitalistic Ideologies				
Evangelistic Ideologies	}	Educational Problems		
Sophistic Ideologies				
Philosophic Ideologies				
Conversion Ideologies	}	Institutional Problems		
Imposition Ideologies				
Suasional Ideologies				

basic ideologies listed in this chart—three for each basic problem—fall into three categories which I have called (1) Supernal, (2) Hylistic, and (3) Cognitive. These classifications are discussed in detail in Volume I; for our purposes they need not be discussed again at this time. All that it is necessary to emphasize is that they complement the study of basic problems, and their complementary nature is made clear by Chart IV, in which all these basic ideologies are related to the basic problems of which they are supposed to be solutions. As will be seen in the discussion of all the problems as they are completed, the discussion of each problem repairs the study of the three categories of ideologies which are offered to mankind as “incitements,” (to use the vivid expression used by Justice Homes in his famous dissenting opinion in the *Gitlow* case), for dealing with them.

A course of studies in the basic problems of man and of society, and in the basic solutions of them, would equip the student with a frame of reference into which he could fit anything and everything he learns and experiences. If, in addition, the curriculum as a whole were organized with reference to these problems, the student would acquire the habit of relating everything he learns to them. No matter how much he might specialize, (and the practice of any profession or even vocation means specialization), the relationship of his own field to that of the whole field of human problems, would provide him with the balance of which our unbalanced curriculum deprives him today. He would at least have been exposed to an education designed to instruct, to cultivate, and to humanize the whole man.

Finally, it would make him fully conscious of the fact that, willy nilly, he will practice some sort of “philosophy of living.” What this kind of “general education” will do for him is to make him incorporate into his philosophy in consideration of all the problems with which he has to deal, and not merely those which by chance come to interest him. He will be less apt to fall for panaceas; less apt to indulge in prejudices; less apt to be swayed by dogmatists, bigots and fanatics in religion, in politics, and in economics.

CHART IV

Life will still puzzle him, as its mysteries and uncharted realms puzzle all of us, but he will have been provided with a sort of compass to guide him in what should be a life-long quest of the wisdom which will make it possible for him to live it well.

CHAPTER XII

EMOTIONAL EDUCATION: THE CULTIVATION OF
THE CONSCIENCE

Emotional attitudes engender meaning upon the world; they draw lines about and segregate an otherwise chaotic environment; they are our methods for finding our way about in an ambiguous universe.— William James.

However well instructed, however highly cultivated, no man is wholly educated if he is not properly educated emotionally. That modern man is not properly educated emotionally, in spite of all his boasted progress, is indicated by the rising tide of personal and social pathologies which can be traced to emotional mis-education of various kinds. It is indicated in those still of school age in America by the rising tide of juvenile delinquency and in the adult products of America's school system by the rising tide of dependence, delinquency, degeneracy, and decadence.* It is indicated by similar social pathologies in most of the developed industrial nations of the world, including communist Russia, which are just as determinedly scientific as is America. And it is beginning to put in its appearance in modern India by the rising tide of what has been altogether too mildly called "student indiscipline."**

It is the contention of this study that these anomalies in a world which is supposed to be progressing, are due mainly to our failure to come to grips with the problem of providing properly for emotional education. The failure of our school system, and the responsibility which I attribute to it for this situation, is three-fold; its acceptance of the role of adjusting the student to

*The evidence in support of this sweeping statement is detailed in my "Education and Living" pp. 115-178.

** To call destructive riots "indiscipline" — riots in which whole universities have had to be closed down, and in which the police have had to resort to shooting at mobs of students in an effort to maintain law and order—is to resort to understatement with a vengeance. What the Russians call "hooliganism," we in America call "juvenile delinquency," and here in India call "student indiscipline."

an industrialized society which is essentially destructive of emotional health; its failure to organize the curriculum to provide for right emotional education; and its failure to include in the educational system as a whole an adequate system of adult education. The first failure I discussed at length in "This Ugly Civilization;"* it would involve us in too much of a digression to go into the matter here. The failure in the organization of the curriculum we are discussing in this chapter. The failure in terms of the educational system as a whole we shall discuss in Chapter 9 of this volume. The problem cannot be dealt with unless all aspects of it are taken into account.

In 1937, the Committee on the Relations of Emotion to the Educative Process made a report to the American Council on Education, prepared by Daniel Alfred Prescott, then Professor of Education at Rutgers University. The report was published in 1938 under the title "Emotion and the Educative Process." There is nothing earth-shaking in the report. It establishes the importance of the problem, rather than saying anything very significant about what should be done about it. But in the letter of transmittal of the Committee, there is a paragraph which calls attention to the existing neglect of this problem so vividly that it is worth quoting:

"World political developments, new devices for swaying the emotions of entire nations simultaneously, emphasis on blind mass fervor, impatience with the scientific approach to national problems, all have driven home the lesson that the job of education is not done when knowledge is disseminated and increased. If the teacher, concerned with his primary business of knowledge, fails to deal with the whole man, particularly with the control of passion and the guidance of desire, he may properly be charged with contributory negligence when the democracy becomes either a mob or a regimented army, when freedom to learn or to teach disappears, when emotions submerge the life of reason, and so force recognition of their claim to a share in the lives of men."

* This book of mine was published in 1929; it is my first major study of what is wrong with our industrial and urbanized civilization.

What transforms this statement of conditions into an indictment of existing educational processes, is the fact that failure "to deal with the whole man, particularly control of passion and the guidance of desire" is precisely and exactly what we find in our schools, colleges and universities today. In virtually none of them is emotional education a recognized part of the curriculum and of the educational process. But what concerns us in this chapter of this study is not the mere fact of neglect, but the fact that we have means and methods which we are not using for dealing with the problem. If we will, we can educate the whole man; if we will, we can educate him not only intellectually but also emotionally.

The Nature of Emotional Action. By emotion,* by emotional action, and by emotional attitudes is here meant various forms of felt and conscious responses of an individual to the stimulus of emotion-provoking and emotionally charged experiences in his life. The essential sequence of events which results in producing emotional action, seems to be that (1) an experience flashes into the individual's conscious or sub-conscious mind; the individual becomes aware of it even though that awareness may only be on the threshold of consciousness; (2) the experience stimulates and arouses tendencies either instinctive and inborn, or deeply impressed long before on his unconscious mind; (3) the response takes the double form of a feeling and an impulse; (4) this feeling, which tends either toward attraction or toward revulsion, and this impulse, which tends either toward friendly or hostile action, will automatically result in motor-action of an impulsive or animalistic kind unless it is properly controlled.

Four characteristics of emotional action are of significance so far as education is concerned:

Consciousness. Whatever the nature of the experience which constitutes the stimulus to which we respond with an emotional state or action,** whether the stimulus is a conscious experience

* The derivation as well as the denotation of the word are perfect, the Latin *emovere* means to move out; *e* means out, and *movere*, move.

** Human action, in the inclusive sense in which it has been defined in Volume I, Chapter 6, includes everything done and experienced by an individual during an interval of time. An emotional state, during the interval it is being experienced, is therefore also an emotional "action."

such as that of seeing a table covered with luscious food, or an unconscious experience, such as a nightmare experienced while asleep, the emotional response is always a conscious one. Take away consciousness from the concept of emotion, and it ceases to be an emotion; it becomes only an operation of the nerves and the brain while the individual is asleep, in a hypnotic trance, in *samadhi*, or some other unconscious state.

Feeling and Impulse. During the interval in which an individual is responding with emotional action to the stimulus of some experience, he *feels* and he is *impelled* to act; he feels pain or pleasure, love or hatred, attraction or revulsion, and at the same time is moved to attack or to run, to welcome or to repulse. An emotional action consists of nothing but feeling and impulse; it is always a mental, and never a motor-action.

Mental Versus Motor-Action. The moment the impulse is translated into a motor-action of any kind; the moment the individual in fact attacks or runs, or appropriates or embraces in response to a feeling and impulse, he begins on action which is distinguishable and essentially different from the emotional "action" which inspired it. The feeling of pleasure experienced at the sight of appetizing food may move him to eat, but a motor-action like eating is a different kind of action from the emotion which stimulated it, even though, after the motor-action begins, the emotional and original mental-action continues. Again, this is evidenced by the fact that while both may continue simultaneously, the motor-action may either terminate before or continue after the mental-action has ended; the individual may continue to eat, for instance, after he has ceased to feel the pleasurable emotion which stimulated him in the beginning.

Instinctual versus Acquired Components of Emotion. In the expression or manifestation of our emotions, there are always two components, one instinctual and inborn, and one acquired or learned. In some cases the instinctual component is predominant, as when we feel simple pain or simple pleasure, but the acquired component predominates in the expression of the same emotion of pain or pleasure by a person who has been stoically conditioned. The instinctual component cannot be destroyed

no matter what we do, as Freudian psychology has made abundantly clear, but it can be repressed; the individual can be conditioned, or taught, to repress his feelings and to suppress all impulses to do anything about them. When an individual's body is broken in torture, his nerves and his nervous system react to this experience as instinct dictates that they should, even though he may be able to suppress every tendency to moan, or cry out when he is being broken. The feeling of pain and pleasure is as much inbuilt into the psyche by nature as the action of the blood in coagulating is inbuilt into the body; both are instinctually inbuilt because both are necessary to the maintenance of life.

But the manifestations of emotion by mankind—the emotional reactions of every individual person—reflect much more his education than they do his instincts. The form in which he manifests them are acquired or learned. American Indians used to be conditioned from childhood to show no sign of pain, however, terribly they might be tortured when captured by their enemies; when the white settlers in America, whose educations had included no such course of emotional conditioning, were tortured by American Indians, they would manifest their pain by hysterical moans and cries of the most agonizing kind.

In recognizing that man's emotional behaviour is so largely a reflection of what he learns and not what he inherits, we are, of course, recognizing that his emotional behaviour is a product of his learning; and logically we conclude that provision for the education of his emotions must be included in any curriculum that pretends to provide for the education of the whole man.

The distinction here made between the learned and the instinctual components of emotion can be vividly illustrated by analysing the genesis of emotional attitudes like those of shame and modesty. There is no instinctual emotion of shame; every expression of such an emotional attitude is acquired; it is produced by the individual's education. A Muslim woman, raised in an orthodox Muslim home, feels shame if her face is exposed to a strange man; a Balinese woman, until the Muslim government of Indonesia took over and imposed Muslim standards upon

the Balinese, felt no trace of shame when she wore no blouse of any kind and exposed her breasts and torso to the waist in a public thoroughfare.

A Catholic, raised in a Catholic community, by a devout Catholic family, and a member of the Catholic Church, will respond with a feeling of awe and reverence on visiting a Cathedral like Notre Dame in Paris, and with a feeling of horror and revulsion on visiting a typical Hindu temple and seeing the "grotesque" idols it contains. A Quaker, raised in a Quaker atmosphere, and still a devout Quaker, will feel the same kind of horror at the iconography—the crucified Christs, the bleeding hearts, the statues of the Virgin—in the average Catholic Church.

The part education plays in these instances of emotional reactions, is true of the part it plays in all emotional reactions. The forms in which we express our emotions and our emotional attitudes are all products of education. And all of them, even when they are in fact formulations of instinctual reactions, are educable.

The Importance of Emotional Education. The importance I am attaching to emotional education is based on one of the most obvious of psychological truisms—the fact that the emotional activities of human beings have about the same relationship to their intellectual activities as the unseen two-thirds of ice-bergs have to the one-third above water and visible. This is true of self-conscious intellectuals, and it is of course true of the great masses of mankind whose intellectual education and self-consciousness is of the feeblest. The average man does not think and reason as he acts; he feels and emotes. And if he neither thinks nor emotes, he acts automatically as his habits prescribe.

The importance of emotional education becomes even more evident if full account is taken of the fact that it is in their emotional reactions that all human beings implement their values. It is possible to intellectualize about values; it is possible with intellectual education to make human beings analyse and verbalise, and even profess values, but it is impossible to make them feel values, and to be driven to implement them, unless they are properly educated emotionally. To educate the whole man,

the educator must not only equip him with a psychology of values, he must make him feel them. For all the values, including the moral values so little considered by man today, are felt; they are values precisely because they have been deeply implanted in the individual's unconscious mind and as a result emerge from it in the form of feelings of guilt or innocence, of beauty or ugliness, and of inclinations to some kinds of actions and aversions to others. Today, because of the neglect of moral education, which is just one form which emotional education should take, most men and women are not merely amoral, many of them are positively immoral. Their behaviour is legal or conventional at best; they value not morality but what is safe or profitable, and in a crisis act without regard to any kind of moral standards. To recognize the importance of emotional education, is to recognize the importance of the cultivation of the conscience.

To appreciate the full importance of this, one must bear in mind that one can feel not only pain and pleasure, but learn also to feel and to react emotionally with approval and inclination to the spectacle of beauty, to the discovery of truth, and to actions which are good, and with aversion and repulsion to ugliness, to the triumph of error, to actions which are evil. It is because of this that right-education of the emotions develops sensitivity to scruples of conscience, imbues the individual with the feeling of duty and obligation, and in sum, *cultivates* the conscience.

Speaking of the neglect of this in American education, in a recent book, Frederick Mayer, a professor of the humanities in the University of Redlands, says that juvenile delinquency is simply the product of "forgotten values."* As a result, Dr. Mayer maintains that schools, all the way from kindergarten through college, face an educational challenge that is virtually ignored. The challenge, he says, is to revivify basic goals. Juvenile delinquency, he insists, is growing so alarmingly because of failure to meet this challenge.

* "Our Troubled Youth," by Frederick Mayer, published by the Public Affairs Press, Washington D.C., 1959.

The fact that he speaks of "basic goals" is an interesting side-light on the manner in which educators today shrink from the use of words like good and evil, morality and conscience.

At a time when the Los Angeles area, one of the largest of the great metropolitan areas of the United States, is disturbed by juvenile delinquency as never before—when delinquency shows itself in countless forms in every area of society—Dr. Mayer calls for teaching with evangelical, and in my terminology, emotional zeal. He says that American educators should not hesitate to abandon existing methods of procedure and to use every means at their disposal in dealing with the crisis with which they are faced. He quotes Woodrow Wilson, when he was not President of the United States but the President of Princeton University:

"Countries grow old by not seeing their real challenge.

This was the way Rome fell prey to German militarism. We need to recapture our youth in this country by seeing our real values—by starting out on the journey toward inwardness."

When asked how this kind of education relates to delinquency, Dr. Mayer stressed the privileged role the teacher can play in lighting up the meaning of life for boys and girls. As he puts it, "Working with delinquents and trying to prevent delinquents is not a chore; ultimately it is a privilege." He sums up his own convictions in the statement: "I believe in the power of warmth and love to evoke a more healthy society," and ends his book with a letter he wrote to a young teacher who wanted to stop teaching: "Do not desert your post. Do not live by expediency. . . . As a teacher you belong to the most vital profession and to the most constructive enterprise of the human race."

Finally the importance here attached to emotional education is vindicated not only because it is necessary if adults are to be persuaded to behave like normal humane beings, but because it is necessary if the students in our schools and colleges are to be taught to use their academic or intellectual training like humanized beings. Emotional education must be included in the home and "pre-school curriculum," but it must also be included in the school and college curriculum. Without this, it

is idle to try to organize a curriculum which purports to provide education for the whole man.

For the fact which cannot be ignored is that at birth the infant of the species *homo sapiens* is not human, except physically; he is merely an animal distinguished from all other animals by his enormous capacity for the development of his mind. But the mind with which he is endowed at birth is a potential rather than an actual human mind, and whether he becomes genuinely human depends in large part on what is done to educate him emotionally during the first years of his life. Emotional education not only precedes intellectual education in point of time; it either creates the right or the wrong foundation for all other kinds of education.

At birth, the human infant is dominated by two desires. One, the desire to satisfy its hunger, is a purely animal desire; the other, the desire to be loved, is a distinctly human one. The first is a physical need, the second a psychical need. Its very first feeding constitutes the first step in its emotional education. If it is then breast-fed; if at the time it first begins to satisfy its hunger, it is lovingly fed and feels the warmth of its mother's breast, the first step in its right-education emotionally has taken place. And if this loving feeding of it by its mother continues for the full term for which nature prescribes breast-feeding for humans—variously estimated to be between two and three years—right-education emotionally continues to take place.

But if on the contrary this does not happen—if, for instance, it is bottle-fed instead of breast-fed, and particularly if it is separated from its mother as is the custom in nearly all modern hospitals and left to the scientific but impersonal and loveless ministrations of a trained nurse—its emotional mis-education begins at birth.

What this analysis of man's first experiences in life makes vividly clear is that humanisation is an emotional problem long before it becomes an intellectual one. And since intellectual education, when it begins many years later, is so largely dependent upon the attitude inbuilt by the individual's very first experiences, emotional education may even be considered

more important than intellectual. This is why the neglect of emotional education in terms of the organization of education is so damaging.

Since all of the individual's experiences during the first half dozen years of its life condition and educate him emotionally, unless those experiences before he goes to school are of the right kind—which is just another way of saying that unless what the child's mother and family have done to him represents right-education—his attitudes both to his schooling and to the problems with which he will be confronted after graduation from school, will be of the wrong kind. The need of the right kind of emotional education begins, therefore, before he enters school; it continues afterwards in school and in college; it continues after he finishes schooling until the time his character-development crystalizes, as it need not but as it usually does. In those individuals who are fortunate enough to escape such character-crystalization, emotional development continues as long as life continues.

Emotional Habits and Attitudes. Implanting of the right kind of emotional habits and attitudes into the very psyche of the individual, is the objective to which education of the emotions should be directed. The task of deliberately providing this, and providing it on the basis of rational planning, cannot be ignored because the inbuilding of attitudes of either the right kind or the wrong kind cannot be avoided. The plasticity of man's instincts makes it inevitable that he will fill this "vacuum" by acquiring such emotional attitudes as are necessary if he is to live at all. Refusal to provide for this need by emotional education of the right kind, is a kind of educational sin, since it leaves the acquisition of emotional attitudes to pure chance. It is better, therefore, to give thought to the kind of emotional education which is necessary to inbuild right attitudes; to apply forethought to the matter of education of the emotions rather than to run the risk that attitudes acquired purely by chance will be of the right kind.

In dealing with this problem in this way, we are dealing with a stubborn fact; the reality of emotional habits and attitudes, a concept which psychologists have been driven to

frame to account for the "consistency of conduct." As one psychologist puts it:

"Attitudes are not faculties, but neither are they fictions. There must be something to account for the consistency of conduct. It is the meaningful resemblance between activities and their congruence with one another that leads the psychologist inescapably to postulate some such generalised forms of readiness (to feel and to act) as the term attitude denotes." *

The fact that attitudes, however acquired, whether accidentally or by deliberately inculcated teaching of some kind, tend to exert a controlling and almost determining influence upon the manner in which most individuals deal with their problems, in contrast with that exerted by reasoning and by considerations of a purely intellectual nature, makes the education of the emotions so important a part of the task of educating the whole man.

These attitudes; these conditioned mental states; these tendencies to respond in particular ways to different kinds of experiences and to the different kinds of problems with which the individual is confronted, tend powerfully to determine not only what the individual does but what he feels. As Allport puts it:

"Without guiding attitudes, the individual is confused and baffled. Some kind of preparation is essential before he can make a satisfactory observation, pass a suitable judgment, or make any but the most primitive reflex type of response. Attitudes determine for each individual what he will see and hear, what he will think and what he will do. To borrow a phrase from William James, they 'engender meaning upon the world; they draw lines about and segregate an otherwise chaotic environment; they are our methods for finding out way about in an ambiguous universe.'" **

* G. W. Allport, "Handbook of Social Psychology," edited by Carl Murchison, Clark University Press, 1935, p. 836.

** Ibid., p. 810. Saying that "attitudes determine" is putting it much too deterministically; I personally go no further than to say that they *tend* to determine. That is enough because they do determine in the fullest meaning of the word in the case of most individuals. — R. B.

Every human being is a bundle of tendencies; a bundle of habitual responses to the stimuli of experience. Confronted by a given experience, by a given problem, or by a given opportunity to act in a given manner, the individual tends to feel and to act the way his attitudes prescribe. All these tendencies, which may range from extremely mild ones to overpoweringly strong ones, have their source in the operations of his unconscious mind. But this is also true of his instinctual drives; they too originate in the operations of his unconscious mind. But there is this difference between them: the attitudes are produced by prior conditioning of the individual — by his emotional education — while his instinctual drives are inherited inborn endowments.

All human action, except that of the most tropismic nature, as for instance in the automatic act of digestion, and all human feeling, except that of the equally automatic feeling of pain or pleasure, reflect, however, not what is inborn in the individual but what he was conditioned or educated to do and to feel. Both feeling and action therefore reflect previous conditioning of the unconscious mind either by single strong emotional shocks which have enduringly affected it, or by many repeated mild emotional experiences which have similarly enduringly affected it.

The distinction to which I am calling attention between these acquired attitudes and the inborn instinctual drives of mankind, can be well illustrated by the manner in which human beings deal with hunger. Hunger is instinctual. Every individual when he needs food not only feels the pangs of pains of hunger instinctually, but has an instinctual drive to do something to satisfy his hunger. But both the feeling and the drive, instinctive as they are, can be and invariably are conditioned; emotional education can make one individual feel and act when hungry in a totally different manner from another. Hindus who have from childhood been conditioned to eat only vegetarian food and who have been religiously indoctrinated with the belief that it is sinful to eat meat, will feel revulsion at the thought of eating meat however hungry they may be, and if they have been conditioned long enough and strongly

enough, will refuse to eat it. Christians on the other hand whose conditioning or emotional education has given them a totally different attitude toward meat-eating, will be attracted and not repelled by meat dishes even when only slightly hungry.

So plastic are man's instincts, and so completely can the attitudes through which the instincts express themselves be conditioned, that the problem of dealing with the instincts is not problem at all; the real problem is that of what to do if the attitudes produced by the conditioning to which the student has been subjected by all his previous experiences before he comes to school, are attitudes of the wrong kind.

What concerns us here, once the importance of this aspect of the problem of emotional education is recognized, is what emotional education in the school might do in dealing with this problem, and what needs therefore to be done in the organization of the school system as a whole, in the organization of school curriculums, and in the organization of teaching methods to re-condition and to re-educate emotionally students with the wrong attitudes, and of protecting students with attitudes of the right kind from those with attitudes of the wrong kind.

There are three student attitudes so obviously essential to effective schooling, that their validity can be taken for granted. These three can be used to illustrate some of the problems to the resolution of which the programme for emotional education should be devoted. The first of these is an attitude of genuine willingness toward the observance and the acceptance of discipline in the classroom, in the school, and on the campus. Superficially, most students will seem to have this attitude, but deep down emotionally many of them will actually be willing to disregard the necessity for it and, what is worse, rationalize their influencing and even inducing other students to join them in their disregard for it.

The second of these attitudes is willingness to study and recognition of the importance of learning. Here too what is superficially true of most students will not be true of many of them. Some will in fact have emotionally been conditioned so that they will make a serious effort to master whatever they

are required to learn; others will fritter away time and devote the barest minimum of it to such study as they believe will enable them to obtain a passing grade.

Finally there is the attitude of respect for the teacher and toward the institution in which they are privileged to study. Some will be genuinely moved by the attitudes they have acquired to treat both with respect; others will feel toward them what will in effect seem not only to justify their own failure to study, but also to justify whatever they do to make it difficult for their fellow students to do so.*

The programme for emotional education, and the school system's whole approach to the task of providing schooling, must aim at maintaining attitudes of the right kind in those who already have them and of preventing those students with attitudes of the wrong kind from infecting other students and perhaps demoralizing the student body as a whole.

The first and most drastic principle of organisation for which this calls is the one that is most generally disregarded: *No student with attitudes which are seriously wrong ought to be permitted in any properly organized school.* The moment a student who is enrolled develops them, or is discovered as having them, he ought to be expelled, or if this is too drastic, segregated from the other students in special classes or special reform schools, as cases of infectious disease in hospitals are segregated in special wards where they cannot infect other patients. The students who wish to learn have rights which cannot be disregarded. No obligation of the educator is greater than that of protecting them from being emotionally infected by students who have

* Extremists in Progressive Education, who maintain that the student must be free to express himself no matter how many rules he violates or how imprudently he treats his teachers, will deny the validity of developing attitudes of obedience to rules, of disciplined study, of respect for teachers. They deny the validity of such values. Discussion of this, however, leads into the problem of the evaluation of values. My own feeling about the matter is this: if the extreme importance attached by the advocates of Progressive Education (which they now call the New Education) to permitting the student to do whatever he wishes, without regard to the work of the teacher and the rights of other students, then schools ought to be abolished, and every child individually educated. Schools are collectivities, and no collectivity can accomplish the purpose for which it is established unless each member of the group subordinates his own impulses and wishes to what the group as a whole is collectively trying to do.

been emotionally mis-educated. The sound apples in a barrel have the right to be protected against rotting, and mixing rotten apples with them not only violates this right of the sound apples, it does nothing to lessen the rottenness of those already rotten.

Schools exist to teach — they are not reformatories. Whatever they do to help students with wrong attitudes or a tendency toward them, must be incidental to what they are doing to help the normal students. Every practice which makes it difficult or impossible for schools to deal with students unfitted for schooling by prior emotional mis-education, ought to be abolished. Of such practices and customs, the most damaging today is that of compulsory school attendance. The moment a student with even a mild tendency toward bad attitudes discovers that no matter what he does, he will not and cannot be expelled — the moment he discovers that the laws of the land or the rules of the institution give him immunity from expulsion — his recalcitrance is encouraged and in substance sanctioned. The whole idea that every child is entitled to whatever kind of education he or his parents desire is without the slightest validity. The whole idea that there is an equalitarian right which entitles every child to schooling including higher schooling, is a degradation of the democratic dogma. Compelling a school or a teacher to try to teach those who cannot or will not learn, is a gross violation of the rights of those who can and will. The corollary of the right to schooling is the capacity and willingness to learn.

And so far as the vast masses of children are concerned, who are capable of elementary learning (and are therefore entitled to elementary schooling) but who lack what is necessary for higher education, no rights are violated if they are not permitted to attend high schools or colleges. Compulsion so far as higher education is concerned, and public support for it so far as every child is concerned, are in no way fulfillments of a universal right. On the contrary, they violate the rights of those who can and will make the effort to profit from higher education.

The moment a student ceases to learn, his rights to schooling cease to exist.

A second principle applicable to the maintenance and the development of right attitudes is this: *that from the moment of matriculation the students discover that right attitudes are expected of them*; that the institution and the teachers take this for granted. But the corollary of this is *that the institution and the teachers must deserve to be respected*. To be entitled to an attitude of studiousness by the students, the substance of what is taught must deserve to be learned. To justify an attitude of observance of rules, the rules themselves, and the institution which issues them, must deserve to be obeyed.

It is possible to insist that every teacher must be respected; to insist that everything prescribed must be studied; to issue rules which call for observance and which penalize students who violate them. But if the character of the teacher does not deserve and command respect, the respect will be formal only, and the formality will be observed only as long as penalties are imposed for disregarding it.

For it is not true that every kind of conditioning of the individual is possible. If an individual is conditioned to act in a manner violative of the normal instinctual needs of the species, his conditioned responses will disappear the moment the conditioning pressure ceases to be applied. This is the way Pavlov's famous dogs behaved; however abnormally they were conditioned to behave, the moment the conditioning pressure was abandoned, they began to revert to their normal and instinctual patterns of behaviour.

If the teacher is to educate his students emotionally in the right way, the process of right-education must begin with himself; his own character must inspire the right emotional attitude in all those who come in contact with him. He must not only be a master of the subjects he teaches — any lack of knowledge in this respect will obviously engender a disrespectful attitude in those he is pretending to teach — but if his character in other respects is bad, as in the special kind of teacher-dishonesty represented by favouritism, and the special kind of teacher-acquisitiveness represented by pre-occupation with exploiting his position, he will not only fail to command a respectful attitude, he will tend to create an attitude of general contempt

for teachers. If students find themselves being taught by teachers of this kind — and they have almost an instinct for finding it out — they will almost certainly be conditioned to feel contempt not only for teachers but for the whole institution of which such teachers are a part.

Teaching, like medicine, is a profession. Like physicians, teachers can engage in malpractice. But malpractice in teaching goes far beyond mere deficiencies in knowledge of subject-matter. It is malpractice for a teacher to fail to observe the ethics of his own profession; it is malpractice for him merely to possess traits which provide the wrong model for student behaviour. The professional teacher is, of course, a specialist devoted to teaching; he may think that his responsibility ends the moment he ceases to lecture. But even if he is teaching a special subject, he cannot avoid influencing the personalities of his students.

He is like a priest or minister; he cannot avoid making a profession of his character and personality. If he is teaching merely for the sake of a job, and because he can make more money out of it than he can by working on something else, this in itself disqualifies him for the profession. The teacher's profession is truth and spreading the truth, and character-building is essential if he is to create truth-seekers. If he cannot rebuild his own character and transvalue his own values, he will neither be able to respect himself nor inspire his students with the right attitude toward learning. If he cannot make this transformation, he ought to leave the teaching profession as he will be doing harm, and not good, as long as he remains in it.

The Two Levels of Emotional Experiences. To provide the right kind of emotional education and to cope with the pedagogic problem which the need for planned emotional education creates, advantage must be taken of some perfectly obvious psychological truths, in particular the distinction made in modern psychology between (1) mild and (2) strong emotional experiences.

1. *Mild Emotional Experiences.* Every experience in life, it is true, makes some sort of impression upon the mind,

and every experience has some, however slight, emotional element in it. But experiences in which the feelings aroused are faint, make no significantly enduring impression upon the unconscious mind, and it is impressions made on the unconscious mind that are involved in emotional education. Greeting someone whom one knows and sees daily is such a mild emotional experience. So is the tasting of an apple one is eating. So is the aroma from smoking a cigarette, and the flavour of drinking a glass of beer.*

But let any one of the mild emotional experiences be repeated frequently, and ultimately the cumulative effect makes a deep impression upon the unconscious mind; mild experience frequently repeated become more and more attractive; a desire to experience them becomes an enduring and almost permanent part of the individual's personality. Repetition of mild emotional experiences create virtually ineradicable attitudes and make for consistent responses to future experiences of the same kind. Repetition makes it possible to use mild experiences as the backbone for emotional education.

The manner in which a teacher and a class greet one another is typical of such mild emotional experiences. They greet one another in some fashion almost daily. This fact can be used by the teacher either to instill a wholesome or unwholesome emotional attitude in the members of his class. The manner in which he enters, and what he first says; the manner in which the class is required to act when the teacher enters — perhaps to rise and to remain standing until the teacher responds to their greeting and seats himself — may each time create little discernible feeling. But let this mutual courtesy be repeated often enough, and it becomes a major contribution in instilling an attitude of courtesy in every participant in the experience. The reverse effect can be implanted if there is no greeting at all; if the teacher comes in, perhaps a few minutes

* This may not be true the first time a mild emotional experience is experienced. On the contrary, there are many such experiences, which, the first time they are experienced, in fact produce strong and enduring impressions. The first cigarette smoked; the first glass of beer, the first sexual experience, may make an enduring impression, no matter how slight is the impression made by similar experience at subsequent times.

late; makes no apology and explanation for his tardiness; or if the class pays no attention to his entrance, goes on talking and shuffling about until the teacher begins teaching and calls them to attention. Let this sort of experience be repeated often enough, and it becomes a major contribution to instilling an attitude of discourtesy.

2. *Strong Emotional Experiences.* In contrast to mild emotional experiences, which have to be frequently repeated if they are to be used in emotional education, a single experience sufficiently startling or sufficiently shocking, which produces strong and deep feeling, can by itself create an enduring and virtually ineradicable attitude toward future experiences of any related kind. Startling emotional experiences of this kind may be accidental but they can also be planned, and both can make enduring impressions on the unconscious mind. It is accidental shocks of this kind, repressed frequently from childhood when as a child an individual has a morbid or traumatic emotional experience, that psycho-analysts have so often found to be at the root of the neurosis of adult patients who have completely forgotten the experience. On the other hand, it is a strong planned emotional experience which is provided in the elaborate rituals and ceremonies which most cultures call for in connection with puberty and marriage, birth and death.

There are an infinite variety of such strong emotional experiences which can be planned and used by teachers and by schools in providing emotional education of the right kind. Convocations, for instance, justify themselves if they are not only planned but conducted with a view to producing an enduring impression upon the participants. The celebration of festivals and holy days can be used for the same purpose. But strong emotional shocks can be administered in ordinary teaching. A physicist, for example, who describes to his class a universe without a trace of God in it, can subject students who have been raised in devout homes and have never before heard the existence of God questioned to an emotional, and not merely an intellectual shock which will last a life-time.

The end-results of either repeated mild emotional experiences or of single strong emotional experiences may be either hygienic or traumatic; they may either condition the subject to respond healthily and wholesomely to future experiences, or may disintegrate and disorient him so that he reacts to them neurotically. Obviously, emotional education of the right kind must be planned to produce hygienic impressions and instill wholesome attitudes.

Since life inevitably exposes every human being to both unwholesome mild and unwholesome strong emotional experiences, emotional education of the right kind should include planned experiences which in effect inoculate the student against the traumatic effects of accidental experiences of a morbid nature.

The Three Emotional Climacterics. There are three periods in the life of every individual when it seems as if nature itself creates the opportunity for making intense and almost indelible impressions on the unconscious mind — three periods when traumatic experiences will imbue the individual with enduring emotional attitudes of the wrong kind, and hygienic and wholesome experiences imbue them with enduring emotional attitudes of the right kind: (1) the period immediately after birth, which lasts a relatively short time — perhaps a matter of months; (2) the period beginning at puberty and lasting a considerable number of years, and (3) the period which is climaxed in the forties and fifties by the male and female climacterics. During each of these periods the individual undergoes profound physiological and psychological transformations. The last two of these are connected with sexual developments and changes. Sexual education has already been discussed in connection with physical education, but it is just as truly a part of a programme of right-education emotionally as physically. What students are taught in connection with their physical education on this subject must therefore be coordinated with what they are taught in connection with their emotional education. There is no need, however, of assuming that this requires ignoring the fact that there are many unreconciled points of view among psychologists and physiologists about

what constitutes a proper sexual regimen for mankind; the college student, if fit for college admission, should be mature enough not to be troubled by this. But the differences must be dealt with in such a way that the student is not bewildered by them, and is nevertheless led to adopt a sexual regime which disposes of the most important of these problems with which he has to deal.

1. *The Infantile Climacteric.* Parturition, Freud's studies of neurosis has made clear, is a profound emotional shock to every new-born infant — a terrifying shock if we try to imagine what the new-born infant experienced during its laboured emergence into the outside world from the security, from the automatic and in a sense loving ministrations to all of its wants, in the warmth of the womb. Suddenly it finds itself in a world which by comparison with its womb-world is icy cold, a world in which it is deprived of constant contact with its mother, a world in which it has to cry for food, for warmth, for contact, and for support if its need for these is not constantly anticipated.

It is probable that Freud was right in maintaining that parturition was a startling emotional experience and that it made a lasting impression upon the unconscious mind of the new-born infant; but that it was traumatic experience is a more dubious interpretation of the facts. It is probable that whether it is a traumatic or a hygienic experience is dependent upon what happens immediately after it finds itself in the outside world, and in a state of extreme impressionability. If at this time it is not lovingly cared for, it most certainly receives a traumatic emotional shock on top of the shock of birth; if instead of being loved it is in fact rejected by the mother, the deprivation makes an enduring traumatic impression upon its unconscious mind; and if the deprivation is harsh enough, develops in the child a neurotic attitude which in many instances is never completely eradicated.

About this infantile climacteric the educator in his classroom can do nothing directly. But indirectly he can do almost everything the situation calls for. If such a Mother's School as

I discuss in some detail in Chapter 10 were made an intergral part of the whole school system, many mothers, and through them the fathers and other members of the family, would be made aware of the enormous importance of the impressions in depth made upon the unconscious minds of their children by what they do, often inadvertently, to them in the first few months and years of their lives. Nature itself seems to call for the right kind of emotional conditioning at this time, and inflicts terrific psychic penalties upon the child, and terrible social pathologies upon society, if the child is even inadvertently rejected by the mother or harshly mistreated by any of the members of its family. If parents are unaware of the necessity for the right kind of emotional education at this time; and if educators make no contribution to adult education in this area, the increase in the number of problem children, of juvenile delinquents, and of neurotics of all kinds will continue indefinitely.

But the school system can do much more than this. It is the school system which in the modern world trains the physicians, the mid-wives, and the trained nurses who deal with mothers, and who organize the modern hospitals which create the modern attitude and the modern folkways having to do with child-birth and child-rearing. Most of them have been so grossly mis-educated, that in most of the modern world the medical profession is unconsciously engaged in making war on the traditional and almost instinctual tendency of mothers to breast-feed, to hold, to carry, to cuddle, and to love their infants on the ground that a minimum of handling is better for babies, and that trained nurses can do more hygienically what needs to be done in caring for them. And pediatricians who are specialists in child care know virtually nothing about the specialty to which the psychiatrists and psycho-analysts devote themselves in trying to correct the damage done to human beings during this early period in their life.

If the school system does not provide leadership for the right kind of emotional education during the pre-school period, it finds itself, as is the case today, engaged in trying to teach such enormous numbers of problem children, juvenile delinquents, and undisciplined students, that it is almost impossible to do justice to those who are normal and who want to learn.

2. *The Adolescent Climacteric.* The second of these periods of great emotional impressionability — the adolescent period, for want of a better term — begins with the onset of puberty, with the “shock” of nocturnal emissions in boys and the menarche in girls, and ends with the “shock” of the first sexual experiences, the “shock” of marriage, if it comes early enough, and the “shocks” of the wedding night and honeymoon. During much of this period, the young in the modern world are in school, going to college, or taking courses at a university. Here again we have a period when nature itself seems to call for emotional education of the most inspiring and impressive kind. And since the period is passed while the young are in classrooms, it becomes a direct responsibility of the school system, and must be provided for in every curriculum which makes a pretense of educating the whole man.

During this period, when the individual comes to grips with some of the problems of adult life for the first time, there is a great hunger for answers to the problems with which they are confronted; there is a natural seeking for ideals by which to live, and there is nothing more important that the school system can do than to make certain that these hungers are not ignored.

It was on the basis of the need for emotional education during this period that Grundtvig* based the whole of his theory of education. It is because of the terrific impact which ideas and ideals make upon the burgeoning adult, and the enduring extent to which they can shape their attitudes, that he insisted that the curriculum of the school which they attended at this time should provide them with a deeply moving vision of how life should be lived. Since the conventional high schools and colleges at that time did not provide it, particularly to the rural population which he considered the cream of the whole population, his disciples began the organization of the Danish Folk School System. Enlivening, they said, was more

* Nicholas F. S. Grundtvig, (1783-1872), may justifiably be considered one of the greatest philosophers of education of all time. The Danish Folk School movement, which his writings inspired, is responsible for making not only Denmark but the Scandinavian countries as a whole into the most enlightened nations in the whole modern world.

important than enlightening; inspiration more important than instruction. Given the enlivening and the inspiration, the quest of knowledge follows and becomes life-long, they argued. Fail to provide them what they need emotionally at this time, and education of all kinds fails of its purpose.

3. *The Adult Male and Female Climacterics.* Sometime between forty and fifty, the individual enters upon the last of the three periods of emotional "storm and stress", of climacteric psychological and physiological change. During this period, menstruation ceases for women; and men become conscious of a decline in their sexual virility. Again nature not only creates in both men and women a condition of high impressionability and susceptibility which calls at that time for right-education emotionally. But though this period comes long after schooling has ended, and the educator no longer can influence the individual in a classroom, the school can nevertheless make a major contribution toward creating the right kind of emotional attitude toward it. It can, along with emotional education for adolescence during the school years, make the individual aware of the fact that later in life he will go through this difficult period, and by the very fact of making him aware of it, create a more wholesome emotional attitude toward it.

It would involve too long a digression to go into details about what should be taught with regard to this particular emotional problem; the subject be covered, in dealing with two of man's basic problems, the occupational problem, and the psycho-physiological problem.

Organizing Emotional Education. To provide for the emotional education of students in schools and colleges, no special course need be added to the curriculum. So far as this problem calls for intellectual treatment, it is already taken care of in existing courses in applied psychology. But four activities that take place in some form in every school and college ought to be examined and considered since they provide the major means for dealing with the emotional education of the whole man. These four activities I think of as (1) inaugural events, (2) terminal events, (3) regular dedicatory services, and

(4) celebrations. Discussing them at this time is, it is true, discussing them out of their strictly logical place in this study. They have to do with the organization of teaching, rather than the organization of the curriculum. But the digression is justified as it is important to make clear that schools and colleges can do a great deal to provide this missing element in modern education.

1. *Inaugural Emotive Events.* Schooling includes a succession of what I think of as inaugural events, beginning with enrollment at each level of the school system. Every such enrolment, if it is to provide a strong and impressive emotional experience of the right kind, must become a kind of initiation; it must, if possible, consist of an experience as vivid, as dramatic, and in its impress on the unconscious mind, as enduring as is the initiation of monks and nuns into religious orders. Though it may be more difficult to invest enrollment in a school or college with such an emotive character such as in the case of the imitation of novitiates into a religious order, the fact remains that every enrollment into a school, every beginning with a new class, every introduction into a new course or subject, is in fact the inauguration of a new experience in learning, and such an experience can be ritualized and so made into an impressive experience. There is no experience more important to the realization of the potentialities of life than learning, and when learning is robbed of this almost sacramental character by a failure to ritualize each step in it, education as a process is not only cheapened, it is negatively-valued. That students introduced to learning in such a manner should lose respect not only for learning but for schools, for teachers, and for everything connected with institutions of learning, should not be a matter of surprise. We are ensuring it by failure to take advantage of the need and the opportunity of making each inaugural event an essential part of a programme of right emotional education.

Our problem as educators is that of investing all such inaugural events in the school life of students with a sacramental character, of making every student feel like an acolyte, and every teacher like a priest.

It is my contention that every subject, even a subject as mundane as accounting; every course of study, no matter how technical; and every basic problem of man and of society, can be invested at its inauguration with such an evocative and impressive character. Accounting, for example, is not merely an acquirement which makes it possible for those who master it to earn a living. It is an important social service. The accountant is in fact a recorder of measured economic truths; the record of economic facts which he keeps is not merely a means to profit, but to the social contribution inevitably made by every efficient enterprise. It is possible, therefore, to present these aspects of accounting in such a manner as to invest the introduction to its study with a character-building element, and make it a factor in the right kind of emotional education.

What is possible with such a subject as accounting, is even more possible in subjects like history or political science. And it is still more possible when the student is introduced not merely to a single subject but is enrolled in a whole school. It is possible in connection with all inaugural events whatsoever.

Introduction to a higher level of learning, when a student enters high school or college, calls for a number of ceremonies, extending over several days, climaxed by an inspiring oration which makes clear the significance of learning and the privilege of attending an institution of learning. It should make him feel the great significance of the concept of the education of the whole man because this alone can equip him to deal with all the problems he will face in life in a rational and humane manner. It should be virtually a series of religious services that begin and end with a procession. It should include music and group singing, pageantry and even folk-dancing.

It should be a modernized equivalent of the way the young in India were introduced to learning before the British arrived and Western conceptions of education were imposed upon the indigenous population. In an official report to the Government of Madras made in 1822, this introduction is described as follows:

"The education of the Hindoo youths generally commence when they are five years old; on reaching this age, the master and scholars of the school to which the boy is to be sent, are invited to the house of his parents; the whole are seated in a circle round an image of Gunasee and the child to be initiated is placed exactly opposed to it. The school master sitting by his side, after having burnt incense and presented offerings, causes the child to repeat a prayer to Gunasee, entreating wisdom. He then guides the child to write with its finger in rice the mystic name of this deity, and is dismissed with a present from the parents according to their ability. The child next morning commences the great work of his education."*

2. *Terminal Emotive Events.* For every inaugural event, there is of course, a terminal event. The emotional importance of final graduation, with its award of diplomas, degrees, and prizes, is usually recognized with a convocation or some kind of graduating ceremony. But rituals at the termination of every educational event is called for by right emotional education. It is called for in promotion from one class to another; it is called for even at the end of a lecture period, or at the end of the day when a teacher and his students part. Advantage must be taken to make every possible occasion a part of a programme for creating the right kind of emotional attitude in the relationship of students and teachers.

3. *Weekly Dedicatory and Inspirational Services.* Chapel services on Sunday mornings were taken for granted in all colleges in the Christian World at one time, and they are still required in all denominational schools. The revolt against chapel in the Western World was due in part to the original insistence upon compulsory attendance, but mainly to its denominational character. Yet nothing is more essential to the wholesome emotional development of both the students and teachers of a school or college than an adequately planned inspiring weekly service of ritualized re-dedication to the task of learning.

* "History of Education in India," Syed Nurullah and J. P. Nair, Bombay, 1943, p. 7.

4. *Celebrations and Festivals.* Finally, every traditional festival and national holy day, and every significant anniversary, should be used to stage a dramatic pageant, and with oratory, music and singing, and processions, transform it into a deeply moving and deeply impressive emotional experience of the right kind.

The Emotive Environment. To invest these activities with the emotive values which are potential in them, the right kind "stage" must be provided. The right emotional attitude towards beauty — even the right ethical attitude toward it — should be instilled by the artistry of the grounds, the buildings, the statuary and the paintings, the very quarters in which the students live, and even the classrooms. By requiring the whole student body to respect, maintain and devote time to developing the existing beauty of every part of the institution, they can be made aware of the part school attendance plays in their right emotional education.

But this manifestation is by no means all that is possible. It is easy to deprecate the importance of costume. But there is nothing which mankind has mere persistently used as a means of manifesting its emotional attitudes than costumes and decorations. For exactly the same reason that a mystic order prescribes a uniform for its members, a school or college should prescribe the kind of costume which is most apt to manifest the fact that both teachers and students are engaged in a common quest for learning.

Counselling. Student counselling is already an accepted procedure in many colleges and universities, but it should be made an integral part of such a system of emotional education as is here suggested. It should not, however be limited to the students. It is even more important that the members of the faculty should be helped with their emotional problems. An emotionally maladjusted individual student is a menace to himself and to his fellow students, but an emotionally maladjusted teacher, because of his position, can do infinitely more harm in mis-influencing and mis-educating emotionally than any individual student. A teacher teaches not only by what

he says but by what he is. Cynicism, which is a major educational sin, in a teacher, communicates itself not formally but informally. It is not merely an intellectual but an emotional illness. It should not be confused with Realism; the Cynic is if anything less realistic than the Idealist.

It is because of these aspects of the emotional attitudes, and not only the more obviously mistaken ones, that the concept of counselling should be broadened and dealt with as part of a total co-ordinated programme of emotional education.

Director of Emotional Education. To realize the possibilities of such a planned programme of emotional education, the whole programme should be put into the hands of a Faculty Committee on the Education of the Emotions of which the Deans or Principals would be ex-officio members.

Finally, just as physical education is centered in a Director of Physical Education, so emotional education ought to be centered in a professionally trained Director of Emotional Education. We take it for granted that athletics and sports are sufficiently important in college to justify the inclusion of a qualified member of the faculty who devotes all his time to physical education. Emotional education, however, is of infinitely greater importance, and physical education positively harmful if it is not accompanied by the development of the emotional attitude called sportsmanship. The task of the Director of Emotional Education will, of course, include some lecturing, but his primary tasks are two-fold: counselling not only the students but also the faculty about their emotional problems, and organizing all the events, both curricular and extra-curricular, which take place each school-year so that they instill in the students emotional attitudes which will inspire them to consecrate and dedicate themselves to learning, and imbue them with values which will make them love truth and goodness and beauty as long as they live.

CHAPTER XIII

PERCEPTUAL EDUCATION: THE CULTIVATION OF SENSITIVITY

For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never catch myself at any time without a perception, and never can observe anything but the perception—David Hume.

Until the advent of Watson* with the psychology of Behaviourism, Hume** with his doctrine of Sensationism, was the most extreme exponent of naive Mechanistic psychology. Hume maintained that all of Man's mental life consisted of what in this study are called percepts. Yet the flaw in Hume's basic assumption ought to be fairly obvious. Man, he maintained, is never "at any time without a perception; and never observes anything but the perception." The trouble with this is that it does not distinguish between the recollection of a perception and the perception itself; between introspection, recollection, and imagination on one hand, and sensation on the other. As a matter of fact, it is much truer to say that man is never at any time without recollections than to say that he is never without perceptions. There are innumerable times when man is so stoutly in the grip of introspection that he is virtually anesthetized against the perception of any sensations from without.

All this is not to minimize the importance of perception, and the cultivation of sense perceptions. It is simply to protest against the gross oversimplification represented by Mechanistic psychology and propagated by Behaviouristic psychologists, and to record the caveat that education of the whole man is not possible if it is assumed that perception alone is the key to the cultivation of the mind.

* John B. Watson, (1878-1958), the American Psychologist.

** David Hume, (1711-1776), Scottish philosopher and historian.

The fact is that all of what human beings learn, as I have tried to demonstrate in the discussion of reflex and inflex arcs in the first volume of this study, consists of responses to either outer or inner stimuli — to stimuli of which the individual becomes aware either through his five senses, or through his faculty for introspection.

All the facts of which we become aware, and all the inferences we make, are the products of either our perceptual or our introspective experiences, and both these kinds of experiences, since they leave impressions of some kind upon us, are educational in nature.

What we ordinarily call education — education in its narrower rather than broader meaning — consists of what might be called *planned experiences* in contrast to *chance experiences*; yet whether planned or whether accidental, both kinds of experiences, since they leave some sort of residue in the mind and have some sort of effect upon the intellect, the character and the personality of the individual, are in the broadest sense educational.

The distinction between experiences which are perceptual and those which are introspective in nature, between experiences which have their ground in sensations and those which have their basis in recollections, imaginations, intuitions, and revelations, whatever these "inations" be called, is, from the standpoint of curriculum building, enormously important.

What we see and hear and learn through one or a combination of sensations, when seized upon by the mind so that it is merely known — so that we have something ranging between a mere notion and a clear idea about it — will in this study be called perception. It is true that it is easy to confuse perception with sensation in discussing these matters, but sensation I propose to limit to the designation of the neural process called the reflex arc, while perception will be used to designate the conscious identification and evaluation of sensations. Sensation man has in common with all animals. Perception is an exclusively human attribute. Every sensation which we consciously identify or evaluate is a percept which varies in its clarity and its value in accordance with the extent to which our senses and sensibilities have been cultivated.

Introspection and inaction, as we shall see, are very different, and call for different treatment educationally.

In strictly intellectual education; in what constitutes the bulk of the present-day curriculum, (perhaps properly so), there is no education of the perceptions as such. The words and symbols used in teaching have to be perceived by the student, and perceptual education to this extent is therefore unavoidable, because incidental, part of purely intellectual education, but countless masters and doctors in all sorts of subjects have been so poorly educated perceptually that they are virtually tone-deaf and colour-blind. It is absurd to speak of such men, however many degrees they acquire, as *wholly* educated human beings. Their senses have not been sensitized. They are blind to the beauties of nature and of art; they are deaf to the beauties of song and music; they are insensible to the beauties of poetry.

The extraordinary extent to which the senses may be sensitized and the perceptual faculty educated has probably been most vividly demonstrated by the educational work of Maria Montessori.* Most of her work and most of her writings, unfortunately, have dealt with the education of the very young, but what she has demonstrated is applicable to perceptual education at every stage of education from infancy to full maturity.

Man versus Animal Perception. All that an animal learns through the use of its five senses is mechanical in nature. Its senses are photographic. Its eyes register what they see exactly as a camera registers what its lenses "see". What its eyes see are *forms*; what its ears hear are *warnings*; what its nose smells are *signals*; what its palate tastes, *food*; what it touches is, *support*. This is true in spite of the fact that many animals have senses far keener than ours. Birds can see infinitely better than we can; dogs smell better; rabbits hear better.

* Maria Montessori, (1870-1952), of Italy, developed the system of training and instructing young children based upon the use of equipment for encouraging spontaneous self-education called the Montessori system. The system places special emphasis upon the training of the senses.

But once an animal has matured, the development of its senses stop.

The purely animal, and in a sense mechanical, responses of animals to their sensations is always one of some degree of attraction or some degree of aversion. Their reactions to their sense-experiences are biologically utilitarian; they never rise above the level of what their instincts tell them are useful. The sight or smell of the food they naturally eat, attracts every animal; the sight or smell of a man frightens and repels every animal which has not been tamed and domesticated. And that is as far as the sensory development of animals goes.

Animals respond to their sensations; they do not perceive them; they cannot distinguish and perceive shades and tones, and make esthetic distinctions and esthetic judgments. The case with man is very different. He too is born with five senses. And he too has neural mechanisms which respond hereditarily to stimulation. But in his case he has what no other animal has, senses which are plastic, the sensitivity of which can therefore be cultivated as long as he lives; which can be sensitized to an almost incredibly higher degree than the mechanical response with which he is equipped at birth. This cultivable and acquirable response, however, differs not only in degree but in kind from mere sensation; it is a product of his education and not an inherited biological endowment.

The extraction from the biological phenomena of sensation of the maximum of what our sensations can contribute to the education of the whole man begins with perceptual education, is atrophied or intensified, as we shall see, by his axiological education, and finally culminates in critical faculties which are provided by his intellectual and introspectional education. What the musically untrained individual perceives when he hears a bar of music is not much more than a pleasant succession of sounds; what the musically cultivated individual not only perceives but adds to perception are nuances which conscious attention and discrimination enables him to discover and of which the uncultivated individual is completely unaware. Perceptual education transforms what the uncultivated individual perceives into what the cultivated individual apperceives.

Perception versus Apperception. Perception, as we shall use the term, is merely the knowledge directly obtained through the medium of the senses; it is the direct knowledge obtained by individuals as a result of sensations of seeing, hearing, tasting, feeling and smelling.

Apperception, on the other hand, is the kind of perception experienced — the kind of knowledge obtained — by an individual who deliberately and even self-consciously evaluates what he perceives as a result of prior discrimination, interpretation, recognition, recollection, and classification of perceptions. In the individual who is highly cultivated perceptually, this complex process becomes so much a part of the man that he hardly has to make any conscious effort to apperceive.

How far this can go we see in the capacity for apperception of great geniuses. A painter like Turner,* “sees” in landscapes what the average individual completely overlooks; a painter like Landseer apperceives in animals what most of us never “see” without his help; a composer like Beethoven* or Chopin* hears, or rather apperceives, in sounds what only their genius enables us to hear; a great poet like Keats apperceives in a Grecian vase what is only an old vase to most people, and a great dramatist like Shakespeare apperceives in human behaviour things that even to so-called trained psychologists are invisible. But apperception, and the cultivation of sensitivity, is not restricted to artists; it is highly developed in scientists. A scientist like Darwin cultivates his perceptual faculties until the whole parade of living organisms on the Earth takes on nuances imperceptible to the ordinary individual; and entomologist like Faber* cultivates sensitivity to insect life; an ornithologist like Audubon* cultivates it with regard to birds. Unfortunately, particularly among scientists, perceptual education is too often specialized.

* Joseph M. W. Turner, (1775-1851), the great English landscape painter; Sir Edwin Henry Landseer, (1802-1873), the famous English animal painter; Ludwig van Beethoven, (1770-1827), the great German composer; Frederic F. Chopin, (1809-1849), the great Polish composer of symphonies; John Keats, (1795-1821); English poet; Jean Henri Faber, (1823-1915) the French naturalist who made the observation of insects a life-study; John J. Audubon, (1785-1851), the great American ornithologist whose paintings of birds have never been surpassed.

These, of course, were all geniuses of apperception, but Montessori demonstrated that it was possible to educate even feeble-minded children to discriminate in sounds and colors as most normal people cannot. The average person can develop his perceptual faculties to an extent which we almost completely overlook when we concentrate merely upon his intellectual or vocational education.

Most individuals learn to perceive automatically; they learn how to distinguish between colors and sounds, but never get to the point where they evaluate shades and tones. Perceptual education begins with the transformation of their vague notions about colours and sounds into clear ideas about shades and tones, forms and details.

What is true of the education of simple sensations, is true also of highly complex sensory experiences. The individual can be taught to perceive clearly not only a particular shade of blue; he can also be taught to apperceive scenery and works of art. He can be taught to perceive such experiences not as hazy notions but sharply and acutely. At this point, perceptual education can be said to be complete, and introspectional takes over.

In providing for merely perceptual education, the three principal canons for cultivating the unconscious mind which I have tried to formulate in Chapter 16 must be observed; what they prescribe must be incorporated and made a part of every course and every subject in the curriculum. No special courses are needed to provide perceptual education, if perceptual education is included in all courses and not only courses in the arts and crafts, in literature and music, painting and architecture, drama and poetry, in which cultivation of the senses cannot be avoided. Every student, however, and not only those specializing in one of these arts, must be perceptually educated.

In educating the whole man so far as his perceptions are concerned, the goal ought to be: *every individual not only a music lover but a vocalist or instrumentalist; and every student not only an art-lover but participant in the creative and interpretive arts.*

CHAPTER XIV

INTROSPECTIONAL EDUCATION: THE CULTIVATION OF THE SELF

Perform thy task...Do not be impelled by the fruits the task might bring to thee...Vast is the gulf betwixt the task performed in *yoga* and the deed done for lure of its fruits...Stand thou then unconcerned...even by the clash of doctrines now confused. Then shalt thou remain unshaken...in creative concentration.—Bhagavad Gita, II: 47:53

The discussion of perceptual education has, I believe, made clear the fact that the moment we consider education of mental faculties other than those which are intellectual in nature, we break new ground; we find ourselves dealing with aspects of education which prevailing practice does not include in curriculum-building. But with none of man's mental faculties are we confronted with more novel problems than those which are involved in what I think of as education for introspection.

Introspects are units of knowledge of which we become cognizant in responding to stimuli which are mental and internal and not physical and external; they are units of knowledge which originate in our brains and not our sense organs, and which operate by inflex and not reflex arcs. Just as it is necessary to use the word *introspection* as a parallel for the term perception, so it is necessary to coin the word *introspects* to provide ourselves with a parallel for percepts, and the word *ination* to provide ourselves with a parallel for sensation. Introspection, as it will be used in this study, refers to the end-result of the process of ination, as the term perception refers to the end-result of the process of sensation. Ination, in turn, refers to the neutral and physiological process which is dependent upon the operation of inflex arcs, just as sensation refers to the neural and physiological process which is dependent upon the operation of reflex arcs.

It is impossible, as I read the evidence, to account for what takes place in thinking as Mechanistic and Behaviouristic psychology accounts for it. It is, in my opinion, utterly impossible to account for what takes place during introspection — during acts of intuition, recollection, imagination and conception — in purely physiological terms. It is for this reason that I have been driven to formulate and develop the hypothesis of the inflex arc, and develop the concepts of percepts and introspects. But important as this hypothesis is to the consideration of curricular problems, it would involve an unnecessary digression if it were fully explored at this time.

What concerns us here is not only the distinction between introspection and perception, but also the distinction between introspection and thinking. Introspection is one kind of thinking. It is thinking subjectively and not objectively; it is thinking not for the purpose of comprehending noetic problems nor for the purpose of controlling and directing action, but purely for the sake of self-comprehension; for the purpose of understanding, of integrating, and of realizing the Self.

Babbitt, in Sinclair Lewi's famous novel of that name, thought, even though he wasn't what we call a thoughtful person. But all his thinking had to do with the immediately practical; with something that he was at the moment engaged in doing. All his thinking was devoted to solving the problems of getting something which was for him an immediate want or desire. It involved a complete violation of the injunction upon which Krishna insisted in the Bhagavad Gita, "Do not be impelled by the fruits the task might bring to thee."

Introspective education becomes enormously important the moment we distinguish between an "intellectual" or a "spiritual" person on one hand, and a "sensate" or "practical" person on the other; between the type of person who is, in Jung's* language, an introvert, and the type who is an extrovert,

* Carl Jung, the Swiss exponent of "analytical psychology," was probably Freud's most important follower. He based his work to a very large extent upon the distinction between temperaments which are inwardly or introspectively oriented, which he called introverted, and temperaments which are outwardly oriented, which he called extroverted.

or in Sheldon's* language, between viscerotonic and somatonic personalities on the one hand, and cerebrotonic personalities on the other. Babbitt was an extrovert; he was an extreme extrovert, so extreme as to be in fact a neurotic. When late in life he suddenly discovers that there is an inner life which all his life he has failed to cultivate, he goes to pieces.

The issue, however, is not of education either for extroversion or for introversion. If introspection is overcultivated, it produces the neurotic mystic who is mistakenly enamoured of other-worldiness as Babbitt was of this-worldiness. The issue is education for wholeness. And wholeness is not achieved if introspection is ignored — if education devotes itself wholly to the production of the practical man. The cultivation of inner and intellectual life is essential to the education of the whole man, and absolutely essential to the production of an intellectual and idealistic elite.

What takes place during introspection is the production and creation of what I have been driven to call introspects; and the various kinds of introspects: recollects, incepts, concepts and images. The thoughts, notions and ideas, facts and data which are the end-products of introspection, since they are not the products of a succession of sensations, cannot be called percepts. That is the reason I distinguish between percepts and introspects; there are two, not one, basic units of knowledge.

Behaviourists will, of course, dismiss the concept of introspects as pure superstition — as a rationalization of what in fact has no actuality. But that man does have an inner and introspectional mental life, and that this produces ideas other than those produced by his sensations, remains a stubborn fact in spite of Behaviouristic dogmatizing on the subject. Just because words like spiritual and intuitional are considered taboo by most scientists and scientifically oriented educators; just because the

* William Sheldon, an American psychologist, made an exhaustive study of human types in a book which he entitled "Varieties of Human Temperaments." The inwardly oriented type which Jung called introverts, and William James "tender-minded," Sheldon called cerebrotonic.

experimental and the pragmatic is more highly valued today than the introspective approach to learning, it does not alter the fact that an enormous part of the mental life of every human being is introspective and not perceptual in nature. The facts in connection with introspection do not, however, have to be attributed to the interposition of something of a divine or spiritual nature; they can be attributed to the operations of the unconscious mind; they can be quite scientifically accounted for as simply cognition of notions and ideas which well into the conscious from the unconscious mind. This explanation negates the Behaviouristic insistence upon sensation as the sole source of all human thinking, and makes it absurd to deny the actuality of inflex arcs, and of the introspects with which their operations provide us.

That sensitizing of the senses and cultivation of keener and keener perception should be taken into account in curriculum building, is something that most educators will find it quite possible to accept. Indeed, it is already accepted in so far as the curriculum includes any worth-while teaching of poetry and other arts, of music and painting, and of other subjects which become purely academic unless good taste is cultivated in the courses devoted to them.

But most of those of us who are entangled in the existing system of education will hesitate to take the further step of accepting the idea that the cultivation of introspection should also be considered essential in curriculum-building. We will probably hesitate because we have been conditioned to feel introspection is dangerous; that modern man should be taught to stick to facts — what can be seen and heard or otherwise sensed — and because we have been thus conditioned, we feel that even if the faculty of introspection is susceptible of education, it is not worth while devoting thought to it or apportioning time to its cultivation.

But none of this happens to be true. Introspection can and should be cultivated. The belief that it cannot or should not is based mainly upon the fact that existing curriculums restrict themselves to what is accepted by science as within the domain of the scientific, and excludes everything which is not.

If man is to be humanized; if he is to be wholly and not only partially educated; if he is to cultivate an inner as well as an outer life, we shall have to disregard the Behaviouristic contention, and apply the scientific method to introspection just as we do to sensation and perception.

That the introspective faculties can be developed is an indubitable fact. They can be systematically developed. They are subject to education, just as they are also subject to neglect. To establish this fact, it is necessary only to consider the ancient Hindu system of education called yoga, and to study what Patanjali* taught in his "Yogi Shastra" not as something esoteric in nature to be used only for the purpose of learning how to enter into mystical trances, but as a method which had been used for thousands of ears systematically to cultivate introspection; not only to develop the spiritual life, but to make the individual aware of the nature of his own Self.

The conscious life of most human beings is without any trace of true consciousness of self. The difference between the state called sleeping and the state called being awake; between a state of complete unconsciousness and the state of ordinary consciousness, is for most human beings a difference of degree rather than of kind. The somnambulist not only walks in his sleep, he performs all sorts of actions of which he is unaware. The conscious life of the overwhelming majority of individuals, the things they do, the things they say, their relations with other people, their experiences, their sensations, their thoughts are in fact sleep-like. They are the products of conflicting impulses of which they have no awareness; they have never developed an integrated Self nor educated that Self to awareness both of what is transpiring within and what is transpiring without.

* Patanjali, who is thought to have lived about 350 B.C., was the author of the famous "Yogi Shastra," the systematic treatise on *yoga* which has been the basis of *yogi* education ever since. Though thought of as an ancient Hindu sage, he was in fact a master of applied psychology long before the science of psychology was developed in the West.

Gurdjieff and Ouspensky* built an elaborate Esoteric philosophic system based upon this undeniable empiric fact: that the whole person of most individuals is without any real unity other than of their physical body; that most persons have no integrated personality that deserves to be called a Self; that for all but a very few introspective individuals, the inner life is but a flux of conflicting impulses, sensations, thoughts, tendencies, beliefs, desires, memories; and that there is no single "I", but a plurality of "I's" of which the one which spoke or acted at any given time was a mere matter of chance. For most human beings, consciousness is confusing because there is no constant "I", no integrated Self to experience consciousness. The illusion of being "I" stems out of the fact that "I" consists of a single body, that this body has habits, and that this body has a memory.

The cultivation of the Self, the integration of the Self, and the realization of the Self is impossible without the cultivation of introspection.

* Georgy Ivanovitch Gurdjieff, who made a mystery of his origin and birth, but who died in Paris, in October 1949, spent a lifetime teaching a system of knowledge to a small circle of pupils. He left only one book which he called "All and Everything"

His most important disciple was probably the Russian writer, P. D. Ouspensky, who, like Gurdjieff, traveled extensively all over the world. "In Search of the Miraculous," which was the title of the book in which he expounds, for the most part, the teachings of Gurdjieff but also his own search for esoteric truth. What justifies interest in the teachings and works of these men is their preoccupation with the problem of the integration of the individual's Self.

CHAPTER XV

AXIOLOGIC EDUCATION: THE CULTIVATION OF VALUES

The story of modern axiology.....is the story of a culture fighting for its very life.....There are indeed signs that.....the Nietzschean argument which, starting with the assumption that the entire metaphysical structure is gone, and proceeding with the premises of evolutionary naturalism, concludes that our traditional values are gone, has been accepted. It may be that our desperate efforts to retain these values, despite their absurdity on the reigning naturalistic premises, is itself a weakness and that these very ideals are themselves ghosts of Plato and Aristotle, which, in the light of a more perfect scientific day, will vanish away.....In any case.... the technical aspect of modern axiology is but the external form of a much deeper issue. As Nietzsche too clearly saw, the "value of our values" is the question of modern philosophy; the "future task of philosophy" is the solution of this problem and to its solution "all other sciences have now to pave the way."—Wilbur M. Urban, in "Twentieth Century Philosophy."

Perceptual and introspectional education, when compared to axiological education, have the relationship of means to ends. No matter how successful, in a sense they are meaningless if nothing is taught about the ends for which perception should be more sensitive and introspection more frequent. Yet nothing illustrates more clearly our indifference to the problem of the education of the whole man than our failure to assign to axiological education its proper importance in curriculum building.

Axiology, if an oversimple definition is permissible, is the science of values, and values — the subject-matter of study by the virtually non-existent group of scientists who could be called axiologists — are mankind's felt and emotional reactions to the stimulus of all of its experiences. Though values are judgments, they are emotional and not intellectual judgments. They should not, therefore, be dealt with as modern psychology

tends to do, as if they were a phenomena calling only for intellectual consideration. A curriculum which only deals with them intellectually in its courses in philosophy, is a defective curriculum. Such a curriculum not merely omits what is essential to the education of the whole man, it leaves to chance, and so to almost certain mis-education, what the student should value and what dis-value.

As a result of this neglect it has ben made easy to profess noble values which are not felt, and to feel values which the individual is ashamed to profess. What he professes is what he believes it is the part of wordly wisdom to openly acknowledge and articulate; what he values is often the exact antithesis of what he professes.

The individual who acts upon the judgment that "business is business" and "every man for himself and the devil take the hindmost," may go to church on Sunday and say that he values the ideal of "the brotherhood of man;" he may take part in a religious service in which he says that "every man is his brothers' keeper;" but what he does belies what he says. The value which he really feels is valid, is the value on which he acts. This is the value which he is really convinced in his heart is valid no matter what sort of values he may profess.

Because of our neglect of the right kind of axiological education, it is a very rare individual in our confused world today whose practiced values and whose avowed professions are one and the same. Nothing is more completely a proof of the failure of modern education, and specifically of higher education, than the schizophrenic intellectual and emotional dishonesty represented by the contradiction between what most professional men today profess, and what they are convinced is valid if they are to succeed. Nothing represents a greater challenge to education than the task of making the individual aware of the real nature of his values — the convictions which actually shape his life than equipping every individual with a rational method for testing his values and of inspiring him with a determination to live, both at home and in his work, both personally and politically, in accordance with them. Nothing

is more important, certainly no amount of merely technical training, than making it natural for him to act in accordance with what he professes as good, as true, as beautiful.

Emotional education must therefore not only be perceptual and introspectional, it must also be axiological.

CHAPTER XVI

VOLITIONAL EDUCATION: THE CULTIVATION OF THE WILL

Everything in the world depends on will.

—Benjamin Disraeli.

The term will, the idea of will-power, and the act of willing, are today considered psychologically old-fashioned.* Modern psychologists for the most part will have nothing to do with them. But at the time Disraeli said that everything depended on will, everybody, including the psychologists, took the existence of the will for granted. An extensive literature on the education of the will exists dating back to that time.

But little or nothing is gained by substituting for a term the meaning of which is generally known, obscure concepts about the existence of which modern psychologists differ among themselves just as they differ from the psychologists who in the past believed in the existence of will, will-power and willing. The fact with which we have to deal is simply this: human beings seem to possess, and universally feel that they possess, the power of making or forcing themselves to initiate, prosecute

* I quote a cogent, and for me a still largely valid, statement about this from R. P. Halleck, in his "Psychology and Psychic Culture," pp., 51-2:

"We are constantly busied with things which bring into play all the powers of the mind. A boy looks into a garden and sees a tree laden with fruit. This mental activity is chiefly perception. The tree is at some little distance, and he is puzzled to decide whether the branches are laden with apples or quinces. He calls up by representative power mental images of former quinces that he has seen. Next, he proceeds to compare the fruit before him with this image, and he decides that both the colour and shape differ somewhat from those of the quince. In this activity he is thinking. He is pleased with the juicy-looking fruit. Memories come to him of the pleasure experienced in eating others apples, and with these memories comes emotion. But still he stands there. The mental state is incomplete. The more he looks at the apples, the more he wants them, the stronger becomes his emotion. But he soon finds out that to want and to feel do not bring the apples to him. A high fence is between him and them. Finally his will causes him to act. He climbs the fence, plucks the fruit, and begins to eat. This boy has now brought every mental power into play. He has perceived, remembered, thought, felt, acted; and he is now, in consequence, eating the fruit."

and terminate something which they choose and desire to do, or which it is their duty to do, or which they have decided to do in spite of temptations not to do so. This power used to be called *will-power*, the mental faculty which exercises it *the will*, and the intervals of time during which individuals use this faculty and exercise this power, *acts of willing*. If by any chance the Behaviourists and other Mechanists in psychology ever really succeed in proving that man is a machine and his will and will power (which he naively believes he possesses) mere illusions, all they will have succeeded in doing is making it necessary to speak not of *the act of willing* but of *the act of believing that will-power is being exercised*. There is, of course, a difference between the two. But if it does not abolish the actuality of intervals of time during which we believe that we are engaged in willing, it does undoubtedly render any time we may devote to reasoning about what to do as superfluous as the time we spend in willing itself. Reasoning, by their logic, can no more influence action than can willing.

But the task of proving the non-existence of willing is no mean one. *A single instance in which one individual acts in contravention of his instinctive impulses will render the evidence of a thousand instances in which individuals act in accordance with them, worthless.* And there is not a day passes, and perhaps not an hour, when an individual does not, by his actions, do the precise opposite of what he has an impulse to do.

That willing is essential to translating decision into action becomes obvious whenever the action called for by a decision is difficult, laborious, unpleasant. It takes the exercise of something which used to be called will-power for the average child to force itself to memorize the multiplication table. In activities of this kind, without willing and the exercise of will-power, it is far too easy to be satisfied with wishing, and to forget about doing. Willing, then, no matter how called or how explained, is the final phase of an interval of time devoted to wishing which subsequently, so to speak, explodes into motor-action. It begins with reflecting, imagining, wishing, choosing; this is followed by deciding; but it will not culminate in action in accordance with the decision taken without the act of willing.

The interval of time preceding a motor-action — let us say the interval preceding the action of a soldier in going to a post of great danger — may be a state in which he feels the pangs of fear. The more he thinks about and imagines what may happen to him if he does what he has been ordered to do, the greater will be his mechanical inclination to disregard what is his duty in the matter. Driving himself to obey the order involves what has been traditionally called exercising the will. If the act of willing is an illusion, then the fact that he drives himself to obey the order is also an illusion. On the Mechanistic theory, it is necessary to assume that everything he does, from beginning to end, is only a soldier's response to his animal impulses. On this theory he may be permitted to believe that he has a certain degree of awareness of what he is doing, (otherwise he would not be able even to hear his orders, much less see where to go), but what he thinks about the matter, what he chooses to do about it, and finally what he decides to do about it, can have no connection with what he actually does about it. For the Mechanist to admit that any kind of mental activity other than that of feeling and impulse can in any manner influence human action, is to open the door to acknowledging the reality of choosing and willing.

To exercise will is to direct one's mind and one's body to do that which, without such action, the individual would not do.

It is an exercise of the will for a soldier to go where he has been ordered to go when his whole inclination is to run from the danger involved. All his impulses may be clamouring at his nerves and his muscles to run away and his refusal to yield to them is a form of mental action so distinct from other kinds of mental actions as to justify distinguishing between them. For him to yield to his impulses would be obeying not the faculty traditionally called the will, but the faculty called the emotions. Most exercises of the will involve resistance to emotions. It is not only possible to distinguish willing from emoting; it is equally possible to distinguish it from thinking, and from the even simpler form of mental actions called sensation and perception. If these are real, then logically the will is just as real.

It is true that several kinds of actions, both mental and motor, may be taking place simultaneously. The soldier is *hearing* the shots and explosions, and *seeing* men being killed and wounded around him at the same time that he *feels* the impulse to run and is using his *will* to compel his feet to stay where they are and not to run away with his body. But recognition of the simultaneity of actions is merely recognition of the fact to which I called attention in the discussion of the nature of human actions in the first volume of this whole study; what is called action is in fact only one aspect of what an individual is doing at any given moment of time. Yet the distinction between these kinds of actions is not obliterated by this; the distinction remains a fact, and its actuality is demonstrated by the fact that the intervals in which one aspect of an action begins and ends, and other aspects begin and end, rarely coincide. The soldier may, for instance, feel the emotion of fear for a long interval—let us say, for a whole hour—but during the whole of this interval, he will *see* many different things and *hear* many different sounds, and each such act of seeing and hearing represents the beginning and end of separate acts of perception each of which involves the completion of numerous reflex arcs.

When any kind of action or activity is deliberately planned, and a decision to do what has been planned and chosen is subsequently carried out in the form of an action or series of actions—when actions are subsequently performed as a result of prior deliberation or thought—willing is obviously involved and will-power is obviously exercised.

Willing in all planned and premeditated action, is an action taking place prior to the performance of the planned action. The soldier may have exercised will in forcing himself to go to the place of battle where he knew there was great danger of his being killed before the first shot in the battle had been fired. In this, willing was performed before the action of going to the place to which he had been ordered, and certainly before the action of staying on that spot took place. The motor-action of *going*, and the later act of *remaining*, were plainly different actions from that of using the will to start the first step which led to the performance of these subsequent actions. The

willing and the doing may therefore take place either in the same interval of time, or in different intervals, and this too justifies treating them as not only two actions but, since one is a motor-action and the other a mental action, as different kinds of actions.

In recognizing the distinction between willing and emoting, between willing and perceiving and between willing and thinking, the common sense of mankind recognizes as actual what no amount of scientific theorizing, of the kind in which Behaviouristic and Mechanistic psychologists are indulging, can wipe out of existence.

I know of no better concrete illustration of willing than that represented by the action which I am myself performing at this time, roughly between three and four o'clock on the afternoon of January 30, 1960, in writing these lines in my study in Ahmedabad, India. This is the anniversary of the day when Gandhi was killed. For all of India it is a holy day. I was invited by friends to attend services to commemorate the day which began at six o'clock in the morning. To attend the services, I had to get up at four-thirty, nearly two hours before daylight. As a result, I was unable to do the stint of writing which I try to finish every morning; I was unable to get back to my typewriter until the afternoon. The afternoon is hot; I am tired and sleepy; every impulse in mind and body clamours for relaxation and for rest. Yet I am forcing myself to finish the particular work which I started yesterday, and forcing myself to do it by what has been from time immemorial called an act of will.

It is true that I *want* to write. But it is also true that I *want* to rest. In making my choice between these two emotions, I deliberated; I spent some time in *choosing*. But in forcing myself to do what I decided to do, I did something different, I *willed*. And that part of my mind which did this willing, is the faculty here called the will.

Granted that the evidence for the existence of the will is accepted at least provisionally, the questions with which this confront us as educators are threefold; (1) Is the will educable?

- (2) Should training of the will be provided for in curriculum?
 (3) And finally, are there methods available for such training?

1. *The Educability of the Will.* That the will is educable was at one time as universally accepted among educators as was its existence. The literature on the education of the will is enormous, both popularizations of the subject and by presumably qualified authorities. From this literature, from the later discoveries in psychology by Freud and Pavlov, and from Patanjali's work on *yoga*, its educability can be demonstrated just as convincingly as can the educability of the intellect.

Compulsive neurotics, for instance, have been and are being cured by modern psychiatry. A compulsive neurotic is symptomatized by acts and behaviour which the victim of obsessions cannot prevent himself from performing. In terms of our problem, what this means is that he hasn't will-power enough to prevent himself from performing them. But since he can be cured, this means, again in terms of our problem, that his will has been sufficiently strengthened, and sufficiently released from the handicaps under which it was labouring, so that it could prevent him from doing what before he was unable to prevent himself from doing. Whatever the therapy involved in curing compulsive neurotics the fact is that their wills were re-educated; and if these sick wills could be re-educated, all wills are obviously educable.

It is necessary to distinguish between a sick will, such as that possessed by compulsive neurotics, and a weak will. With most students, it is weakness of will rather than sickness of will with which the educator is confronted. The difference between the two defects may be merely a matter of degree, but sickness plainly calls for therapeutic treatment by a psychiatrist; weakness, for education via a curriculum which makes provision for it.

The educability of the will is demonstrable in another way. Willing is a conscious process. The will is a faculty of the conscious mind. And that the conscious mind can be educated must be accepted, or the whole basis for educability of any kind collapses. Moreover, the conscious mind can be directly controlled; unlike the education of the unconscious mind, which

can only be reached indirectly, the conscious mind can be consciously and deliberately controlled and developed. Methods for reaching and influencing the unconscious mind are numberless and include not only conventional methods of teaching but everything from the use of suggestion and hypnotism, to the use of drugs and narcotics—not only the old-fashioned drugging with opiates, but the new-fashioned controlling of the conscious mind with tranquilizers to lesson conscious excitement, and the use of “no-nods”, as they are called, for the purpose of fighting sleepiness.

William James was one of the first psychologists to base his recommendations about teaching upon the now accepted theory that every physical sensation, every experience of any kind, including the experiences involved in the exercise of will-power, leave a permanent impression upon the ten thousand million cells of the human brain. Since these impressions are constantly accumulating, and their sum total become the constituent elements in character and personality, the situation calls for recognition of the principle that *everything we do makes it easier to do the same thing over again*. Believing that all the activities of an individual are registered permanently in the brain, James insisted that disciplined education was essential. “The hell to be endured hereafter of which theology tells,” he wrote, “is no worse than the hell we make for ourselves in this world by habitually fashioning our characters the wrong way. . . . Could the young but realise how soon they will become bundles of habits, they would give more heed to their conduct while in the plastic state.”

It is, in my opinion, the business of the school to make every student aware of the need for cultivating perseverance and determination, and the need to cooperate with his teachers in taking advantage of the provisions incorporated in the curriculum for cultivating will-power.

2. *Curricular Organization for Cultivating the Will.* There are two conclusive reasons for including the education of the will in the curriculum, the first being that a strong will—a properly cultivated will, like a properly cultivated intellect—is a part of

the equipment with which education should provide every man and woman if the ideal of the education of the whole man is to be realized. The second is that a weak-willed student is invariably a poor student. A strong will is needed not only in the world at large, it is needed in the classroom if the student is to profit from his schooling. Merely to memorize what needs to be memorized in the course of schooling, will-power has to be used, and the student who is deficient in will-power will not only fail to memorize what he should, but even if he remembers it long enough to pass his examinations, will be unable to recollect it and use it in later years.

Both of these reasons justify curricular provision for the education of the will. But again, this need not take the form of a special course to be added to the already overburdened curricula of our schools and colleges. Consideration of the methods available for cultivating will-power make it plain that education of the will can be incorporated in existing courses.

3. *Methods of Educating the Will.* We are justified in anticipating to some extent the discussion of the organization of teaching. But in order to avoid too lengthy a digression, I shall limit myself to calling attention to the three most important methods of cultivating determination and educating the will. The first, (a) the use of suggestion, both *altero* and *outo*-suggestion, was extensively discussed by psychologists who dealt with the problem of developing will-power fifty years ago when everybody believed in the existence of a will. The second, (b) which dates in its modern form to the work of Pavlov, is the use of conditioning, which has been extensively used in the Communist world and popularly called "brain washing," but which, it is not so well recognized need not be used brutally and immorally but can be used properly for educational purposes. And the third (c) is the use of mental exercises which experience has shown result in the development of will-power in a manner analogous to that in which physical exercises develop muscle-power. The virtues of initiative, of perseverance, of "doing it to a finish"—all of them different forms in which determination expresses itself—can be developed by practicing or exercising these virtues, just as better posture and greater strength can be

developed by practicing standing and sitting correctly and properly exercising the muscles of the body.

Suggestion, conditioning and exercising the will can be incorporated in teaching any subject. They can be taught in the beginning and the ending of any class or period of instruction; and they can be taught non-verbally at all times. Both can be used initially by the teacher, but probably the most important suggestion the teacher can make in connection with them is that the students practice auto-suggestion and auto-conditioning as an essential part of their "home work", so that they themselves will take hold of the problem of strengthening their own will-power in the time devoted to studying outside of the classroom.

James didn't agree at all with Dewey, and Dewey's more enthusiastic disciples, that the most successful education comes from the spontaneous interest of the pupil, who learns in the course of satisfying his curiosity. Few children are curious about the alphabet, and fewer about the multiplication table. As he put it: "It is nonsense to suppose that every step in education can be interesting. The fighting impulse must often be appealed to. Make the pupil feel ashamed of being scared by fractions, of being 'downed' by the law of falling bodies; rouse his pugnacity and pride, and he will rush at the difficult places with a sort of inner wrath at himself that is one of his best moral faculties. A victory scored under such conditions becomes a turning point in character."

In terms of educating the will, it is equally nonsense to suppose that every exercise which makes for habits of endurance, perseverance, and discipline, will be "interesting". But that makes such exercises none the less necessary.

About this, William James and the psychologists and educators now considered old-fashioned, are infinitely wiser than those of us moderns who follow the educational fashions of the moment. James, with his ineluctible common sense, has a totally different approach from what is being used in conventional teaching today.

Today not only teachers but parents as well, are victims of mis-education with regard to the discipline which this sort of teaching calls for—in part owing to John Dewey, and in part to Sigmund Freud. The Freudians have popularized the belief that the infantile and childish psyche can be irretrievably bruised by disciplining it, and the Deweyites eschew all insistence upon not only discipline in the classroom but even self-discipline in the child, on the ground that the child must only do what it likes to do. The Freudians may be right in maintaining that harsh disciplining of the very young child is a mistake, but there is a limitation to this expressed in a bit of ancient Indian wisdom in the "Chanakyasataka:" "Fondle your son until he is five years old; for ten years beat him; and as a friend treat him, when he is sixteen." In modern terms, this means to me; if you love your son during his first five years, you can discipline him for the next ten, and make an enduring friend of him after he becomes sixteen.

In no field of education is this truer than in that of the education of the will.

CHAPTER XVII

THE ORGANIZATION OF THE EDUCATIONAL SYSTEM

In the past, man was first; in the future, the system will be first—Frederick Winslow Taylor, "Principles of Scientific Management."

Long ago Aristotle called attention to the fact that the training of the character precedes the training of the intellect. For the training of the character, Aristotle look chiefly to what he called the environment. That this is true, both in terms of analysis of the educational problem and of prescription for its solution, is obvious. But if it is true, then something not so obvious is also true; *the educational system cannot be thought about in terms of classrooms only*. For there is nothing we educators can do in our classrooms which will produce properly educated men and women, if the environment before they enter school and after they leave it, influences them to believe, to value, and to act in contravention of what the school teaches them. This is doubly true if what the school teaches is not what the culture prescribes—if the school considers the function of education not enculturation but humanization.

If we exclude the home (the pre-school environment) and the culture (the post-school environment) from the organization of the educational system, what we do in our classrooms, however effectively we organize the work we do in them, will fall far short of what is necessary in the education of the whole man.

We educators, therefore, find ourselves compelled to become social engineers; we are forced to step out of our classrooms and take the lead both in the task of family revivification and of social renaissance, if for no other reason than that failure to do so means failure to educate properly in the school itself. We must make the environment—the whole culture—play its proper part in a complete system of right-education. We must organize education not only in our schools but outside of them. We must organize education as a whole.

EDUCATION IN THE SCHOOL, THE HOME, AND THE CULTURE

The First Six Years	{ Pre-School Education: The Home The Culture
From Six to Twelve	{ Primary Education: The Common School The Home The Culture
From Twelve to Sixteen	{ Secondary Education: The Vocational School The Academic School The Home The Culture
From Sixteen to Eighteen	{ Tertiary Education: The Folk School The College The Home The Culture
From Eighteen to the End of Schooling	{ University Education: The Professional School The Home The Culture
Post-Schooling to the End of Life	{ Adult Education: The School of Living The Home The Culture

CHART V

Impossible as this may at first sound, it means that we must find something which works and which will provide for right-education of the young by the parents, by the newspapers, by the cinema, by the radio and the television, by business and industry with its advertising and salesmanship, by the church and the temple, by political parties and social movements, and even by the government itself. We cannot afford to remain mere cogs in a system of juvenile education inside of our schools; we must also devote ourselves to the re-education of adults in order to counteract the mis-education of the culture and the environment. We must face up to the problem of organizing the whole of the educational environment, not only that part of it represented by schools.

In a free society this is possible, as in a regimented society it is not. In a free society this transformation and transvaluation of the environment by educators is possible without resort to revolution; in a totalitarian society it cannot be done. To the extent to which a free society falls short of giving the educator the full academic freedom this makes necessary, he must become a social reformer, while in a society in which all freedom is denied, a social revolutionist. Refusal to take on this responsibility is a kind of treason to the profession to which he belongs.

Every institution, then, in which individuals acquire the characteristics they display, and not only the school system, is a part of the educational system of every society, some being intra-mural and some extra-mural so far as the classroom itself is concerned.

Extra-mural educational institutions like the home and culture which are not organized primarily for education, as is the school system, must therefore be recognized as part of the whole problem with which the educator must concern himself. If any institution in society is engaged in shaping character, (the home, for instance); if there are individuals in the institution engaged in giving any kind of instruction in it, (as a mother cannot avoid instructing her children); if there is a content, and in a sense a curriculum, in what is taught in the institution, (even though the content and the curriculum are informal and implicit as in the home, instead of organized and explicit, as in school); and if as a result it contributes to the education or

character formation of even a single "student", (as is the case with all children raised in homes), then it functions as a school even though it is not called a school and does not confine itself exclusively to the task of education. Thus defined, the home in which a child lives, the shop in which a trade is learned, the churches and temples, the newspapers and periodicals, the cinemas and broadcasting stations, the social movements and the political parties, are all parts of the education system as a whole.

Extra-mural educational institutions, in this broad conception of education, may be either good or bad, depending upon whether they furnish right-education or mis-education; upon whether they contribute to or hinder the humanization of these who are influenced by them. If education as a whole in any society does not humanize at least the determining number of its whole population, education in that society is bad, no matter how well its formal school system is organized, no matter how imposingly housed, no matter how completely staffed, nor how great the amount of money spent upon it.

The school system in such a society may do some things very well; it may, for example, make efficient technical specialists out of the young; and yet if it fails to deal with the whole problem of endowing its charges with all the characteristics of normal human beings; if it educates them only partially and not wholly, it will not be a good school system. This is just another way of saying that a school system may be bad not because of what is taught in it, but because of what those who teach in it omit to do outside of it.

A really good educational system may be likened to a chair. No matter how sturdy three of the legs, unless all four of them are sound, we have a chair which does not deserve to be called a chair; we have a chair which it is dangerous to use as a chair. But the educational system as a whole is like a chair in another respect. It must not have five or six legs; it must not have too many legs or any legs which prevent it from functioning as it should. The right organization of education as a whole calls for making certain that the system has every "leg" it should have, and no "leg" it should not.

CHAPTER XVIII

EDUCATION IN THE SCHOOL

Popular education and certain faiths about popular education are in the mores of our times. We regard illiteracy as an abomination. We ascribe to elementary book learning power to form character, make good citizens, keep family mores pure, elevate morals, establish individual character, civilize barbarians, and cure social vice and disease. We apply schooling as a remedy for every social phenomenon which we do not like.—William Graham Sumner.

In considering the organization of education in the school as contrasted to education outside of the school, we might well begin by recognizing that schooling has a quantitative as well as a qualitative aspect. In quantitative terms two mistakes are possible; there can be the mistake of having too little schooling, and there can also be the mistake of having too much. It is to this quantitative aspect that William Graham Sumner referred in his ironic reference to the present day belief that more and more sheer schooling—more and more classroom education—is the solution of the educational problem. The movement to increase schooling, supported in the United States by the vested interest represented by the National Education Association, has spread all over the world. That vested interest wants more and more support by the government for the school system, and offers as the solution of the educational problem a constant increase in the number of years which the young are to be incarcerated in classrooms. Even if this programme were free from every consideration of an invidious nature—even if those who are promoting it here in India as it is being promoted in America—were completely disinterested and believed in it sincerely as a solution of the educational problem, it would not alter the fact that it is from beginning to end based upon a mistaken diagnosis of the nature of the problem.

Organized versus Spontaneous Education. The broad comprehensive sense in which education is conceived in this study,

makes it necessary to distinguish between what might be called the organized and planned education provided by schools of various kinds, and the spontaneous and largely unplanned education provided in the home and by the culture generally. What has happened in the modern world has been a steady expansion of organized education and a corresponding contraction of the education which used to be provided by the home.

On this matter of quantity of schooling, Frederick Mayer, the American educator whose book on the educational problem was discussed in Chapter 9, Section I, is typically American. In spite of the fact that he recognizes the critical nature of the challenge facing education, and recognizes that the American school system must grapple with problems which it is now neglecting or mishandling, he nevertheless recommends increasing of the amount of schooling as if that were the sovereign panaces for the problem. He thinks that the problem can be dealt with by providing public funds to support increased schooling for every individual for a period of ten years on the elementary and secondary level, of three years on the college level, and of three years in post-graduate schools for those going in for higher education. This means from thirteen to sixteen years of schooling. It means, if schooling begins at six, that it will not end before nineteen for some and before twenty-two for others. The young, as a result, will not be expected to do a tap of meaningful, productive work before they are sexually mature, past the period when nature itself has prepared them for fatherhood and motherhood, and when they ought to have learned to support themselves, if not by what they earn in outside jobs, by what they do in the home or on the farm.

Like most protagonists of more and more schooling, Mayer has given no thought at all to Grundtvig's totally different approach to the organization of the school system. Primary schooling for everybody, Grundtvig insisted, should end by the time they are ten or twelve. By this time, assuming that they had started at six, they should have mastered all the essentials of an introduction to learning. Then, he insisted, they should go to work for four to six years, preferably with their hands, in the country and not in the city, and in agriculture, in

domestic crafts, or in some other meaningful and non-repetitive work. During these formative years they should grapple with the realities of life, and experience the most important of all means for disciplining themselves intellectually and emotionally—the discipline of useful and productive work. About the time they reached the peak of the second great emotional climacteric in life, when nature itself is driving them to pair off and mate, they should spend not less than one and if possible two years in what in Grundtvigian terminology is called a folk school, but which in fact is a kind of college with collegiate standards of teaching, in which not knowledge and technology, but philosophy and inspiration dominate the curriculum.

I have discussed this exhaustively in "Education and Living", and it would take too much space to go into the matter here. But the alternative to the Mayer hypothesis deserves consideration—the possibility that it is an excessive number of years spent in schooling which creates insoluble educational problems and which aggravates such problems as juvenile delinquency.

In considering the relationship of classroom schooling to the organization of the whole educational system, the outrageous hypothesis that it may call for less schooling than America is inflicting on her young, should be considered.

Since education begins before schooling; since what we educators can do in our schools—specifically through those institutions of higher learning which shape the whole organized school system—is profoundly affected by what transpires in the pre-school and post-school periods of spontaneous and unorganized education; and since these stages in education "from the cradle to the grave" are necessarily inter-related, the question of what kind of schools to provide should take into consideration the role not only of the school, but that of the home and the culture. If this is done, we find not only that there is a difference in role, but that provision can be made in the school system itself for exerting a profound and determining influence upon the education which takes place in the home and the culture.

If what the home and culture are doing to students is harmful to them educationally, the educator has no right to passively

accept the situation. It is not true that because he cannot control the home and the culture as he can control what goes on in school, that he is entirely helpless. It is only true that he cannot influence the extra-mural environment directly. Granted that he has to resort to indirection, he must then consider what to do indirectly which is adequate; what he might do to make as certain as possible that nothing outside the school undoes what he is trying to do in the school itself. It is this situation which makes adult education actually more important than juvenile education.

The right organization of education on the university level is essential if there is to be the right approach to adult education, since it is the education of educators which is involved. Teachers' training schools and schools of education determine not only what teachers do in elementary and secondary schools; they determine the conception which teachers will accept with regard to this whole problem. It is on the university level that questions like the number of years of schooling, and what must be done in the field of adult education to make juvenile education most effective, are subjects for consideration.

Ways and Means. Before considering all the different institutions of which such a total educational system should be composed, consideration of "ways and means" for supporting the whole education system is in order. For if the support of any part of it is wrongly organized, the whole system must inevitably go askew; it will reflect not the fulfillment of its proper function, which is what can be expected if it is properly supported, but what is demanded of it by those who support it.

One important preliminary distinction needs to be made. This is a discussion of provision for the *support of schooling*; it is not a discussion of the *ownership and operation of schools*. A parent, for instance may provide support for a school in paying tuition for his children, but that does not mean that he is engaged in operating the school. Similarly, a special commercial interest may donate money to a school, but the school may neither be owned nor operated by the special interest itself. This is important to the discussion of government provision for the support of education in any form. In the case of military

education, the government not only provides for the support of the establishments providing it but must also own and operate them. But this is not necessarily true of common schools, high schools, colleges, and universities. The government may provide for their support indirectly by scholarships as will be here discussed, without itself owning and operating a single school of any kind.

"Ways and means" for the support of schools fall into four quite distinct categories: (1) private support, (2) support by autonomous educational endowments or foundations, (3) support by special interests of various kinds, and (4) support by the government. Unfortunately, the school system today is supported with funds obtained from all four of these sources quite without regard to whether there are, or are not, norms, applicable to the matter.

1. Private support means payment by the family for all the costs of educating their children, including full tuition to any school to which they are sent, or payment of all the costs of his own education by the individual who is himself studying. The indicated norm with regard to this is: The primary burden of the cost of education should be private. Each family should pay for the cost of educating its own children, and each individual, if he has no family, for his own education either by working while studying or paying for it after he has finished his studies.

There are two classes in even the most prosperous of nations today for whom the fulfillment of this norm is impossible: the poorest classes, who are unable to make more than token payments even for the primary education of their children; and the middle classes with highly gifted children, who find it very difficult to pay the full cost of higher education for them. Ideally there should be no such conditions, but we have to begin not with ideal conditions but with conditions as they are. To provide for this gap in supporting education by paying for it privately, there are methods now being used, the practicability of which has been demonstrated, which can be expanded to do away with the gap altogether.

2. The second method of providing for the support of education is through autonomous educational foundations. There are many such foundations in America and in many other countries. Every private school or college with an endowment fund large enough to pay the entire cost of the institution, is such a completely autonomous foundation. Girard College, in Philadelphia, is such a foundation. But there are many more which are in part privately supported and in part supported by their endowment funds. Nearly all colleges and universities which charge tuitions fall into this category. To the extent to which they are supported by income from tuitions, they are privately supported; to the extent to which they are supported by endowment funds, they are autonomously supported. Yale and Harvard and Princeton Universities are examples of such foundations for education.

And there are institutions which are in part privately, in part governmentally, and in part autonomously supported. All the State Universities in America — Ohio State University, for instance — are supported in this manner; in part privately, from tuitions; in part by the government, by grants from the public treasury; in part from their own endowment funds.

The indicated norm applicable to support of education by foundations and endowments, may be expressed this way: autonomous educational foundations, free from domination by any special interest, (including the government), which accept no grants from sources which in any way restrict their freedom, should provide for the gap between what private support and private payment make available, and the actual cost of the necessary schooling.

This norm is rooted in a principle which, so far as education is concerned, is fundamental. This is the principle of educational autonomy — the principle that educators and educational institutions should be completely free to teach the truth, the whole truth, and nothing but the truth. There is only one way to insure this, human nature being not what it should be but what it is: to endow educational institutions so

that they are not dependent for support upon non-educational institutions of any kind.

3. The third method of providing for the support of education is through special interests — a church or religion, a profession or industry. All the educational institutions maintained by the Roman Catholic Church are supported by this method. To whatever extent a professional association, like the bar, maintains law libraries; or an association representing a particular industry, like the fertilizer industry, makes grants to educators or to educational institutions, a special interest is providing support for education.

The indicated norm here is two-fold: (1) in a free society every special interest must be free to educate as they must be free to influence and persuade; however, (2) no special interest should pretend to give a general education, since in the very nature of things it must give primacy to its own interest, and this unavoidable bias makes disinterested education a misnomer. When a special interest of any kind establishes an educational institution, or makes a grant to an existing independent educational institution, the facts about the matter must not be concealed, and nothing should be said or published under the aegis of an apparently independent educational institution financed in this manner which pretends to be a disinterested contribution to truth. "Teach the truth, the whole truth, and nothing but the truth" is utterly incompatible with teaching what is in the interest of a special interest.

4. There remains, finally, consideration of the support of education by the State. This method of providing for education is, unfortunately, the method which everyone today considers outside the realm of criticism. Yet studies of education in America, where State support of education first began to be practised on a wholesale scale, demonstrate that it is wholly mistaken method of dealing with the problem. It has provided universal education, it is true, but the education provided is inferior in every respect to that provided by most private schools, colleges, and universities. This is a controversial statement; it will be heatedly repudiated by the advocates of public edu-

cation. But even if public schools provided educations comparable to those provided by private schools, there is still a conclusive reason for doing away with the whole business of State owned and operated schools, colleges, and universities.

In the broad sense in which education is here defined— which reflects the way in which everybody, old and young, are actually educated— schools, colleges, and universities are simply one of a large number of enterprises engaged in education which constitute the whole educational system of society. Homes and churches, libraries and museums, theatrical and broadcasting enterprises, books, newspapers and periodical publishing enterprises, are all parts of the total educational system. Every argument as to why these enterprises should be non-governmentally operated, applies also to schools, colleges, and universities. All these educational enterprises should be either privately operated, or, if they require enfranchising— as with broadcasting enterprises— operated by autonomous foundations which are not subject to control by special interests of any kind.

There is what might be considered a canon of education which applies here: Education should be paid for and provided only by interests and institutions which have no interest primary to that of education. The canon is based upon an induction from indisputable facts: whenever education is paid for or provided by any interest or any institution with an interest primary to that of education, (and the State is an interest and an institution with a very special primary interest indeed), the truth about anything taught will be taught only in so far as that does not clash with the special interest involved.

There is a negative aspect of this canon which may be phrased as follows: Government should pay for education only when such payment is essential to enable it to fulfill its own proper functions. These proper functions, as the discussion of the political problem in this whole study makes clear, revolve around the use of force— as classically expressed, “for the maintenance of law and order” and “for the defence of the realm.” To fulfill this function, the government must have trained—

or educated— police and military forces, and to pay for this kind of education is a proper function of government. To whatever extent its civil servants need training which is not available in ordinary schools, this too may be something for which the government can properly pay.

But ideally no government should have anything more to do with education. In a free society, however, a population trained for its responsibilities as citizens is an essential prerequisite to “the maintenance of law and order” and “the defence of the realm.” Ideally the conditions of the citizens of such a society should be such that they can all pay for their own educations. But there are many free societies in which economic conditions are not ideal, in which there are some classes unable to pay for the minimum of education which this calls for. In so far as education is essential to all the citizens to enable them to discharge their duties as citizens properly, payment for their education becomes as proper as payment for the education of civil servants and polices and military forces. But the moment the State pays for any kind of education over and above what is necessary to the discharge of civic obligations of its citizenry, we have an act of usurpation— we have the use of the taxing and police powers of the government for oppression.

Humanization, general education, and the education of the whole man is a family, not a State, responsibility. It is as much the responsibility of the family to equip the children it brings into the world with knowledge of that world and how to live in it, as it is to feed, clothe and shelter them. Of this kind of education, training for citizenship is very small part, and nothing lends itself less to compulsion, nationalization, and bureaucratization as does humanization, general education, and the education of the whole man.

The acid test of the validity of the prevailing dependence upon the State for the support of the school system is furnished by religion. Whenever the State takes on the role of propagator and defender of a faith, it proves up to the hilt the immorality of the use of force not only in imposing a state religion upon the population, but also in imposing a state-prescribed education upon the people. Within the nation, the doctrine that state

and religion should be one, justifies everything from the establishment of a state church to the suppression of heresy. With regard to religions other than its own, it justifies crusades, jihads, and other kinds of religious wars. It transforms religion from an activity in which the individual may freely and voluntarily engage, into an activity justifying inquisition, persecution, and oppression in a million forms. It is because of this that Jefferson, and all the great lovers of liberty, insisted upon the separation of church and State.

Mistakenly, however, Jefferson and all who followed him in this matter, did not foresee that liberty required also the separation of school and State. Humanization, for example, is impossible so long as school and State are one; the State will see to it that devotion to the nation is placed before devotion to humanity. Public support of the school system involved the glorification of everything that is the State's own — the glorification, as officially prescribed, of its own language and literature, its own sciences and arts, its own ethics and customs, its own religion (or irreligion), its own statutes and constitution, its own social, political and economic ideologies, and even its own racial policies with their prescriptions for an official skin colour, facial contour, kind and colour of hair!

What is it that the apologists for white imperialism used, to call the "white man's burden"? It was the "burden" of imposing his way of living, his morality and religion, and his law and government upon the benighted natives of the rest of the world.

If there is no validity to compulsory religious indoctrination, there is no validity to compulsory national indoctrination either. The State has no right to impose its notions of what people should know and believe and do upon anybody. State employed educators and a State operated educational system may pretend to be neutral between different religions and different ideologies, but they cannot be.

To avoid the charge of being partial to any one religion, the school system in America and in many other countries has been secularized. But Secularism is itself a doctrinal ideology,

abhorrent to millions of religious persons. Roman Catholics in America feel so strongly about this matter that they have built a duplicate school system from parochial schools up to universities to avoid what they consider the evil of Secularist indoctrination of Catholic children and students. (And yet with sublime inconsistency, they insist that State education in Catholic countries like Spain and Ireland must be compulsory indoctrination with Catholicism!) After the French Revolution, the French public school system became doctrinally anti-Catholic, just as after the Russian Revolution, the Communist public school system became doctrinally Atheistic.

The dilemma cannot be avoided. The moment the State establishes a school system, it establishes an official form of indoctrination. In Communist Russia, official indoctrination was plainly labelled "Socialistic", and indoctrination in the public schools of Capitalist countries was called "Bourgeois." In America, there is no official label for the indoctrination, but that it is Bourgeois and Capitalist no unbiased person will deny.

At the one point where the State does have a legitimate right to provide education for its future citizens — in equipping them to discharge their civic responsibilities — it has unfortunately been assumed that this can only be done by establishing a State owned and operated school system at every level from primary school to the university. But this does not happen to be true. As a result of this mistake in dealing with the problem, we have what we call "free" education for every child, ignoring the fact that what the State gives "free" with one hand it takes with "force" by taxation with the other.

We have blinded ourselves to the fact that we have socialized and communized education; that we have as a result compulsory school-attendance of children, and that we use the law to compel taxpayers to contribute to the erection of schools and for the support of a school bureaucracy — including those taxpayers who prefer to send their children to private or parochial schools and who are therefore compelled to pay twice for the education of the young.

The exploration of this aspect of the matter is detailed in a late volume of this study which is devoted to the political prob-

lem as a whole. Here it is sufficient to point out that there is at least one alternative method of providing for the training of every child of citizenship which does not involve these anomalies and these oppressive uses of police power. Every civic interest could be just as well served by abolishing the whole public school system, taking the government out of college and university education altogether, and substituting for this a system of State scholarships — scholarships granted by the State to every child but to be used in schools selected by their parents. The family, which has the real responsibility for the education of its children, must then be left completely free to select the school — religious or secular, as the family may choose — to which to send its children, with only the one limitation that the school selected must provide the minimum of education which the State decides is essential to citizenship.

This idea will seem strange to our bureaucratized employees of the public school system not because it is a bad idea but simply because it means abandoning ideas about education which they have never stopped to examine.

Academic Freedom. There is another, and equally important, reason for making education a private and not a public enterprise, applicable to all schools, but particularly to institutions of higher education.

Schools, colleges and universities, in common with all cultural enterprises, should be staffed by the kind of elite I have for many years insisted should furnish leadership and direction to society. The schools, at all levels, but above all at the university level, must be autonomous enterprises to make it possible for those who staff them to furnish unbiased instruction to their students and impartial leadership to society. They must be completely free and independent; they must cease being dependent for their support upon the State; they must be freed from catering to politicians and public officials; they must not be subject to the dictation of partisan ideologists; of evangelists of religions; of leaders of the commercial, industrial and financial, world. Academic autonomy is not real unless those who teach or who do research, are completely free to seek the truth, no

matter whom it may disturb nor what vested interest it may injure. Without this freedom, teachers will warp what they teach — or what they publish — deliberately or subconsciously so as to please those who dictate to them; they will devote themselves to what those upon whom they are dependent demand of them.

The effectiveness of schooling at all levels depends not merely upon the technical competence of the educator, but upon his character and personality. If the educator has to teach not what he believes to be the truth, the whole truth, and nothing but the truth, but what he is compelled to teach, he cannot conceal from his students the insincerity and lack of integrity which this forces upon him. Without academic freedom — with the schools subject to the control of those who are not dedicated, courageous, concerned and thoughtful educators — a subtle note of insincerity and hypocrisy infects all education. Values, particularly moral values, cannot be instilled unless the educator himself is free from duress of any kind, and so free from the slightest taint of venality. This calls for a revolution both in the manner in which schools are controlled and the manner in which, for the most part, they are financed today. That there is nothing impractical in suggesting that we provide a non-governmentally operated school system, and an educator-controlled school system from top to bottom, is proved by the hundreds of private schools and universities which have existed for centuries in most of the nations of the world. What the situation calls for is an increase in their number, and a decrease in the number which are state-owned and government operated. The chances that this will take place in the United States are almost nil; the whole system would have to break down — as some day it will with the breakdown of the whole of American civilization — before those who have a vested interest in its continuance will take an objective view of the matter.

But in India, as in some of the newer nations of the world, there is a bare chance that such a revolutionary approach to education might be launched. There are still hundreds of thousands of villages in India in which there

are no schools of any kind, and upon which the state may never be able to inflict its heavy educational hand.

There is ample evidence that before the British government began to install a governmentally operated schools system in India, over a hundred years ago, there were private schools in practically every Indian village. British records are dotted with references to the surprise of those who wrote them, about the degree of literacy in the villages, and the ability of the merchants to keep accounting records. The level of literacy in India prior to the British conquest was fully as high as that in the most literate countries of the rest of the world, and may actually have been higher in the villages than at present when nothing is done by private initiative because everybody has been taught to look to the State to provide them with schools.

If one half the ingenuity which has been devoted to creating a State supported school system were devoted to creating an adequate system of private schools, the function of education would almost certainly be better fulfilled than it is at present. The guardianship of the young would be returned to those who are their proper guardians, the family. Additionally education would be enormously improved because this would make possible academic freedom from the bottom to the top of the educational hierarchy. Teachers could teach, and educators could organize education, without having constantly to consider whether what they do, or plan to do, pleases or displeases officialdom.

There is no form of leadership by educators more important than that of creating a climate of public opinion in which it would become perfectly natural for people to pay, family by family, for the education of their own children, and over and above that, to make contributions to support the different kinds of educational institutions essential to the right-education of old and young. With such a change in public opinion, clamor to have the State provide "free" educations would be treated with the same sort of contempt with which clamor to have the State provide food, clothing and shelter to everybody used to be treated in pioneer America. There would be a return to the self-respecting doctrine that it is the people whose duty it is to support the State, not the State's to support the people.

EDUCATION IN THE FIRST SIX YEARS

The Educational Function of the Home: Character Building.

A child's education should begin at least one hundred years before he is born—Oliver Wendel Holmes.

We begin now consideration of the institutions — and not merely the schools — of which a system of education which will both educate the whole man and provide for man's humanization, should be composed. Both must be provided in that revolution in education which, however slowly it may be realised, the situation we face calls for.

There have been systems of education which provided for the education of the whole man. All cultures with a total tradition, as with primitive cultures, had such educational systems. They were, however, growths; they were not planned, and though they educated the whole man, they failed to humanize him, as their sad histories demonstrate. The ideal system which we must try to envisage must include all the institutions necessary to educate the whole man and at the same time humanize him.

In considering the kinds of institutions for which we have to plan, we must not lose sight of two all-important specifications: the fact that it must provide, for two quite different classes of students — for the minority of students who are capable, and for the vast mass of students who are incapable of higher education in the academic signification of the term; and secondly, the fact that it must provide for education from birth to death, and not merely during childhood and youth. Unless these specifications are taken into account, there may be a plan, but it will be a plan for partial, not total education; and partial education, however efficient, is no cure for mis-education.

Henry Adams,* in his classic autobiography in which

* Henry Adams (1838-1918), was an American educator, historian, and author, who taught for seven years at Harvard University, and who condemned what I am calling partially planned education in an eloquent summation of what he had learned in a whole lifetime of "education." So important did he consider the part education played in life, that he called his autobiography "The Education of Henry Adams." The expression, "from cradle to grave", was from the edition published by Houghton, Mifflin & Co., in 1927, p. 13.

he tells the story of the life of a dedicated educator, insisted that education is "from cradle to grave".

We should begin, therefore, with the period from birth to six. Since this problem is dealt with at length in the discussion of the part the home should play in education in Section VIII of this Chapter, it would be a useless duplication to go into the matter at this time. What that discussion makes perfectly clear is that during the period from birth to about six, the school system should have nothing to do with the child in any form even faintly resembling the classroom technique of education.

What this calls for is the consideration of an outrageous hypothesis — a hypothesis which will outrage the devotees not only of the nursery school but also the devotees of Froebel and the kinder-garten. Neither of these institutions should have been invented. They are contributions to the emasculation of family life and to the modern trend aiming at the shifting to the school of educational functions which belong in the home. What Froebel and his followers have to contribute to the solution of the problem of the education of the young child should have been taught to the mothers, and their institutions used as experiment stations, or as places to which children go only for short periods at a time with their mothers; or to which they went regularly alone only when an emergency makes it impossible for the mother to take care for it and there are no other members of the family — elders or siblings — to entrust it to.

For if the child is to be properly educated emotionally; if the nascent adult is to be wholly educated, the child should not be weaned too early; it should not be "skirt"-weaned before three nor "family-weaned" before six. For the first few years of its life, it should be in almost constant contact with its mother; for the next few years, in constant contact with its family. The modern idea that the mothers with very young infants should be freed from them so that they can work in industry or devote themselves to careers outside of the home, is in effect a movement to neurotize the child; to produce problem children who have been deprived of the loving contact they must have for their emotional security; and at the same

time neurotize the mothers by depriving them of a maternal experience essential to the normal life of all women.

The influence we educators can exert — and at this point it is enormous — should be used to abolish the misbegotten institutions called nursery schools and kindergartens. One of the chief hindrances to decent schooling in America is plainly the overloading of the school system by placing on its shoulders responsibilities which in other times and other cultures have as a matter of course been discharged by the family.

For this overloading we educators are ourselves in large part responsible. We have been too ready to assume, and often to claim, that our schools should look after the total development of growing boys and girls and that, being experts, we can do a better job with and for them than their own mothers and fathers.

Schoolmen have not been content with their former function, one largely of instruction; they now claim the right to deal with the whole child — his health and hygiene, his games and sports, his manners and morals, his social adjustment, the rounded development of his whole character.

What might well be substituted for the nursery school is a mothers' school, or as it really ought to be, a mother-and-child school. Such a school should aim to enroll as many mothers with very young children, and potential mothers who are expecting their first child, in the study of child care, child psychology, dietetics, family relations, and in particular eugenics and euthanasia,* the normative sciences which enter into the solution of the population problem.

* There are four of these normative sciences — eugenics, eutenics, eugerontics, and euthanasia.

Eugenics, when broadly interpreted, is not only the study of birth control and family planning, but the study of the part which sexuality should play in a normal pattern of living.

Euthanasia, if also broadly interpreted, is not merely the study of the implications of what has been called "mercy killing," but the whole problem of what mankind should be taught about the manner in which every individual should deal with the inevitability not only of his own death but that of those he loves.

A model for what such a mother's school might be is furnished by the experiment in education started at Vassar College by a thoughtful group of the faculty of that famous college for women. Vassar College came into existence with Feminism and the Feminist movement. It symbolised the revolt of American women against the restrictions under which they had suffered educationally, and particularly against the denial of college educations to them. Its aim, unfortunately, came to be the preparation of women not for home and family life but for careers outside of the home. But in spite of Vassar's intentions, most of the graduates of the college married and became mothers. What the college eventually did was to organize a summer school for graduates who had refused to embark upon "careers" and had instead become mothers. The mothers, sometimes accompanied by their husbands, came back to Vassar to attend this Institute of Euthenics with their infants and children, and took courses dealing with all the problems involved in what I am discussing in terms of the educational functions of the home. And of course through such an Institute, the faculty of the college exerted an influence upon the whole culture which they could not have exerted had they continued to confine themselves to the formal teaching of the regular college curriculum to undergraduates only.

CHAPTER XX

EDUCATION FROM SIX TO TWELVE

The Function of the University: Mastery and Leadership

A parent gives life, but as parent gives no more. A murderer takes like, but his deed stops there. A teacher effects eternity; he can never tell where his influence stops.—Henry Adams.

If we begin with the needs of the child, and not the needs of the school system as it is, classroom schooling should begin around six and end for all but a tiny minority by twelve. The school which should be organized to introduce the child to classroom learning, I think of both as the common and the primary schools — *common* because every child needs to be introduced to learning in spite of differences in sex, in temperament, in status, and regardless of how great the difference in their educability; and *primary* because the function of such a school is to equip them with primary skills — skills which can be better taught in a classroom than in a home; skills like reading and writing, and such knowledge of geography, history, and the sciences which will give them a primary acquaintanceship with the nature of the world and the nature of the society in which they find themselves.

But primary schools should not be the monstrous growths we have built in America in the name of centralized schooling, housing often thousands of children, the majority of whom spend from one to two hours daily in school buses being transferred from home to school and back again, and requiring an expensive separate administrative staff which does no teaching at all.

Here a digression dealing with a most important matter is unavoidable. In trying to classify the institutions which as a whole constitute the educational system, a classification which is summarized in Chart V, it will be noted that I have been forced to ignore the terms commonly used to designate different kinds of schools. The terms primary, secondary, and

higher education are today meaningless. One knows nothing about the kind of education which takes place in a school when the usual designation for it is used. A graduate of what would be called a primary school in France, is much better educated than the average graduate of a high or secondary school in the United States. German Gymnasium students, attending what are secondary schools in Germany, would be in colleges in the United States. Similarly, when I was in Portugal I met some young men from a Portugese lyceum, which is a secondary school, and I found them better educated than most American college students. If the school system is to be discussed in a really meaningful manner, some standardization of terminology is needed; in the absence of such standards, I have been forced to use age-periods in this study.

Primary schools should be in every community and every neighbourhood, so that the children are close enough to their homes to walk to and from them and return home for their luncheons. The common school could be, in a very small village, a single room and yard in the home of the teacher so that establishing it would present no insuperable financial burden to the population of even the smallest and poorest of villages. The parents even in such communities could support it because it would not require much more than the financing of the teacher, the purchase of books and inexpensive supplies, and no great investment in housing and equipment.

I have discussed this at length in "Education and Living"* and while that was written nearly twenty years ago, it is in its essentials what my subsequent studies of education seem to vindicate. All that I believe it necessary to do here is to draw the inferences which still seem to me valid so far organizing the school system as a whole is concerned.

There is not the slightest question but that the time now spent by children in modern primary and secondary schools mastering the elementary tools of learning could be greatly reduced. For one thing, these schools are too large; the more

* "Education and Living," Chapter IV "Juvenile Education, from Six to Twelve" pp. 85-104.

modern, the larger and more highly are they centralized. Most of the time of the pupils in these over-large schools is devoted not to study but to shifting from one class to another, or in trying to adjust themselves to the frequent shifts prescribed for them. As it is now, the effectiveness of all new pedagogic devices for teaching the basic symbolic disciplines tend to be nullified, because the public has been taught that the school system should find ways of occupying virtually the whole of the child's time until he is sixteen and even eighteen years old. At all hazards, the schools are made to keep them from becoming competitors to the existing labour force until there is no escaping from the necessity of permitting them to go work. To keep them occupied, the schooling process, instead of being shortened, is lengthened, and time which could be devoted more wisely and profitably to learning to work is wasted upon pseudo-study and extra-curricular activities which do not amount to much more than killing time pleasantly.

If our primary schools were relieved on the one hand of educational activities which ought to take place in the home, and on the other of activities which ought to take place while they work as apprentices on the land or in some craft, the schools could concentrate on their essential task, the equipment of the young with the symbolic tools and the basic knowledge which they need as members of civilized society. It is exceedingly probable, as Grundtvig maintained, and as his followers in Denmark demonstrated, that they could then give the average child everything in the way of elementary academic instruction by its tenth or twelfth year. Our primary schools could then graduate the masses of less educable pupils as well equipped as the average is now graduated at sixteen or eighteen.

If this were done, the complex and expensive administrative mechanism we now call a high school would become an anachronism. Its equipment, buildings, and teaching personnel would be released from the futile task of trying to provide secondary academic education to every child, and could be used to provide vocational schooling to the majority and academic schooling to the minority which can really profit from higher education.

If, furthermore, the schools were decentralized, and the Indian tutorial system reintroduced, a single teacher could take care of a whole school; he could be decently paid and could afford to take the graduate training which would make him worthy of higher pay, and a school could be provided for every village and every neighbourhood, with none of the fantastic expenses now necessary to build gigantic centralized school buildings for thousands of children with the additional waste of time and of money transporting them long distances between their homes and their schools.

The curriculum of such a primary school would still centre around reading and writing and arithmetic; around geography and history, and the traditional subjects in primary schooling; but ideally — in terms of the proper function of education as a whole; in terms of humanization and not mere enculturation — certain important changes seem to me called for.

For one thing, geography ought to be de-nationalized; on the one hand it should be localized and on the other globalized. Right-education should make everybody thoroughly familiar with the geography of their own community and region, and then give some introduction to the geography of the World and of the astronomic system of which the Earth is a part.

For another, history also should be de-nationalized. Nationalized history is inescapably chauvinistic; it is, as Napoleon described it, "a lie agreed upon." Every individual should know thoroughly the history of his own community and region; it should acquire a greater importance in his eyes than that of the nation and its distant and pretensions capital since it will, as a matter of fact, play a greater part in his life. But it should not only be de-nationalized, it should be humanized. Every child ought to learn that he is first of all a member of the human race, and that the particular nationality into which he is born is purely an accident of birth. With this kind of history, he would be conditioned to think of other nationalities and other races not as rivals and hostiles and, as the Greeks put it, "barbarians", but as fellowmen — fellow members of the whole of humanity.

Finally, the curriculum should not aim merely at literacy but at introducing the young to the great literary treasures of their own culture. To make it possible for them merely to read the quantities of trivialities, if not worse, provided by newspapers and by advertising men, and not to imbue them with a taste for good reading, is to do them more harm than good.

*The "Reader."** The most important didactic teaching-aid in an ideal school should be the "reader" which should be used to introduce the student to the reading of good books. It ought to be veritable educator's Bible. It ought to contain the most forceful, the most eloquent and the most moving things written and said by the greatest geniuses which each culture has produced — not mere brief extracts, but either the whole of a selection, or all of the selection except that which can be left out without damaging its total effect. It would, therefore, be a big book — printed necessarily on "bible" thin paper, but legible, in type which is not too small since it should be given to the student immediately after he has mastered reading — and bound so that it would last a lifetime.

Such an American reader would contain Thomas Jefferson's "Declaration of Independence," and Thomas Paine's "The Crisis." It would contain Washington's "Farewell Address." It would contain Emerson's "Essay on Friendship" and Thoreau's essay on "Civil Disobedience." It would contain Webster's "Liberty and Union" reply to Foote, Lincoln's "Gettysburg Address," the essence of his Second Inaugural, and probably his "house divided against itself" address. It would contain Ingersoll's reflections at the tomb of Napoleon, and his address at the funeral of a child. These are some of the more unusual items which should be included. But they will make it clear that it must be a catholic and not a conventional

* Until the advent of Progressive Education in America, the book which every pupil used in learning to read was called a "reader". McGuffey's readers were used for this purpose for generations, and were printed by the millions. They were, unfortunately, too puritanical in tone and were attuned to different age levels. This suggestion of mine is intended for a reader to fit all ages, just as the Bible, which used to be taught to veritable infants, was the same Bible, read by adults. My suggestion is for a reader consisting not of mechanically composed selections whittled down to the level of the least common denominator of intelligence of the class, but of selections intended to stretch their intelligence to the utmost.

reader; that every item must be at one and the same time richly American and truly Humanist. They also make it clear that nothing truly jingoistic — however eloquent, as for instance Edward Everett Hale's "The Man Without a Country" — should be included.

It ought to contain the best in the American Humanist tradition in poetry. Bryant's "Thanatopsis" plainly belongs in it; but it is a nice question as to whether Keyes' "Star Spangled Banner" does — it is pretty chauvinistic! Ingall's "Opportunity," yes; Howe's "Battle Hymn of the Republic," yes, but "Barbara Fritchie," no!

Every nationality should have such a reader of its own. Shakespeare belongs not in the American but in the English "reader;" Goethe in the German; Racine and Moliere, Rousseau and Hugo in the French. I know the literature of India too little to dare to make suggestions. The Bhagavad Gita is an obvious "must", but for each nationality those most thoroughly saturated with the best of its literary tradition should make the selections.

With a teaching-aid of this kind, the pupil would not only learn how to read, but in reading it his mind would be constantly stretched above its existing level of development. If properly taught, he would be immunized against the reading of trash, and if he could never afford to buy another book, he would still have a treasury of good reading in his home.

Teaching in the primary school might well centre around such a "reader."

CHAPTER XXI

EDUCATION FROM TWELVE TO SIXTEEN

The Foundaton of Secondary Education: Preparation for the work

The prevailing philosophy of education today tends to discourage hard work.—Abraham Flexner.

Clear thought is the quintessence of life. In the end its acid power will disintegrate the force and flummery of current passions and pretenses, eat the life out of every craven creed, and bite its way through to a world of light and truth.—H. G. Wells.

As with the nursery school, I suggest consideration of an outrageous hypothesis — that secondary schools, both junior high schools and high schools, as we now have them in America, should be abolished. They are anachronisms. Worse than that, they are positive hindrances to right-education both of the manually and the intellectually endowed children who have finished their primary schooling.

They are anachronisms because they originally came into existence for the small proportion of children from the upper classes whose parents could afford to keep them in school indefinitely. Attending what used to be called an academy in America at least taught these favoured children enough to qualify them as "ladies and gentlemen." I use these two terms reluctantly, because while there is nothing wrong with the ideal of gentility, there are no others with which to suggest the invidious sense in which they need to be used. "Secondary schools," as we now think of them, were originally either "finishing" schools for the gentry, or preparatory schools for professional life and scholarship of some kind.

They are neither of these things today, but rather bastardized and hybridized institutions blindly groping for a function.

What they are principally expected to do, at least in the United States where trade unions are so powerful, is to keep the masses of children in school as long as is humanly possible; to prevent their entering the labour market and becoming a factor in the monopoly of labour exploited by the unions.

There is, of course an educational function to be fulfilled by vocational and academic schools during the years between twelve and sixteen, but high schools today make no real attempt to fulfil it. In dealing with this problem, we must first of all consider the dilemma created for education by the present tendency toward the "degradation of the democratic dogma."

Probably the worst mistake in the organisation of schooling today has its source in a mistaken idealism: in a sentimental devotion to Democracy with a capital "D"; in a completely unrealistic and unscientific Equalitarianism; in a universal acceptance of the slogan that "all men are created equal" which, so far as children are concerned, means that all children are equally educable.

The simple and obvious fact is that this is not true.

Even if all men were born equal, (which the birth of the first feeble-minded infant proved to be untrue), their necessarily different experiences after birth would make them unequal. The organization of the school system, and of everything which the school system does must begin not with the similarities, but with the differences in the natures of individual human beings. These differences, which were noted by the great seers of ancient India, are confirmed by the very latest of scientific discoveries. The ancient seers of Hinduism maintained that men were born with four different natures. Modern psychologists may not accept the classifications of human nature embodied in the ancient social system of India, but it does accept the proposition that men are by nature unequal and different, and not equal and uniform. William James maintained that all of them could be divided into those who were tough-minded and those who were tender-minded. Jung maintained that the division consisted of those who were introverts and those who were extroverts. Sheldon maintained, in one of the most comprehensive of recent studies, that they are all either viscerotones, somatotones, or cerebrotones. Many years ago, in writing "This Ugly Civilization," I divided them into quality-minded, quantity-minded, and herd-minded types.

In spite of these varying classifications, what all students of the subject agree upon is that the differences are real, and if this is true, Equalitarianism is grossly unrealistic.

So far as the educational problem is concerned, this means that in organizing schooling, we must begin by recognizing that all individuals are not equally educable; that great masses of individuals are for the most part educable only in terms of manual, practical, useful, or applied activities; that most of them have a strictly limited capacity for intellectual or academic education; that only a small minority are benefited by attendance at institutions of higher education; that the majority are manually, and only a tiny minority intellectually endowed.

Thomas Jefferson, whose interest in education was so great that he prescribed that his tombstone be inscribed with the statement, "founder of the University of Virginia," and who made the initial blue print for education in his home state, would be horrified by the present day American programme of education. Nobody can accuse the author of the Declaration of Independence of being undemocratic. He was, as a matter of fact, the founder of the Democratic Party in America. But Jefferson was no sentimental fool. He was a keen observer of realities, and one of the wisest men America has produced. Yet his educational blue print for his country was based upon a rigorous distinction between the educable and uneducable student — the "culturable" and "manuable" student.

Nock, * in a provocative book which every person interested in the educational problem ought to read, said:

"No more sincere a believer in the doctrine of equality ever lived than Mr. Jefferson; certainly none more intelligent; yet the plan that he drafted for public education in the State of Virginia is the severest possible judgment against the popular perversion which we have followed ever since his day, and are still following. Mr. Chinard of the Faculty of Literature at Johns Hopkins University,

* Albert Jay Nock, "The Theory of Education in the United States." Harcourt Brace & Co., 1932, (pp. 45-46). This was a set of lectures delivered by Nock at the University of Virginia.

who probably knows more about Mr. Jefferson than any one else in the country knows, thinks that his plan may have had a good deal to do with shaping the French system, which.....differs from ours in being rigidly selective. In outline Mr. Jefferson's plan was this: Every child in the State should be taught reading, writing and common arithmetic; the old-fashioned primary-school course in the three Rs. Each year the best pupil in each primary school should be sent to the grammar schools, of which there were to be twenty, conveniently located in various parts of the State; they were to be kept there one or two years, and then dismissed, except 'the best genius of the whole.' who should be continued there for the full terms of six years. 'By this means' wrote Mr. Jefferson, 'twenty of the best geniuses shall be raked from the rubbish annually.' I venture to call your attention to these rather forceful words, as showing how far this great believer in equality was from anything like acceptance of our official assumption that everybody is educable. But this is not all. At the end of six years the best ten out of the twenty should be sent to William and Mary College, and the rest turned adrift. Mr. Jefferson's plan appears selective with a vengeance in our eyes, accustomed as they are to the spectacle of immense borders of inert and ineducable persons slipping effortlessly through our secondary schools, colleges, universities, on ways that see greased for their especial benefit.

"Of the twenty best geniuses annually raked from the rubbish of the whole State, only fifty per cent were destined to reach an under-graduate college!"

What the realities plainly call for are two kinds of secondary schools, one for those who are manually endowed and who ought to go to work learning the crafts and trades they will follow, and one for those who are intellectually endowed and who should be preparing themselves for higher education. The first kind of secondary school should be an essentially vocational or technical school; the second a traditional academic high school — but traditional mainly in that its standards are high.

From twelve to sixteen the rigidly selected minority in these real high schools should be laying a solid academic foundation for their studies for professional life. For this they will have to learn how to use their mind. As Wells puts it, they must become masters of that extraordinary faculty called the intellect, and learn how to use it as an instrument with which to create and to discover, and to "bite..... through to a world of light and truth."

For those who are manually endowed, we of this generation who have made Science and its consort Technology, our Gods, should recognize the dignity of an activity called manual work. It is not exaggerating the facts to say that the real effort in education today is devoted to abolishing labour, not to ennobling it. Our efforts at ennobling manual work are confined to occasional eulogies on the dignity of labour. But our conduct — particularly as educators — gives the lie to our words. We belittle labour in fact, no matter what we say with our mouths, because we have been conditioned to consider manual work unpleasant. The truth was summed up a generation ago in Flexner's book about American education which caused such a furore at the time it was published. As he expressed it, "The prevailing philosophy of education today tends to discredit hard work."* Flexner was thinking of "hard" study and not only of "hard" labour. But both tend to be discredited by the high value attached by American educators to the cult of "giving everybody a good time."

* Abraham Flexner, was one of America's most important Educators. His study of medical education resulted in a revolutionary change, for the better, in the standards of medical education. The quotation is from his book "Universities," p. 47.

CHAPTER XXII

EDUCATION FROM SIXTEEN TO EIGHTEEN

The Function of the folk School and College: Vision

Where there is no vision, the people perish.—Proverbs 28:18.

Twenty years ago when I wrote "Education and Living," I was still willing to accept the idea that the college should deal with the problem of the young from sixteen to twenty. In the years since I have become increasingly convinced that if the wastes of the school system were eliminated — the sheer idiocies which now encumber the curriculums of our schools of all kinds — better educated men and women would be produced if the four-year college term were reduced to two, and all schooling ended for all except those going on to a professional school, or having a genuine call to enter upon post-graduate studies of some kind. I now believe that if we move in this direction, we will add two rich years to the lives of most of those who would otherwise waste them in college. In addition, enormous sums of money and thousands of educators would be released for fields of education which are in fact undernourished today.

Robert Maynard Hutchins, when Chancellor of the University of Chicago, was right: the four year college course is four years of foolishness for most students. Let's make up our minds what the college diploma should mean, and then let the student learn what it calls for just as fast as he can. Some of them will be able to cover the ground in a year; some in two or three; the laggards who require a full four years would be showing suspicious signs of being those who should never have been admitted to college at all.

The indivated norm is, *nobody in school after eighteen except those preparing for a profession or with a genius for scholarship.*

1: *The College.* With some such dual approach to the problem of schooling between twelve and sixteen as that represented by work and vocational schooling for the majority, and academic secondary schooling for the educable minority, the way would be prepared for a dual approach to the problem of schooling between sixteen and eighteen, when nature itself, in the second great emotional climacteric in life, seems to dictate devotion to framing a vision by which to live.

There is a distinction which needs to be observed in fulfilling this need in the college on one hand and the folk school on the other. Both, it is true, must provide vision, but the college must provide a vision appropriate to those whose work in the world will be mainly service of a scholarly or professional nature, while the folk school must provide a vision appropriate to those whose work will be mainly concretely productive in nature.

The traditional idea that the task of the college was to provide a liberal education, was in effect a recognition of the importance of providing the college student with a philosophy of life — with a vision of how he was to live his life. The introduction of the sciences into the curriculum, and the consequent subordination of the liberal arts and humanities, led to the substitution of facts for vision and data for culture as teaching objectives. And this in turn led to the mania for specialization and the transformation of the college into a hybrid which was in part a pre-professional school and in part a liberal arts college. Today it has become neither fish, fowl, nor good red herring. It should again become an institution devoted to the production of the intellectually and spiritually liberated individual with an abiding hunger for the quest of the good, the true, and the beautiful—a hunger which should not be destroyed by specialized training for a particular profession. Since those who belong to the "highly educable" minority will implement this hunger very differently from the way it is implemented by the majority, the college curriculum will be fatally defective if it fails to provide the student with a philosophy of living appropriate to what Santayana called "The Life of Reason."

2. *The Folk School.* By the time the "manually educable" majority have spent the four years between the end of their primary schooling and their sixteenth years in some sort of work as apprentices in homes and farms, in crafts and shops, and at such planned vocational schooling as already suggested, they will be ready for a period of final juvenile schooling, for they too will be emotionally ready for the adoption of a philosophy of living appropriate to the manner in which they will spend the rest of their lives. They and their parents should have been fired with a vision of what at least one, and preferably two years of the right kind of schooling of this kind might mean for them, for their families, and for the community in which they will spend their lives.

Grundtvig's solution of this problem has been amply vindicated pragmatically. In the folk schools or people's colleges which his disciples began to establish nearly a hundred years ago in Denmark, and which from Denmark spread to Norway, Sweden, and Finland, they have proved that curriculum and teaching which Grundtvig prescribed, was capable of transforming peasants and workers into the most highly cultured masses found anywhere in the world.

The folk schools created in the young men and women who attended them a hunger to improve their farming, to cultivate the arts and crafts, to make their homes more comfortable and beautiful, and to develop their communities to the utmost. The folk schools created the hunger, but its role was not to provide technical education. Technical schools of all sorts developed around the folk schools, and above all, cooperatives of all kinds were organized to provide instruments through which the people could realize their aspirations.

However different the immediate environment and the local conditions in other nations and other continents, the problem is in essence the same, and it is my conviction that the folk school, adapted to those varying climates and conditions, is the answer for schooling the masses of young men and women everywhere.

It would involve too great a digression to go into this matter in detail. But I mention it mainly to make one point; it would

be far better to let the masses of children continue working without any kind of secondary schooling, than to do what we are doing in America—compelling them to go to high schools, in which they are trained to be lazy, in which they learn nothing worth while since they are principally engaged in killing time, and in which, because of boredom, they get into mischief and are tempted into juvenile delinquency. The Danish solution of this dilemma is probably the ideal one; the American solution the worst.

CHAPTER XXIII

FROM EIGHTEEN TO THE END OF SCHOOLING

The Function of the University: Mastery and Leadership

We must hold a man amenable to reason for the choice of his daily craft or profession. It is not an excuse any longer for his deeds that they are the custom of the trade. What business has he with an evil trade? Has he not a calling in his character?—Ralph Waldo Emerson.

1. *Mastery.* Strictly speaking, there is no such school as a university; it is in reality a collection of professional schools, even when it does not consist of a school devoted to a specific profession but merely of a school devoted to some one special field of scholarship. Whatever the profession, then, even if it be merely the profession of scholarship, the function which the school should perform at this level can be summed up in the word mastery.

Mastery, however, is as greatly needed in the humblest occupation as in the most exalted. It is just as necessary that a housewife baking a loaf of bread, a mother training her child, a farmer tilling his fields, a carpenter building a house, or a mechanic working at a lathe, master their vocations as it is that an engineer building a bridge, an architect designing a church, a physician prescribing for a patient, a lawyer defending a client, a sculptor carving a statue, a painter decorating a wall, a teacher instructing a class, shall master their professions. If mastery in the professions is of greater importance than in the crafts and trades, it is because more people are affected by what a professional man does. What a teacher does, for instance, affects hundreds and often thousands of pupils whom he instructs and influences; what a housewife or a farmer does affect for the most part only one family. If an agronomist makes a mistake in his findings, he may contribute to the destruction of thousands

of acres of land; if a farmer makes a mistake in tillage, he damages only a single farm. If a parent, seeking to educate his own children, permits them to read trashy books, he damages only a few souls; but if an author—a professional writer—writes a vicious book, he may damage countless numbers of human beings, generation after generation.

The function of the professional school is not to equip the limited number of students who are capable of higher education with the means of earning more money than they could in humbler occupations; nor is it to supply the number and kind of technical specialists which a complex industrial society needs for its enterprises; it is to make certain, first, that they acquire mastery of their professions, and then, that they utilize that mastery to discharge all the obligations to society which the privilege of higher education imposes upon them.

All that has been said about vocational schooling is in some form applicable to professional and technical schooling; substitute the various professions for the various crafts, trades and industries around which to organize education, and you have a professional instead of a vocational school.

There can be a vocational school in every community; a professional school cannot. Because of this fact, the professions ought to be regionally organized, and each regional professional group should take the full responsibility for the education of future members of their own profession. All the practitioners of medicine in a given region should therefore be fellows of a regional medical school; all the lawyers fellows of the regional law school; all the educators, of the regional school of education. The members of every profession, as a matter of professional *esprit de corps*, ought to give some time to teaching, much as physicians used to feel obligated to give time to the poor in public clinics. But more than that, they ought to feel obligated to give time to research, or at the very least, to pooling in periodic conferences what they have learned from their experience in the practice of their professions. The assumption of such responsibilities for teaching and for research, and a continued relationship with their regional professional school, would tend

to make fellowship replace membership in mere medical, bar and other professional associations.

The effect of such a change would be to transform existing professional associations from a species of labour union, (mainly engaged in promoting the economic prosperity of the members, restricting admission to the profession, and opposing legislation considered inimical to their vested interests), into fellowship devoted to education, to scientific research, and to scholarship or truth-seeking in their own professions. The whole standard of professional life would be raised by the obligation to teach young aspirants to the profession, and the obligation to keep abreast of the latest developments in every science and art affecting professional work.

It is possible, therefore, to think of these regional professional schools as institutions which would replace the various State boards which now license doctors, lawyers, architects, public accountants, and other professional men. Why should not these professional schools take permanent responsibility for the character of the service rendered by those upon whom they have conferred degrees? Without resort to coercive statutes, the mere right to withdraw a professional title would give the school the power needed both to protect the public and to discipline its membership.

Today, graduation from a medical school and licensing by a State board of examiners are prerequisite to the practice of medicine. But under such a scheme of medical education I am envisioning, fellowship in the regional medical school would qualify for practice, while dismissal from fellowship or failure to observe the code of ethics and the standards of the profession would automatically result in withdrawal of the right to use the title, and so of the right to practice medicine.

Under the existing scheme of things, the lawyer is a speculator of business engaged in making as much money as possible out of the practice of law. Under such a scheme of things as I am suggesting, he would be, subject to the ethics and standards of his regional school of law, a life-member of a group dedicated to the application of law, to the problems of providing justice

Under the existing scheme of things, the teacher—a member of the profession which teaches all professions—is a mere employee of some school, college or university. Under such a scheme of professional education as is here suggested, he would be a fellow of his regional school of education; he would be alternately teaching in his own school, and learning by periodic visits to his *alma mater*, how to teach more effectively, and how to keep alive the inspiration essential if teaching is not to become hopelessly routinized.

Throughout the life of the members of every profession—and in particular the teaching profession—there would be a sort of movement back and forth between work in “extension”, or practice, and study “in residence” in his regional professional school. No member of any profession would ever graduate in the sense in which he graduates today. His diploma would be transformed into a certificate of admission to fellowship in his profession. He could never feel, as graduates are taught to feel today, that his diploma was an instrument for display entitling him to engage in a competition for money making. He would never be freed from the ethical obligations which are the corollaries of the privileges of a professional education. He would not be tempted to treat his code of ethics in a Pickwickian manner. The physician, for instance, would think of himself not as a physician earning a living from treating the sick, but as an educator, in the sense in which Plato (in “The Laws”) insisted that it was a physician’s task to teach health, in contrast to the “quack” who devoted himself to making money out of the application of quick and easy remedies.

The lawyer would become a professor of justice; the writer, the painter, the architect, the musician, the dramatist, a professor of beauty; the scientist, not only a technician, but a professor of truth; the teacher, not only an instructor and indoctrinator, but a professor of humanization.

The mastery of a profession would mean mastery not only in a technical sense, but mastery for the purpose of contributing to the creation of a better life and the organization of a better society.

Leadership. If in the organization of a comprehensive scheme of education, particular tasks are assigned to particular schools, what is obviously left for the university is the co-ordination of all education. In such an all-embracing conception of educational institutions, one institution would have to be assigned the task of co-ordinating the activities of all of them including the home and the culture—of seeing to it that institutions are organized for each task of education in every community of every region, and then, by frequent surveys and frequent conferences, making certain that each is doing what it should do, so that the educational system as a whole realizes its purposes.

But co-ordination, vital as it is, is not enough. Indeed, co-ordination of the right kind is not possible unless the university is constantly clarifying the purpose of education as a whole, and developing the methods by which that purpose is to be realized.

This, of course, is just one way of saying that the university must be a place where a group of scholars devoted to truthseeking are providing, through the school system, the leadership in society which the educator should assume. Without participating, as an institution, in any other activity than the development and stimulation of education as a whole; without playing politics, for instance, it could provide the influence which is needed if man and society are to move progressively toward the realization of their highest human potentialities.

"A university should be a place of light, or liberty, of learning," was what Disraeli thought, not a mere place of pedagogy. Albert J. Nock outlined some of the things which might be considered in the creation of such universities in an essay he called "The Vanishing University." He described it as "A university run by its fellows, with only the loosest and most informal organization.... A university that would not hold out the slightest inducement to any but those who really wanted to be put in the way of learning something, and who know what they wanted to learn; a university that imposed no conditions

but absolute freedom—freedom of thought, of expression, and of discussion."*

That our universities will not be centres for truthseekers nor places of leadership will remain a fact until we who are educators realize that there is a responsibility which they are not discharging. The failure to discharge this responsibility is what Sir Richard Livingstone had in mind when he wrote "Education for a World Adrift." It is the contention of this study that this failure justified him in saying:

"The history of mankind might be described by a cynic as a series of splendid expeditions towards no goal at all, led by men who have all the gifts of leadership, except a sense of direction, and every endowment for achieving their ends, except knowledge of ends worth achieving."

If a really new page in history is to be turned, what is called for is a new kind of leadership.

* I have taken the liberty of making one change in what Nock wrote; I have substituted "run by fellows" for his phrase "run by students." The word "students" is too suggestive of immaturity to warrant its use with regard to the conduct of a university. It should be run by "mature scholars, artists and scientists who are banded together in the search for 'the good, the true, and the beautiful.'" If there was a fellowship of that kind, the minimum of administrative machinery, (which his reference to "no president, no trustee" suggests), would be required.

The essay appeared in "The Freeman Book," published by W. B. Huebsche, Inc., 1924, pp. 58-59.

CHAPTER XXIV

ADULT EDUCATION

The function of Schools of Living: The Re-Education of Society

We need education in the obvious more than investigation of the obscure.—Oliver Wendel Holmes.

Since the organized school system cannot prevent the culture under existing conditions from exerting the determining influence upon adult life, upon the home and family, and upon all the institutions of which society is composed, (including the school system itself), the problem with which education is confronted would seem an insoluble one. What needs to be recognized, however, is that it will remain insoluble only as long as the educator accepts his present role in the scheme of things. What needs to be recognized is that the moment he begins to take full responsibility for the whole problem of education—including the problem created for him by the home and the culture—*existing conditions will begin to improve*. The problem will remain insoluble only if he is content with the hopeless task of trying to organize a good system of classroom education in a culture which is in fact undoing all that he is trying to do.

A profound revolution is called for, and it must begin with the educator.

The role of the school and of the culture, educationally, must be reversed. The determining influence must be exerted not by the culture but by that educated elite which it is the educator's first task to create. If the child is not to be mis-educated before the educator can do anything about the matter, and if the adults who are being mis-educated by the culture are to be rightly re-educated, the school system will have to add to the existing system a school for adults specifically organized to re-educate a determining number of them for leadership in the community and in the culture.

It is ridiculous to assume that just because the culture has from time immemorial exerted the determining influence in educating human beings and in shaping the course of human behaviour, that the education it provides is automatically right-education. Just because men and women have become old enough to have children, to participate as adults in industry and agriculture, in social and civic life, does not mean that they are individually and collectively equipped to determine the proper pattern in accordance with which life should be lived.

In accepting this situation and in organizing the educational system on this fallacious assumption, we have in effect turned modern man over to the tender mercies of a society in which values and aspirations are prescribed by venal advertising men on one hand and political demagogues on the other. In making no adequate provision for furnishing adults the guidance and leadership needed in dealing with the serious social and cultural problems with which all adults are confronted; *in failing to make adult education our first concern*, we virtually render worthless what we may have succeeded in teaching in school and college. If we do not include in our concept of the educational system, an adequate school for adults, we surrender education as a whole to the domination not of what is true and good and beautiful but to the domination of the prevailing culture.

We in effect acquiesce in the doctrine that whatever is, and whatever prevails in the mores and folkways of our culture, is right; we abdicate our role of custodians of the good, the beautiful, and the true.

Tradition versus Re-Education. No such problem confronted man until tradition began to collapse before the rise of modern science. The problem cannot arise in a culture where tradition, rather than science, is the determining factor in education. It cannot arise in static, homogeneous cultures, or in cultures which change so slowly that the ultimate purpose of life, as well as the activities and the institutions of people, are prescribed by tradition; in which there is a traditional environment which family life and the education of the child reflect, and in which everybody inherits standards about how life should be lived in much

the same way that everybody inherits the colour of his skin and the language he speaks.

About what the individual should learn, tradition remained the determining factor until the dawn of modern science. It remained the determining factor even in the many instances of conquest of people with one tradition by a people with totally different traditions—as for instance when Christians or Muslims conquered so-called “pagan” and “heathen” peoples—because that meant merely the imposition and substitution of one tradition for another.

What might be called total tradition and the absolute authority of the culture, in matters of education, was entirely shattered by the Age of Revolution. The English Revolution led to the realization of that freedom of conscience about which Milton and Locke had written, but this is just another way of saying that non-conformity to tradition was legitimized. The American Revolution and the French Revolution spread non-conformity through the whole of the Western World. But it was the Commercial and Industrial Revolution, which reflected the rise of modern science, that finished the authority of tradition completely. After these seismic disturbances, only in Asia were there still high civilizations with great populations raised in accordance with a total tradition.

The climactic fact with which education is confronted today is that virtually the whole world is now not only without the guidance of tradition, but it is without the guidance of any substitute for it; it is in other words, without the guidance of any adequate system of adult education.

Custom versus Tradition. This does not mean that the adult population has emancipated itself from the thralldom of its environment. It still consists of individuals reacting to their culture. But the culture to which they are reacting in the modern world finds its authority and its sanctions not in a slowly evolved and almost immutable tradition, but in the influence exerted upon it by rapidly changing social and commercial, scientific and political customs and fashions of all kinds. Since the time when custom and fashion—in contrast to a tradition

slowly developed over centuries by trial and error—began to dictate how the individual should be taught to live and what the school system should teach to enable him to live that way, an educational gap has been created. Into this gap radio and television, the cinema and the newspaper, advertising and salesmanship, ideology and politics have moved. On the crucial questions of purposes in life, moral and esthetic values, and patterns and habits of living, everybody as a result follows impulses engendered by these biased forces and not by the disinterested dictates of reason.

Adult education by the culture is as a whole unplanned, and those who are educated by it are of course unaware of the fact that they are being educated in this manner. In all modernized cultures it is effected through a great variety of institutions most of which provide mis-education of the worst kind. Libraries and museums; parks, botanical and zoological gardens; sports and playgrounds; concerts and lectures; camping and traveling, provide educational experiences for adults which are wholesome, which develop and cultivate their personalities. But the institutions which dominate adult education today are not wholesome, and instead of humanizing people, contribute to their dehumanization. This, for example, is true of such institutions of modern mass-culture as the cinema and the sensational newspaper; radio and television broadcasting; advertising and salesmanship; national patriotism and partisan politics; monomaniac ideological movements, and fanatic and dogmatic religions.

The essence of right-education is truth-seeking—the search for and the presentation of the truth, the whole truth, and nothing but the truth. No institution which has an inbuilt bias can provide this, unless it provides also some sort of immunity against its bias. This is the handicap under which most social movements and most religions labour. Even if they do present the truth about what they believe, they rarely tell the whole truth about those who do not believe as they do. This, in general, is the case with all apparently disinterested institutions which nevertheless “have an axe to grind”. They do not need to be venal, like advertising, in order to mis-educate.

And unfortunately, in the free world today it is venal advertising and venal salesmanship which are the most influential of all methods of adult education, while in the Communist world, it is Marxian dogmatism and bigotry which are put into first place in all institutions which in any way educate adults.

The trouble with education by the culture is that instead of being provided by truth-seekers, it is provided by wealth-seekers and power-seekers on one hand, and by monomaniacs or narrow-minded bigots on the other. In a modern culture such as that of free America, the institutions which provide it—advertising and newspapers, for instance—are staffed by men who have been taught no wisdom, who have been taught to know social conditions but have been emotionally calloused to feel no concern about them, who have been so miseducated that they feel no concern about truth or goodness or beauty, but solely about promoting their own ambitions by promoting the interests of those who employ them. In the cultures of the Communist world, the situation is even worse; all the institutions of society are staffed by power-seekers who are often bigots and monomaniacs as well. The “revolt of the masses,” which makes it possible for the Hitlers and the Mussolinis, the Lenins, the Trotskys, and the Stalins to seize power and destroy all possibility of voluntary and peaceful humanization, is itself positive proof of that mis-education.

In the free world, for which America provides a shining example, nothing proves more completely the failure of the formal school system—and particularly the institutions of higher education—than the callousness and lack of concern, the lack of wisdom and the lack of dedication of the men who staff the institutions and provide the teaching of those who, when they graduate, use all their talents and knowledge for profiting from the mis-use of our mediums of mass-culture. America, thanks to its school system, is almost completely literate. All these wealth-seekers and power-seekers who are responsible for the mis-education of our adult population are therefore products at least of our primary and secondary schools, and a staggering proportion of all of them are graduates of our colleges and universities. Our schools of marketing provide us with adver-

tising men; our schools of journalism with those who write for newspapers. Our institutions of higher education provide us with those who, as doctors and lawyers or as businessmen and as politicians, use their positions to mislead and mis-educate the adult population of the nation today.

What the situation calls for is neither a return to the dominance of tradition, nor yet the adoption of another variation in the educational fashions of the moment. It calls for such a revolution in education, particularly higher education, as I have called for in the beginning of this study. It calls for the substitution of humanization for enculturation, for the substitution of general and integrated education for specialization, for giving priority to what will result in the education of the whole man and so ultimately the re-education of society itself.

Drastic as this sounds, it has the virtue of being something that can be initiated in any college or university; in almost any school or classroom. There is always a minority of the student body which has by good fortune been educated to be thoughtful and concerned, in whom there is a fund of idealism which can be fired, and who as a result can be moved to show the courage necessary to dedicate themselves to the peaceful revolution for which I am pleading. But if they are to be helped to escape from being spoiled by the prevailing atmosphere of selfishness and cynicism, they must be equipped with a philosophy of living in which the role they are to play in society is explicitly outlined, and in which the function of membership in a determining elite is not subordinated to self-seeking vocationalism pure and simple.

As this properly equipped minority spreads through society the institutions of the culture which shape the aspirations and provide ideas for the masses of adults will begun to transform conditions from top to bottom, and create the sort of conditions in which the quest for truth and beauty and goodness is not considered old-fashioned.

But the situation calls for more than this. It calls for the organization of a kind of school now missing, through which they can work and exert the necessary influence upon the whole culture, community by community. It calls for an addition to

the existing school system, in every community, of the right kind of school for adult re-education—just as the situation in the home today calls for the right kind of schools for mothers and fathers.

Adult education of the kind which should be provided in such schools acquires its enormous importance, as compared to juvenile education, from the fact that it is not only adults who make the decisions about how life shall be lived and what sort of social institutions shall exist, but even more from the fact that it is the adults as parents who are the educators of the next generation during its pre-school period. If the adults were properly re-educated, a revolution would be started which in a generation could transform mankind. For re-education is adult education directed at correcting the errors which abound in both tradition and custom. And none of these errors are more demaging to mankind than those which have to do with parental conditioning of the unconscious mind of their children, imbuing them with values and ideals, and so forming their characters, their attitudes, and their habits.

What the right organization of the educational system as a whole calls for is not merely the abandonment of the education entertainment which now goes under the misleading name of adult education; not merely the abandonment of the superfluous extra-curricular activities and meaningless courses which now overload the existing school system; not merely the abandonment of nursery schools, but the addition of a number of "schools" for adults all of which might grow out of, and be centred in, what I have called Schools of Living. These schools would provide classes and courses for a mother-and-child school, for an arts and craft school, for a social-philosophy school. I have spelled out this suggestion at length in the second volume of "Education and Living."* It would involve too great a digression to repeat the whole of it here. But some outline of its substance must be made.

* "Education and Living," Volume II, pp. 683-702. The whole of this volume of 435 pages is devoted to the definition of right-education and re-education in such schools for adults.

Its purpose should be *the humanization of the community*—the humanization of the whole culture—through adult re-education. It should be organized by the educated elite of the community—by those who are not only educated, but concerned, courageous, and dedicated, and who should form a fraternity and fellowship to influence their community through this school for adults. This school should, of course, have classes for adults—for the mothers-and their-infants in arms; for the adults interested in studying both their own community problems, current social problems, and the basic problems they have to deal with both personally and as members of society. But the conduct of these classes should constitute only a part of the work of the school. It should be a community-planning centre. It should promote the making of periodic surveys of the community, and promote the making and constant revision of community-plans.

Finally, it should be a cultural centre. It should be an arts and crafts centre. It should sponsor drives to provide libraries, museums, and other institutions needed in every community. It should sponsor lectures, concerts, dramas, dances, pageants, festivals. It should help to bring to each local, and usually culturally isolated community, the best that all cultures can offer in the way of enlivening and enlightenment.

But it should never forget that *it is a school*; that its function is education. It will inevitably inspire social and political and economic movements, but it should not itself be a social or economic or political movement. It should stand above all particular movements, bringing to bear upon the all the resources of unbiased knowledge and wisdom.

Of course it will be unable, in the beginning, to find, particularly in small communities, many of the intellectual and artistic personalities requisite to such an ambitious programme. But it should have such an intimate relationship with the university in the region in which it is located, so that it can call upon the university staff for such help whenever needed.

The introduction of such a school into a prosperous and a complacent culture like that of America, is virtually hopeless.

But an usual opportunity for its introduction exists in India. True, the existing political leadership is determined to crystalize India into "a Socialistic pattern of society," but no such crystalization has yet taken place, and none can until the community life of its half million villages is as completely obliterated as it has been in America. Until that takes place, village and rural renaissance is still possible. Traditional Indian community life, moreover, included an institution which to a degree provide the leadership for the community and the culture for which I am calling. This was the Saraswatee Bhavan. What might be done is not so much to revive the Saraswatee Bhavan as to re-incarnate it in terms of existing needs. The Saraswatee Bhavan could perform the education function for which the original School of Living in Suffern, New York was established in 1934.

The hard-headed educator who prides himself upon being practical and who has been conditioned to think of any radical change in the existing system as hopelessly visionary, will naturally ask how adults can be persuaded—since forcing them is out of question—to attend such schools. About this I have one conviction to submit, and one suggestion to make.

I believe that it is quite possible to persuade a sufficient number of men and women to take part in such a movement and participate in the work of such a school, to re-educate that determining number which is all that is needed to transform eventually the whole of a community.

To transform a culture, it is not necessary to look for some miraculous method of transforming every member of it overnight. It is sufficient to provide vision and method, values and ideals for a minority large enough to provide the whole community with leadership of the right kind.

But I have in addition a very hard-headed suggestion to make. It is promised on the assumption that educators should stop using the coercive powers of government to compel every child to become literate, and should substitute instead the spreading of the truth that schooling for their children is a great

privilege for which parents should be willing to make sacrifices similar to those they make in bringing them into the world and supporting them until they are able to support themselves.

Let us assume that the number of adults in the community who could be persuaded to participate in serious adult education is too small to provide what I have called the determining number for the transformation of the whole community. The question then is, how could the number be increased to a determining number? I suggest, *making attendance by the parents at a School of Living or a Saraswatee Bhavan a prerequisite to the admission of their children to school.* Parents now make all sorts of sacrifices to provide money with which to educate their children. This is particularly true of the best of the adult population. What this suggestion calls for is no material addition to the sacrifices which they are already making for that purpose; it calls for the sacrifice of a part of their time for the purpose of personal study by them of the real problems of living; it calls for their devoting a part of their time to their own fullest humanization. There is no reason to believe that parents would not be willing to give up sufficient time for this purpose to win for their children the privilege of going to school.

What we would then have is the best of the parents who are engaged in farming or in some of the crafts, and virtually all of those engaged in the professions—doctors, lawyers, engineers and architects, teachers and preachers—working together at the task of learning how to use education as a means of broadening and deepening, enriching and humanizing the whole of their own community.

What such a school would do for the community is to create a self-conscious minority which had been taught "sales-resistance" to what advertising now prescribes; which would refuse to subscribe to trashy newspapers and to attend equally trashy moving-pictures; which would refuse to listen to trashy broadcasting and television programmes.

It would do more. Since the men and women who write advertisements and who write and edit newspapers; since those

who act in the theatre and the cinema, and who in any way produce these mediums of mass-education would themselves participate in such a programme of re-education, they would begin to apply to their own work the values and ideals which are now missing from it; they would gradually transform the existing mediums of mass-culture from mass mis-educators of the community into mediums of right-education and social renaissance.

CHAPTER XXV

EDUCATION IN THE HOME

A child's education should begin at least one hundred years before he was born.—Oliver Wendel Homes.

If children are to be properly educated by the school system; if they are to receive the pre-school preparation they need in order to profit from what the school system itself has to offer them, their education must begin in the home. It cannot wait until they are old enough to go even to a nursery school. The home must therefore become an integral and organized part of the educational system as a whole. For the child cannot be prepared to play the part it should in the adult world by classroom instruction only.

To prepare the child to benefit from classroom instruction, but even more, to prepare it for development into a normal human being, it must be provided in the first few months and first few years of its life with all the fundamental personality-characteristics of a normal human being. These personality-characteristics the child can acquire in only one way, from its mother and from the other members of its own family.* For it to become, in the course of its growth and maturation, a loving and cooperative human being; for it to become a poised and emotionally-secure person, it must be loved and not merely instructed; it must feel that it belongs to a family, and not to any impersonal public institution.

No hospital, no orphan asylum, no boarding school, not the best of foster homes, not even the model substitutes for homes and families about which Utopian Socialists have dreamed,

* The scientifically important case of Helen Keller provides not an exception but proof of the point here made. The mother and family were unable to cope with the problem of raising a child born deaf and blind; she became a wild animal until in her teens they employed, quite by accident, a dedicated teacher — really a foster-mother — who devoted almost her whole life to offsetting the handicaps with which Helen Keller was born.

can furnish a substitute for what a loving mother alone can provide; nor offset adequately the deprivation of emotional-security which results if it has not been rightly conditioned and rightly educated in the first six years of its life in a home belonging to its own family. In all substitutes for home life during these crucial years, there will be missing the most important of all the experiences which it must have during these years—the experience of being accepted and of being loved by its mother and father, its brothers and sisters, its grandparents and its other relatives.

Right-education for life requires the right kind of home life during these years; and the way to ensure the proper development of the fundamental personality-characteristics of a normal human being is not to turn the child over to the presumably expert ministrations of professionally trained teachers in a school, but to make provision for the right-education of its mother and the other adult members of its family. The modern world is discovering in the most painful way possible—by confrontation with millions of problem children—that no child can be properly prepared for living by taking this phase of education out of the hands of its family. By urging both parents today to obtain employment in industry and in effect forcing them to leave the task of character-building to the school system, we create juvenile delinquents, no matter how many welfare agencies we set up to take care of the problem thus created.

The truth of this was in effect recognized before the Industrial Revolution and before the rise of the modern system of "factory" education was developed. The education and the training of all craftsmen required that the "student" be apprenticed to his "teacher" and live in his master's home as a member of the household. It was similarly recognized in the ancient Indian system of education in which the "student", or *shishya*, lived as a member of the household of the *guru*, or "teacher", selected to educate him.

The evil in the present situation is two-fold; it emasculates the child, and it emasculates the family. In effect, it deprives the family of a function it should fulfill, and so contributes to

family disintegration. And it ignores the fact that the child has to be individually conditioned and tutored in its earliest years, particularly so far as emotional education is concerned, and that the home naturally provides such conditioning and tutoring by the mother and the other members of the family. What we overlook is that as the classroom method of dealing with the very young child came in, this tutoring disappeared.

Somewhere in his famous "Commentaries on the Laws of England," Blackstone remarks, in discussing the duties required of parents by the common law, that of the three requirements—protection, education, and maintenance—the most important was education. Not the mere increase of population, he said, but the increase of a well-ordered, intelligent and honorable population determines the strength of a State. At the time Blackstone wrote, a little more than two centuries ago, the process of shifting the responsibility for education from the family to the State had not yet begun. Today, confronted by the fourth and fifth generation which has been subject to State responsibility for education, it is high time we asked ourselves whether the innovation has been successful, and whether its continuance is not proving disastrous, not only to the individual and the family, but also to society.

Because the basic personality-characteristics of the individual begin to be formed at birth, it is impossible to relieve the family of this responsibility without finding a substitute for family life itself. From Plato on, one social theorist after another has toyed with the idea of producing a model citizenry by providing that children should be taken from their homes and families and educated by experts at the expense of the State. The fact that none of these experiments have lasted very long, or produced the model citizenry hoped for, ought to be accepted as conclusive evidence that something is wrong with the idea. Over and over again it has been shown that even inexperienced and unschooled parents, in homes in which love is not subordinated to other values, (to the monetary value, for instance, of the money which both parents might earn by taking outside

* This work by Sir William Blackstone, (1723-1780), was for over a century the most important text book used in the study of law.

jobs and turning their children over to schools at the earliest possible moment), rear children who are morally and emotionally far superior to those raised by the professional experts employed in schools of various kinds.

The only exceptions to the norm towards which this points are furnished by homes in abnormal communities — in large urban centers, for instance — with their abnormal environment for all human beings. It is impossible in a big city — not only in the slums but also in the most fashionable neighbourhoods — for even a good home to fulfill its character-building function properly. Such a situation, however, does not call for shifting the function to a school. Such a situation calls for decentralization of the population — for the revival of village and rural life — and for moving out of big cities by every family which wishes to provide a proper environment not only for the pre-school education of its children, but for all the members of the family as well. The problem does not call for the abolition of the family as the founding fathers of Socialism insisted; it calls for a planned programme of right-education for the adult members of the family. The right kind of adult education movement would in effect make the home an integral part of a total system of planned education. But educators would then have to step out of their classrooms to provide the leadership for which this calls.

Of the many traits and habits which every child necessarily acquires during the first few months and years of its life, the most important are emotional in nature. It can no more avoid acquiring a group of emotional attitudes than it can avoid acquiring the ability to speak, and if it does not acquire the right ones, it will acquire the wrong ones.

If an infant is either deliberately or unconsciously rejected — if it is deprived of the experience of snuggling against its mother's breast as it nurses, or skirt-weaned too young and deprived of almost continuous contact with its mother at that time — it will become emotionally insecure and instead of feeling love and kindness for mankind, feel hostile and aggressive towards everyday. To be properly educated emotionally, the child must be accepted; it must feel that it belongs

somewhere and to somebody, not artificially as in a school, but in the very nature of its needs as an organic being. This is possible only in a home in which its emotional experiences make it feel that it is loved and in which it is therefore inspired to feel and express love in return.

No nursery school, no matter how expertly organized, can furnish the kind of emotional experiences every child must have if it is to develop the right kind of emotional attitudes. Such a school, if it were to attempt to provide the love which every child needs, would have to have a ratio of children to teachers which would come very close to one child: one teacher. What is more, it would have to find teachers who had no homes or children of their own to make a first claim upon their fund of love.

Not every home, of course, furnishes its children the kind of emotional experiences they should have. This is why adult education is necessary. But in the very nature of things, no school with its arbitrary and temporary teacher-child relationship can provide them. The teacher cannot be trained to provide love, as he or she can be trained to provide knowledge of geography. If normal emotional attitudes are not built into the unconscious minds of children during the first years of their life, not only are they deprived to a proper means for controlling their animal impulses but the foundation for the development of neurotic personalities are laid. As the family disintegrates in the modern world, with both parents going out into industry, the child is increasingly deprived of the emotional security it should normally acquire. That we are troubled by the startling increases in the number of neurotic and psychotic personalities, and by social pathologies like sex perversion and juvenile crime, follows naturally and inevitably from the family's failure to fulfill its normal educational function. Modern parents may be well-meaning — most of them are. They may shower material benefits upon their children; they may believe that they demonstrate their concern and their love for them by providing them with all the amenities of a high standard of living — all that the modern urban and industrial world offers from expensive food and the best in clothing to television,

frequent visits to the cinema, and the latest automobile — but the right emotional attitudes, the fundamental moral virtues, the right personal habits and beliefs and aspirations have virtually no relationship to these things.

What this means is that the school today finds itself confronted with problem-children no matter what class of home they come from. What is staggering the leaders of education in America is not that juvenile delinquents come from poor homes but that they also come from well-to-do homes. Since the school cannot cope with this situation after the children come to school, it must turn to a programme which will transform the homes from which the children come.

The difficulty of the problem should not be under-estimated. An adequate programme for dealing with it does not call merely for teaching parents how to teach and train their children during the years before they go to school. *It calls for them to abandon the urbanized homes in which all families today tend to live.* Instead of accepting the urbanized home as an inescapable fact, it is necessary to make parents aware of the fact that such homes cannot provide the environment essential to the right pre-school education of their children.

It is here that John Dewey and the rest of the organizers of modern education have made their terrible mistake. For Dewey specifically began by admitting the truth of the fact to which I am calling attention — the truth that only the rural and village home can provide the right kind of environment for the child. But then, when he began to formulate a new system of education for the modern industrialized world, he assumed that the school could provide what the new urbanized home could not.

Granted, he said, that the village home provided the kind of environment essential to the right pre-school education of the child, the fact which the educator must now accept is that in the new modern world, the children will come from urban and not rural homes, from homes in which not only the home but the parents themselves cannot provide the kind of pre-school education the child must have. Some other institution, he

maintained, must therefore take over the task of furnishing the education which the pre-urbanized and pre-industrialized home used to furnish. The public school must provide what the modern home can not.*

Dewey accepted Industrialism as "the wave of the future" from the very beginning of his work as an educational philosopher and reformer. "The modification going on in the method and curriculum of education," he said, "is as much a product of the changed social situation, and as much an effort to meet the needs of the new society that is forming, as are changes in the modes of industry and commerce."

Upon this two comments can be made: in spite of this change, it is not true even in America that there are no homes left in which this fundamental education is not and cannot be furnished by the family to its children; there are still many such homes in the rural regions and rural communities of America. While in most of the so-called under-developed nations of the world—in India, for instance—the overwhelming majority of homes are still located in villages and not in cities. All these homes, instead of being deliberately emasculated and deprived of a function which is properly theirs, should be helped to function normally by integrating them into the educational system as a whole instead of shifting their functions to nursery and public schools.

I ask those leaders of education, living in great metropolitan centers and pontifically determining what shall be taught to children in this age of transition, have they the moral right to deny a single family the right to decide whether their children shall be conditioned for village and rural or for city and industrial life?

Secondly, if we assume that all children, both those from rural and those from urban homes, should begin schooling shortly after they stop crawling, that they should be kept in school as long as possible each day, and that they should receive

* Dewey's argument is set forth with classic effectiveness in his "School and Society" which he published in 1899. I discuss the validity of the thesis he maintained in the very beginning of my own book, "Education and Living."

instruction which will adjust them to an urbanized and industrialized world, what we will be doing is insisting that future generations should abandon rural and village life and live upon a single, predetermined "modern" pattern of life. There is no escape from this conclusion. If the school system takes over the whole task of teaching, including that traditionally given in the home, in order to prepare the child for "modern" life, we will be insisting that education before six should be given not where it should be, in the home, but where it should not, in the school.

CHAPTER XXVI

EDUCATION BY THE CULTURE

I can not say that I am in the slightest degree impressed by your bigness or your material resources, as such. Size is not grandeur, and territory does not make a nation. The great issue, about which hangs a true sublimity and terror of overhanging fate, is, what you are going to do with all these things.—Thomas H. Huxley, at Johns Hopkins University in Baltimore in 1876.

That a culture is an educational institution — or rather a whole collection of educational institutions — every student of cultural anthropology well knows. What is, unfortunately, not so well recognized is that modern culture — in spite of its science and its technology, in spite of its staggering material productivity and impressive conquest of men's natural environment — is one of the greatest mis-educators in the whole gamut of all the cultures which mankind has developed.*

Modern culture is more crassly Materialistic than any preceding culture. It ridicules traditional spiritual and moral values because of the superstitions of the religions which produced them, ignores the Amoralism and Moral Relativism which are implicit in its devotion to higher and higher material scales of living.

It is more destructive of the natural resources of the Earth than any preceding culture. It is not merely teaching people to consume with prodigal waste the mineral resources of the Earth, but to engage in a vertiable war upon the soil, the forests, the water, the flora and fauna, and even the atmosphere essential to organic life.

It maims and slaughters human beings on its highways, in industrial accidents, by poisoning crops with pesticides, by devitalizing and chemicalizing foodstuffs.

* For any who wants evidence establishing these sweeping statements, I suggest reading "Education and Living," pp. 115-272, where the evidence is documented in detail.

It is more destructive of human life than even the most warlike and the most savage of its predecessors, and while it organizes Leagues of Nations, and United Nations, and peace congresses of all kinds, its devotion to Nationalism and to ideologies like Fascism and Communism has plunged it into wars the most destructive of life and wealth in all history.

Finally, it is destroying itself emotionally. Speed, more speed, and still more speed — with utter disregard of the rhythms of nature — is being used to destroy man's mind and soul. It cannot build jails fast enough to house its criminals and juvenile delinquents; it cannot build insane asylums fast enough to house those whom it is burning up neurally and psychically.

And all these social pathologies are glossed over and minimized not only in its schools, which it insists should not concern itself about them but concentrate upon the business of preparing the young for life in modern culture, but in all its mass-educational institutions — advertising and selling; cinemas; radios and televisions; newspapers and periodicals — all of which are engaged in conditioning the whole population to accept modern culture, and to ignore anybody and everybody who in the slightest degree questions what it calls Progress and who may be pleading for some balance essential to the maintenance of mental and physical health.

If education is to realize its possibilities, it must face up to the fact that its role is not enculturing with modern values, but testing them in terms of what used to be called the eternal verities.

If education accepts its proper role of leadership, it will begin recognizing that *initial-education*, (which is what it provides in its schools), since it reflects what the culture and not what the educators prescribe, is for the most part mis-education. What is needed, and what is education's proper function, is to provide right-education. To be able to provide this, it must take on the task of *re-education*—of the re-education first of itself, then of the school, then of the home, and finally of the culture.

If education faces up to its full responsibilities; if it distinguishes between the purposes it now fulfills and the function which it should fulfill, it will look beyond the problems it faces in schools and classrooms, and take the lead in providing a system of adult education which would in time transform and transvalue the whole of modern culture.

CHAPTER XXVII

THE ORGANIZATION OF TEACHING

Seven years of silent inquiry are needed for a man to learn the truth, but fourteen in order to learn how to make it known to his fellowmen. — Plato

A fresh approach to methods of teaching is needed if we are to take the problem of the education of the whole man seriously. Existing methods must be re-examined and re-evaluated. New methods, and old methods now neglected, must be considered. And if this is done, I believe the result will demonstrate the mistake of seeking one perfect method of teaching. This is what in effect the zealous followers of John Dewey claim to have found in what they used to call "Progressive Education" and which they now call "The New Education."

But that is not all. Such a re-examination and re-evaluation of teaching methods, I believe, will also show that what I think of as classroom teaching, with its primary reliance upon instruction and lecturing, upon textbooks and examinations, is not the proper answer to the problem of organizing education so that the end-result is the education of the whole man.

What such a study seems to point to is not the use of one method but the use of a plurality of methods, each one the one best adapted to the particular purpose which needs to be realized.

In America, where more effort and more money has been spent in teacher-education both in accordance with the older conventional classroom methods and with the method of classroom teaching developed by John Dewey's disciples, a rash of books have appeared in recent years, both by distinguished lay-men and distinguished educators, severely critical of the results achieved. A group of educators of the highest standing formed an organization some years ago for the purpose of doing something about it, which they called the Council for

CLASSIFICATION OF ALL KINDS OF METHODS OF TEACHING

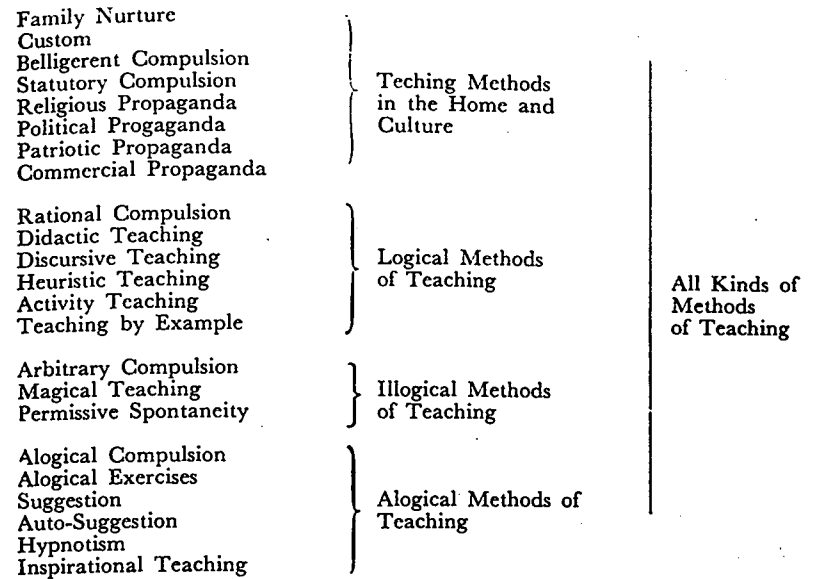


CHART VI

Basic Education, though by basic education they meant not what Gandhi meant, but the old symbolic and academic disciplines. What they claim is that existing methods of teaching in America, which claim to reflect what Dewey advocated, are not even achieving the result which classroom teaching was invented to teach.

A nation-wide debate resulted from the publication by a well known educator, of a book entitled "Why Johnny Can't Read."* What the book clearly demonstrated was that after a generation of the teaching of reading by the new methods, the standard of reading had become poorer than with the old methods which the "new" educators had so bitterly condemned. One of America's leading editorial commentators, Dorothy Thompson, writing in October 1956, in a magazine with a circulation in the millions, "The Ladies Home Journal," called America a nation of "literate illiterates."

"It is possible," she wrote, "that in the universal push to abolish illiteracy, we may create the phenomena of literate illiterates in every higher sense."

Like a genuinely thoughtful person, she was concerned not with mere literacy, but with the problem of teaching the child to want to read what is worth reading. I myself have insisted that enabling a person to read sensational newspapers, to read advertisements, and to read "comic books," is actually not to improve him but to make it possible for the writers of these things to degrade him. What produces the kind of human being who reads not trash but what is worth while reading, is not the mere ability to read, as Dorothy Thompson puts it, but "his awakening to the freshness and originality of thought and expression commanded by the great masters of prose and poetry."

A Gallup poll of the American public taken in May, 1957, revealed the fact that only 17 per cent of the public was reading a book of any kind at the time the poll was taken. Yet of the over one hundred million adults in America at that time,

* Rudolf Flesch, 1955.

approximately eighteen million have attended college, fifty millions high school, and virtually all of them primary school. What is more, this poll, which had been taken annually since 1949, showed that the percentage had declined in eight years by almost one-quarter, from 21 percent to 17 percent.

By way of contrast, similar polls taken in nations uninfected by Progressive Education, showed no such shocking figures. In neighbouring Canada, 31 percent were reading a book at the time the poll was taken, in Australia 33 percent, in West Germany 34 percent, and in England, 55 percent. The critics of Progressive Education are certainly entitled to an explanation for this dismaying result.

What the situation plainly calls for is not exclusive devotion to Progressive Education, ingenious as are some of the pedagogic devices which it has introduced, but a combination of methods adapted to all the problems involved in the task of educating the whole man physically, intellectually and emotionally.

With this ideal in mind, the problem of *how to teach* calls for the selection of methods of teaching which will, from the vantage point of the classroom, equip both the masses and the classes, both the manually and the mentally gifted, and both the academically educable and the academically ineducable, with the physical, intellectual and emotional education which each should acquire. The question is, which of all of the available methods of teaching, (and not only the methods adaptable to classroom teaching upon which the modern educator relies almost exclusively), will enable the whole population, and not only the juvenile population, to become rightly educated? As we have seen in our discussion of the organization of the curriculum in Chapters 5 to 8, there is need for effective methods of not intellectual and physical education, but of at least four kinds of methods of emotional education — perceptual, introspectional, axiological, and volitional.

What the study of teaching methods with this end in mind plainly establishes is that not one but a combination of methods is called for in each instance, though in each distinct

field of education some one method may deserve to be given primacy.

Teaching versus Self-Instruction. Education begins not with self-instruction but with teaching by others. The individual receives his first teachings at birth, not from a professional teacher but from his mother, from a mid-wife or a physician — from whoever happens to give him his first experiences as he emerges from the womb. Learning — even the unconscious and animal-like learning of the new-born baby — follows upon this initial act of teaching. And then, until he becomes physically and mentally able to study on his own initiative — until self-instruction in contrast to teaching by others, can take place — everything that he learns is a product of teaching by others.

During early infancy he is psychologically incapable of learning anything on his own initiative except such rudimentary physical matters as the manipulation of his mouth and eyes, his fingers and hands — parts of his body he is able to use even before he is able to crawl. Learning from self-instruction probably begins in the most rudimentary fashion sometime after weaning, when he begins to distinguish between himself and what is not himself. But real self-instruction begins much later, probably during adolescence, or when he begins to be self-conscious in the full meaning of the term. Millions of adults never reach this stage; millions suffer from adult infantilism; millions live their whole lives as such immature personalities that they can hardly be said to teach themselves anything.

But even for those who begin to teach themselves quite early in life — who have the ability to provide themselves with self-education — teaching by others does not stop. Teaching pervades the whole of life. It continues day after day, experience by experience, up to the day of the individual's mental death. The moment the individual no longer learns from others, he is mentally dead even though his body continues after a fashion to live on. Only the complete imbecile resists all teaching; only the most hopelessly insane individual is immune to teaching early in life; only in the last and saddest stages of senility is the individual unable to learn from others.

The Three Basic Methods of Teaching. There are innumerable methods of teaching, but in choosing those best adapted to the various problems with which the professional teacher has to deal, it will help greatly if they are considered in terms of the three distinct categories into which all of them seem to fall. These three I think of as (1) logical, (2) illogical, and (3) alogical. When teaching methods are classified in these three categories, we get a diagrammatic picture of available teaching methods as shown in Chart VI.

Extra-Mural versus Intra-Mural Teaching Methods. Many of the methods of teaching in the family and in the culture are basically the same as those used in schoolrooms; they are simply used and practised in social institutions different from the formally organized school system. To go into a discussion of all of them would involve a digression into subjects which I dealt with at length in a previous book.* But it is necessary to all attention here to them and to make clear that unless the school system and the professional educator provides leadership in dealing with the problem they represent, the school system will be unable to do its own work properly. Eight of the most important of these educational practices are included in the list in Chart VI so as to make this discussion of organizing teaching methods fairly comprehensive.

One thing must be emphasized. In the world today, virtually all those who shape and use these extra-mural methods of teaching are graduates of the modern school system. The more modern the nation, the greater the proportion of them who are graduates of institutions of higher education. Formal education can therefore take credit for what they do which is right educationally, but also it must take the responsibility for what they do which is wrong. The worst of these extra-mural methods of education today is commercial propaganda — advertising, salesmanship and publicity — in the free world,

* See "Education and Living," Volume I, Chapter VII, "Standardization." The statistics used in this book were based upon the period 1930 to 1940. At that time it showed that four times as much money was being spent in America on advertising, selling and publicity as on the whole school system.

and State or statutory propaganda in the totalitarian world. Between them they are today undoing the best of what the formal school system is doing. If this form of mis-education is ever to be ended, it must begin in the school and it will only begin there when the school takes full responsibility for education both in the school and in the home and culture.

CHAPTER XXVIII

LOGICAL METHODS OF TEACHING

Until there is correct thought, there cannot be right action; and when there is correct thought, right action will follow.

— Henry George

Every method of teaching which is directed primarily at the education of the conscious mind, I think of as logical — logical in intention if not always logical in fact. The characteristics which distinguish such methods are a logical relationship between the statements which the teacher makes, the instruction he gives, the questions he asks, the activities he directs, and the responses which the student is expected to make, the exercises he is expected to perform, and the activities in which he is expected to engage. The relationship is formally a logical one; it can be expressed syllogistically. In all of them the teacher presents premises, and follows this by making the student in some way aware of conclusions.

The Two Canons of Logical Teaching. There are two canons or norms of logical teaching, and the effectiveness of the teaching is in proportion to the extent to which these canons are observed. The first is an intellectual, conceptual, ideological, and noetic canon: (1) *Logical teaching should produce comprehension of the subject-matter taught.*

The second canon is implemental, pragmatic, praxiological: (2) *Logical teaching should produce mastery in the doing — in the practice and application — of what has been taught.*

It is possible to distinguish, as shown in Chart VI, at least six methods of logical teaching which conform to these canons.

1. *Teaching by Rational Compulsion.* Consideration of teaching methods might well begin with what is the crudest

of all methods of teaching, compulsion. It is the use of force — physical force either overt or constructive — which distinguishes compulsion from all other methods of teaching, and the problem which this creates is not, as prevailing sentimentalizing about education prescribes, how to eliminate it but how to distinguish between right-compulsion and mal-compulsion. For the obvious fact which cannot be ignored is that the complete elimination of all compulsion not only deprives the teacher of a necessary method of teaching but also ensures the mis-education of many students. Some children, and perhaps most children, might be conditioned in the first few years of their life so that they can thereafter be led to do everything that they should do purely by persuasion, but the fact remains that many are not, and many will never be. In dealing with these children compulsion must be used, not only in teaching them but also to prevent their infecting other children with their bad habits.

Every child must be taught some things, and prevented from doing many things, which are mandatory and prohibitory in nature. Compulsion to ensure this must begin before the child is intellectually capable of comprehending the necessity for such things. True, if it can be made to comprehend so much the better, but comprehension or not, it must be compelled to leave matches alone and prevented from playing with fire; it must be restrained from breaking things and from damaging property.

On the other hand, there are many individuals, no matter what their age, about which this still remains a fact which has to be accepted. A student, not only in an elementary but in a high school and college, must be compelled to observe decorum in the classroom, and prevented, by force if necessary, from doing anything to the building or equipment of the institution in which he is studying which is destructive of its property or which interferes with its ability to perform properly its task of teaching.

An adult must submit to the authority of a traffic officer when walking across a street as well as when driving an automobile; the traffic officer, in directing traffic is teaching in

precisely the same way a parent is teaching when he forcibly restrains his child from injuring itself or from damaging any property. But it is in defending the realm, particularly in the police and military forces of a community, that compulsion is essentially a rational means of "drilling" or teaching.

It is a mistaken sentimentalism which has interdicted the use of all compulsion in teaching. But though this is true, compulsion, no matter how national, has a definitely limited place in the arsenal of teaching techniques. As in the use of compulsion in any other area of human life, it should not be resorted to in teaching if there is any alternative method of teaching which can be used to teach what needs must be taught. Even when compulsion has to be used, it must be used sparingly. Otherwise it is likely to generate in those subjected to it secret hatred for authority which may later develop into open rebelliousness. It may, if unwisely used, even defeat its purpose, and instead of teaching the student to submit to discipline in the interest of social order, provoke him to seek compensation for his involuntary submission to too strict a discipline in early life, through the obsessive exercises of hate and power later in life.

2. *Didactic Teaching.* Because education today is almost exclusively equated with schooling — because it is so universally taken for granted that education takes place only in classrooms — the method of teaching which has been most highly developed by professional educators is the one I think of as didactic. The teacher furnishes the student facts, and trains him in procedures and practices. He poses problems and disposes of them. Didactic teaching is therefore the antithesis of heuristic teaching.

Our modern schools of education — our teachers' colleges — have developed didactic teaching so that the teaching process, the subject-matter, the text-books, and the teaching-aids are virtually scientific in their precision and detail. Didactic teaching lends itself perfectly to the teaching of the symbolic disciplines, equally perfectly to the teaching of the pure or descriptive sciences, and to the facts contained in

subjects like history and geography. It lends itself only in part to the task of teaching the applied sciences, and least of all to the teaching of the arts, the crafts, and the techniques generally.

Taking modern schooling as a whole, about nine-tenths of it is didactic in nature. This is probably the gravest mistake made today so far as teaching methodology is concerned. If the whole man is to be educated, and particularly if this is the ideal in teaching not only the intellectual elite but the masses of people, this almost exclusive use of the didactic method is grossly in excess of what right-education calls for.

The most important didactic teaching-aid in an ideal school should be the "reader," described in Section IV of Chapter 9, in discussing the curriculum of the primary school. Next in importance would probably be the denationalized geography and history suggested in that same discussion. They too should be fascinating reading tools. But since the "reader" may well be for many students the only book they may ever own, its presentation, when a child is ready for it, should be an event. It should be presented before the whole class as soon as the teacher decides the student is ready for it. It should be for the student and the class an emotional experience in depth. It should be inscribed to the student, and when presented the speech of presentation should make it clear that it is his to be kept all his life, because no matter how many times he reads the great classics of his own literature, they will always reveal new meanings to him, and familiarity with them will make him not merely an instructed but a cultivated person. Part of the teacher's joy in connection with the use of the "reader" by his class should be leading them to discover not only the truths it contains but the poetry of language — the revelation of the enrichment which comes from mastering new words and new ideas and from reading the great geniuses who have created the best of the nation's cultural heritage.

3. *Discursive Teaching.* Third in popularity so far as classroom teaching is concerned, particularly in higher education, is what I think of as discursive teaching. The teacher,

when using this method of teaching, does not "tell" and the student "listen;" he does not merely "ask" and the student "answer;" he does not merely "instruct" and the student "execute" as called for by a syllabus; but he organizes a discussion in which he leads, it is true, but in which the responses of members of the class are not prescribed. The seminar and the class discussion, (and tutorial discussion in contrast to tutorial instruction), are discursive methods of teaching. In spite of its informality, like all methods of logical teaching it leads from premises to conclusions, and its objective is comprehension by the conscious mind of the student.

4. *Heuristic Teaching.* A fourth method of logical teaching, of which the essence is leading the student to discover the truth about a matter for himself, is what has been called heuristic. In contrast to didactic teaching, which aims at equipping the student with answers which he is supposed to remember, (however imperfectly he may understand them), heuristic teaching aims at making understanding more vivid than is possible didactically, by posing a problem, making suggestions about procedures for resolving it, and then, having created conditions which give the student the necessary opportunity, allowing him to discover the answer to the problem for himself.

In a sense, heuristic teaching stresses the educational value of experiencing in contrast to verbalizing.

Experience, old proverbs assert, is a great teacher. For the intellectually less-educable masses of mankind, it is the greatest of all teachers. And since life itself consists of a series of experiences, life itself is their greatest teacher. But by itself, experience is a rather fitful and wasteful teacher. Unguided reliance upon it has its dangers. It ignores the enormous value of pre-knowledge — of acquiring knowledge before the individual has to use it. It ignores the importance of profiting from the experience of others. Because of its fitfulness, experience which teaches a necessary lesson often comes too late for the individual to profit from it.

Heuristic teaching should therefore be planned; it should ensure experiences from which the student is certain to make the discoveries necessary in order to cope with the problems he will face later in life. What results from this kind of teaching, much more than from didactic teaching, is the acquisition of confidence and conviction. Though not presented in formal logical terms, it is still an essentially logical method of teaching; but the logic is deduced from a discovery rather than from a formal proposition.

5. *Activity Teaching.* While activity teaching is as old as mankind, it has come to be considered an entirely modern innovation because of the emphasis placed upon it in the New Education which stems from the work of John Dewey. In classes which follow this form of education, fully half of the time is supposed to be spent at work or play in school shops, studies, laboratories, playgrounds, or auditoriums. The students learn from motor-activities rather than from books or lectures. The theory upon which this kind of classroom activity-teaching is based can be summed up in a positive and a negative form. The positive form is that the students should learn from self-directed, spontaneous activities preferably pursued not as individuals but as a group; negative, that teaching should not be imposed through formal learning from books and lectures. The danger which has developed is that in stressing spontaneity, all disciplining is excluded. And this reduces the whole procedure to an absurdity, since it assumes that there is nothing which needs to be learned but that which will be spontaneously acceptable to the student.

But there is an aspect of the fetish for "action" in teaching which it is easy to overlook. In spite of the fact that those who are its most ardent advocates call their methods the New Education, activity teaching is not new. Before the development of classroom teaching, this method was taken for granted; it was called apprenticeship; most boys studying a craft were apprenticed by the time they were seven; girls were taught housewifery by their mothers, and farm boys farming by their fathers, though neither were formally considered apprentices.

When apprenticed formally, they usually spent seven years before they "graduated" and became journeymen slaters and carpenters, armourers and smiths, weavers and tailors. But this activity teaching in real "workshops," and not schoolroom imitations of them, was not confined to the crafts; it was also used in teaching the arts and professions. Prospective lawyers did not go to a law school, they "read law" as *apprenticii ad legem* in the office of a practising lawyer; the prospective physician did not go to a medical school, but was apprenticed to a physician; the prospective artist joined the *bottega* of an established master-artist and was taught the graphic arts by beginning with the mixing of the paints, preparing surfaces for painting, painting backgrounds, and finally, if he had the necessary talent, becoming a master in his own right.

When the modern variant of "apprenticeship" is compared with its progenitor, there is ample evidence indicating that vocational education today would profit enormously if it were to return for the most part to teaching "on the job" and not "in the school."

6. *Teaching by Example.* In sharp contrast to the activity method of teaching, both old and new, is the method which I think of as teaching by example. A teacher not only teaches by what he does, as in apprenticeship teaching, and not only by what his pupils do, as in modern activity teaching. He not only teaches by what he says, as in didactic and discursive teaching; he also teaches by what he is. He cannot avoid doing so. What he is reveals itself in everything that he says and everything that he does; it speaks without speech and demonstrates without action.

This inescapable accompaniment of all teaching provides the teacher at one and the same time his greatest power and charges him with his greatest responsibility.

In a sense, preparation for teaching begins not with the intellectual and technical mastery of what the teacher is to teach, but with the cultivation of his own character. If he is himself studious, his example will tend to make his students

studious. If he has no real interest in scholarship, he will dull whatever interest his students may have.

If he is himself sincere and honest, he will tend to make his students sincere and honest — even if he never uses either words in his discourses with them. But if he is neither, he may read scripture to them until he is black and blue in the face, and his students will discount every word he utters.

If he himself has cultivated good taste; if he really likes good music, good reading and poetry, good drama, good painting, sculpture and architecture, his students will tend to cultivate good taste. If, on the other hand, he is a cynic and philistine, there is nothing that he can say about literature or music or any of the arts, which will instill good taste in his students.

If he himself is a thoughtful truth-seeker; if he is concerned about social and economic and political well-being, he will tend to make his students concerned about such problems. But if he has no genuine concern about them, he may teach sociology, economics, and political science with perfect academic mastery of each subject, and yet his students will have no concern about any of the problems with which these subjects deal — except to remember enough of what the teacher requires of them to obtain passing grades.

Finally, if he is a dedicated person; if he has a purpose in living above that of merely enjoying as high a standard of living as possible, he will tend to make idealists of his students even if he never exhorts them by a word of an idealistic nature.

There is an old saw which says, "Actions speak louder than words," but this is just another of saying that "Example teaches more effectively than anything else."

ILLOGICAL METHODS OF TEACHING

Who was it who invented the art of divination? It was the first rogue who met the first fool. — Voltaire.

Illogical methods of teaching, in contrast to both logical and allogical methods, are directed at both the conscious and the unconscious mind. What chiefly distinguishes them from both logical and allogical methods is the fact that they have no rational relationship to the subject-matter being taught. Primitive educational practices are richly illogical; too many of these methods of teaching survive, unfortunately, to this day. These methods of course produce effects, but the effects have neither a causal nor syllogistic relationship to the intentions of those who use them. It is as if those who used them were acting on the theory that effects can be divorced from causes, and premises from conclusions.

There are at least three kinds of these teaching methods which can be used to illustrate what is involved; (1) the use of magic, (2) the use of arbitrary, and often inhumane, compulsion, and (3) the use of what might be called permissive spontaneity.

1. *Magical Methods of Teaching.* The primitive agriculturist, for instance, was taught by his *shaman* or medicine man that the way to assure the production of a good crop was by propitiation, by making the right kind of sacrifices to the *mana* of the soil. Not only the content, but the method of teaching, was magical.

Magic, most anthropologists agree, was a kind of primitive science, though a completely irrational one.

2. *Arbitrary Compulsion.* The use of switching, flogging, and other forms of physical punishment for teaching have in many cases as illogical a basis as has reliance upon magic.

Man being normally a humane being, any kind of inhuman treatment, whatever the motive, is *ipso facto* irrational. Inhumane compulsions, nevertheless, continued to be used in teaching even in the so-called civilized world until relatively recent times. A description of teaching methods in the indigenous schools of India which prevailed a hundred years ago furnishes an illustration of the inhumane use of physical punishment, though this example of inhumanity can be more than matched by the beatings administered in English schools in the hey-day of the Victorian Era.

"The internal routine of duty for each day will be found with very few exceptions, and little variation, the same in all the schools. The hour generally for opening the school is six o'clock. The first child that enters has the name Saraswatee, or the goddess of learning, written upon the palm of his hand as a sign of honour; and on the hand of the second, a cypher is written, to show that he is worthy neither of praise nor censure; the third scholar receives a gentle stripe; the fourth two; and every succeeding scholar that comes an additional one. This custom, as well as the punishment in native schools, seems of a severe kind. The idle scholar is flogged and often suspended by both hands and a pulley to the roof, or obliged to kneel down and rise incessantly, which is most painful and fatiguing, but perhaps a healthy mode of punishment."*

Since I have tried to formulate norms, canons, or laws for both logical and illogical teaching, some canon applicable to illogical teaching ought to be submitted. I have been able to formulate only one which applies to the use of any such methods, and which can be reduced to a single word: *Don't*. Don't use any of them because illogical methods of teaching have no place in a solution of the educational problem which deserves to be called a solution. Whatever of such teaching persists calls to high heaven for eradication.

* From "Selections from the Government of Madras," No. II, Appendix D, 1822. From the discussion of Indigenous education in India, in "The History of Education in India," by Syed Nurullah and J. P. Nair, 1943, p. 7.

3. *Teaching by Permissive Spontaneity*. Among the cults which have developed in modern education, particularly in primary education, as a result of the revolt against not only authoritarianism but even discipline in teaching, none is more illogical than the cult which attaches greater importance to the impulsive activities of children than to their direction by the teacher. The method, if it can be called a method, is rationalized by emphasizing the concept of spontaneity as against discipline, and permissiveness as against compulsion. It is really a perversion of what was valid in both John Dewey's and Maria Montessori's educational philosophy. Instead of recognizing the distinction between the spontaneous discovery by the child of the significance of what the teacher has prepared it to discover, (as in Montessori's "explosion into writing"), and what a child is simply moved by its impulses to do, all of the child's activities, no matter how meaningless and pointless, are treated as if they had a mysterious significance. The method is illogical both because it is irrational and because it is entirely without a particle of magical value.

ALOGICAL METHODS OF TEACHING

Look to the essence of a thing, whether it be a point of doctrine, of practice, or of interpretation. — Marcus Aurelius.

Alogical methods of teaching, in contrast to illogical methods, are rational and not irrational in spite of the fact that they ignore all formal logic. In contrast to logical methods, they have two characteristics in which they are entirely different—their role in education depends upon the efficacy with which they make impressions on the unconscious mind and not the degree of comprehension provided for the conscious mind, and there is no formally logical relationship between instruction and response; the relationship between the means and the end is not syllogistic from premise to conclusion, but etiologic, from cause to effect.

In psychological, instead of educational, terms, alogical teaching is what since the time of Pavlov psychologists have called conditioning.

Although alogical teaching is directed at the unconscious mind, in nearly all instances it takes place when the student is conscious and completely awake. But there are some exceptions.

Hypnotism furnishes such an exception. Hypnotism is practised for all sorts of reasons—for entertainment, for instance—but it is also a method of teaching. This is true of both its use in post-hypnotic suggestion and its use therapeutically. Yet it is a method of teaching in which the subject is unconscious at the time the hypnotist is making suggestions, and in effect "teaching" his subject.

It is the contention of this study that no one method of teaching can possibly result in the education of the whole man. Logical teaching of all kinds, didactic most of all, is essentially practical in the sense in which the word practical is commonly

used today. All logical teaching is practical because it contributes to the vocational education to which most of education is devoted today.

But there are important aspects of the education of the whole man which cannot be dealt with by mere logic and mere intellectuality—education in values, for instance. When values are dealt with intellectually, what results is comprehension not implementation. The student may learn all about the values of the different cultures of the world—about those of the Esquimaux and those of Modern Man, about those which prevailed in Medieval Europe as compared to those which prevailed in Ancient Rome and Greece—and yet completely fail to cultivate his own feeling for values in the slightest degree. For imbuing the student with felt-values, logical methods of teaching are almost valueless. For this purpose, alogical methods of teaching must be used.

The Four Canons of Alogical Teaching: There are four natural laws of alogical teaching, (1) the law of impression, (2) the law of repetition, (3) the law of association, and (4) the law of stimulation. There are, of course, an infinite number of devices to which teachers can resort to influence the unconscious mind, but all of them depend for their effectiveness upon one, or some combination, of these four natural psychological laws.

1. *The Law of Impression:* That every thing experienced makes some sort of impression upon the unconscious mind, is one of the truisms of modern psychology. This is obvious if only because the unconscious mind is the storehouse of our memories. But for a single experience to make an impression in depth—an enduring impression—upon the unconscious mind, it must produce a strong and vivid emotion, it must startle and shock. Experiences which make these enduring impressions can be either traumatic or hygienic, either unwholesome or wholesome.

The mental and emotional illness which Freud and the psycho-analysis call neurosis has its origin for the most part in traumatic experiences—experiences which make such a devastating impression upon the unconscious mind that the whole

experience tends to be repressed, manifesting its existence subsequently in the neurotic behaviour of those who have suffered such experiences. If these traumatic experiences are analyzed in terms of the problem with which we are concerned, they amount to this; they condition the individual to respond neurotically to life, and to exhibit a neurotic attitude toward all subsequent experiences which in any manner recall the original traumatic experience.

While psycho-analysis confines itself to dealing with the effects of traumatic experiences, this does not mean that individuals do not have single experiences which have a similarly enduring effect upon them, but which are not traumatic in nature at all. It does not mean that they cannot have deeply felt experiences which are in fact wholesome and hygienic. In terms of our problem, this means that it is possible deliberately to subject individual to, and in effect inflict upon them, deeply impressive experiences which have an enduringly wholesome effect, and which condition them to exhibit more wholesome attitudes toward their subsequent experiences in life than would otherwise be the case. These kinds of impressions can be deliberately used for the right kind of emotional education.

Mystical and religious experiences are often of this kind. If the impression produced is deep and vivid enough, it produces what is called a conversion and may result in an enduring change in attitudes.

The variety of these hygienic and wholesome experiences is infinite, and the educator can take advantage of this fact and incorporate as many as possible of them into his work.

The deeply moving experience provided by seeing a wonder of nature like the Grand Canyon of the Colorado or the peaks of Kunchangnja in the Himalayas, or by a great work of art which may range from the reading of a poem like the Rubaiyat of Omar Khayyam to the first sight of an architectural monument like the Taj Mahal; the hearing of a great oration like Lincoln's Gettysburg address; the reading of a great work of literature like Ruskin's "Unto this Last," or Thoreau's "Walden," has in countless cases produced such a deep and wholesome effect upon

individuals. But it is not necessary to go to Colorado or to the Himalayas to have such experiences. Sunrise and sunset, the starry heavens at night, the miracle of seed and flower, can provide them.

Both the form and the substance of such experiences are important if they are to justify their use educationally. Mahatma Gandhi had such enduring experiences in reading Ruskin and Tolstoy and Thoreau. Nicholas Grundtvig insisted that it was the business of the teacher to provide such experiences to his students when lecturing to them in his classroom. And Kristen Kold, who became the first exponent of Grundtvig's theory of education, illustrated what Grundtvig meant by saying that in his home his father had a "grandfathers' clock" which he would wind up religiously and which then ran a whole week. But, said, Kristen Kold, it was the business of teachers to "wind up" their students so that they kept "running" the rest of their lives.

The right organization of the curriculum, the right organization of the school system, and the right organization of teaching must include making such vivid and deep impressions upon the unconscious mind; must regularly expose the student to experiences which will produce enduring emotional attitudes of the right kind—attitudes which must be developed if he is to use what he learns at school and in college in a rational and humane manner throughout his life.

The making of sharp, vivid, and deep hygienic impressions upon the unconscious mind is observing the first canon of alogical teaching—the law of impression.

2. *The Law of Repetition.* The second canon of alogical teaching is based upon the psychological fact that, unlike strong and startling experiences, serene and placid and mild experiences do not make an enduring impression on the unconscious mind unless they are frequently repeated. If the mind concentrates upon their nature and meaning, and they are repeated frequently enough, they ultimately make precisely the same enduring impressions on the unconscious mind and produce the same enduring emotional attitudes, as do single deeply felt experiences. But they must be endlessly repeated.

Like strong experiences, mild experience may be either traumatic or hygienic. Unpunctuality is an attitude decidedly unwholesome; it can be inbuilt into the unconscious mind until it becomes almost impossible for an individual to be on time for any engagement. This is the end-result of repeated disregard of appointments. Each one of these is a minor traumatic experiences. Bad manners, and criminality, can become inbuilt attitudes by the same process of repeating mild breaches of manners or of morals, which, when repeated sufficiently often, become conditioned responses to temptations, and opportunities to disregard the rights of others.

But wholesome attitudes of all kinds can be produced by the same process—by the process of repeating wholesome or hygienic experiences. The individual who habitually observes every opportunity to be considerate to others, inbuilds an enduring attitude of concern about the rights of others. The individual who habitually observes simple duties, inbuilds an attitude of discharging obligations under all circumstances.

The second canon of logical teaching is simply to repeat wholesome experiences; repeat maxims of a hygienic kind over and over again; chant them, recite them, meditate upon them as regularly as one eats and rests and sleeps.

3. *The Law of Association:* The psychological fact called the association of ideas fascinated Hume and Locke long before the development of modern psychology. "Our mind," said William James,* "is essentially an associating machine." As the facts about this apply to logical teaching, they may be summarized as follows: Every individual tends to associate new notions and new ideas not only with those with which he is already familiar, but with feelings and attitudes about them which have previously been inbuilt into his unconscious mind. He tends automatically, and usually unconsciously, to comprehend new ideas by associating them with his existing ideas, and to feel about them as he already feels about ideas which are similar to those with which he is already familiar.

* Quoted by Dale Carnegie, in "How to Develop Self-Confidence and Influence People by Public Speaking," pp. 63-64; Association Press, 1926.

All his feelings fall into one of the two opposite categories, pleasant or painful. When he feels a new experience, what he feels is unconsciously the product of associating the new experience with previous experiences which have been either pleasant or painful. If he smells assafetida for the first time, he gives his perception of it content by associating it with the notion of nastiness and the feeling of repulsion. On the other hand, if he smells a flower which is strange to him, and associates its odor with the odor of roses, his perception of it becomes identified with a feeling of pleasure and with the idea of beauty.

To use the law of association for the purpose of producing enduring impressions upon the unconscious mind of a student, he should be made systematically to associate experiences of any kind which are new to him with ideas and feelings which are already an inbuilt part of his innermost self.

William James discusses the process in connection with the cultivation of memory:

"Suppose I am silent for a moment and then say (to myself) in commanding accents, 'Remember; Recollect' Does (my) faculty of memory obey the order, and reproduce any definite image from the past? Certainly not. It stands staring into vacancy, and asking, 'What kind of thing do you wish (me) to remember?' It needs, in short, a cue. But if I say, 'Remember the date of your birth, or remember what you had for breakfast' or 'Remember the succession of notes in the musical scale,' then my faculty of memory immediately produces the required result: the cue determines its vast set of potentialities toward a particular point. And if I now look to see how this happens, I immediately perceive that the cue is something contiguously associated with the thing recalled. The words, 'date of my birth,' have an ingrained association with a particular number, month, and year; the words 'break-fast this morning,' cut off all other lines of recall except those which lead to coffee and bacon and eggs; the words 'musical scale,' are inveterate mental neighbours of do, re, mi, fa, sol, la, si, do. The laws of

association govern, in fact all trains of our thinking which are not interrupted by sensations breaking on us from without. Whatever appears in the mind, must be introduced; and, when introduced it is as the associate of something already there. This is as true of what you are recollecting as it is of everything else you think of. . . . An educated memory depends upon an organized system of associations; and its goodness depends on two of their peculiarities: first, on the persistency of the associations, and, second, on their number. . . . The 'secret of a good memory' is thus the secret of forming diverse and multiple associations with every fact we care to retain. But this forming of associations with a fact—what is it but thinking of the fact as much as possible. Briefly, then, of two men with the same outward experiences, the one who thinks over his experiences most, and weaves them into the most systematic relations with each other, will be the one with the best memory."

4. *The Law of Stimulation:* The last canon of alogical teaching roots itself in the biology and not only the psychology of mankind. As a biological entity, man is endowed with two kinds of hereditary, spontaneous, involuntary, and virtually tropismic, impulses, (1) impulses of inclination and attraction, and (2) impulses of revulsion and repulsion. The instinctural drive in man for survival, for sexuality, for expression are the basis of these two kinds of impulses. Ideally, man ought to work, he ought to learn, he ought to sacrifice immediate desires for distant goals spontaneously. Ideally his natural impulses ought to be sufficient to move him to do what he should. But as a matter of fact few individuals are ideally endowed in this respect. If, therefore, the average child is to be made to learn, its impulses must be stimulated to move it to do what it will not do spontaneously. The discovery that promises of rewards and threats of penalties will stimulate students to study is one of the oldest discoveries of teachers. This is in effect all that the law of stimulation amounts to: the offering of rewards and the threatening with penalties, by unleashing impulses deeply implanted in the unconscious mind, will make an individual do what he is

CLASSIFICATION OF METHODS OF STIMULATION

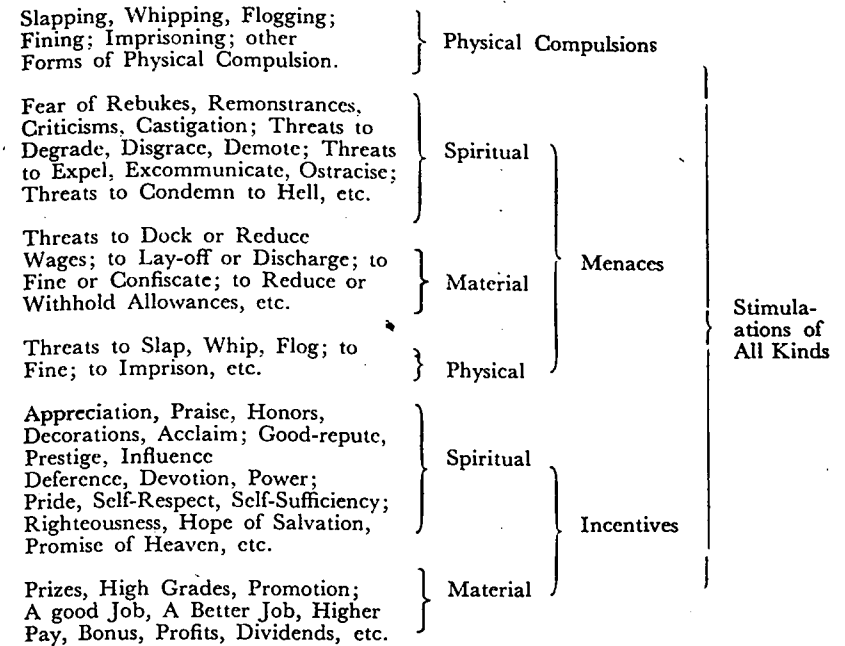


CHART VII

desired to do and refrain from doing what it is desired he should not do.

Simple and obvious as all this is, in application its complexity is breath-taking. To avoid a lengthy digression, this complexity is shown by means of Chart VII.

For our present purposes it is sufficient to recognize that one of the laws of psychology of which we can take advantage in teaching, and of which teachers have taken advantages from time immemorial, is that of dangling before the student something he wants and threatening him with something which he does not like. This is the law of which teachers used to take much too much advantage in its least desirable form when switching and flogging was one of the principal methods of teaching. It is still the law of which the modern school takes advantage when it offers the student a prize or a promotion, a scholarship or a good job to stimulate him to study. It is not, of course, in accord with the great Vedic moral injunction of the *Gita*—not to strive for “the fruits of action.” But with the immature child, and even with most immature adults, it is apparently one of the effective means of stimulating them to do what the “stimulator” desires them to.

If the various teaching techniques which are successful in making enduring impressions upon the unconscious mind are carefully analyzed, it will always be found that some one or some combination of these four laws of logical teaching are being consciously or unconsciously used.

Conditioning. It is to Pavlov's classic experiments in demonstrating the existence of the conditioned reflex that we owe our understanding of the use of conditioning in education. What he made clear was the mechanism which must be used in building into the individual responses of the desired kind.

Watson's* Behaviouristic psychology represented the construction of a complete human psychology based upon the assumption that all human behaviour consisted of conditioned

* John B. Watson, (1878-1958), the American psychologist who developed the psychological doctrine called Behaviourism.

and not of reasoned or of willed activities, with experience and environment acting as the agency (or the principal) which created the responses reflected in all human actions. It is not, however, necessary to assume that Watson was right in his interpretation of what Pavlov had demonstrated. For the fact is that there is a rational and a willed use which can be made of the mechanism represented by the conditioned reflex and not merely the determinist and mechanist interpretation Watson assumed.

Children, for instance, must be taught not to play with knives, with matches and fire, with anything which may injure them or others; they must be taught not to damage or destroy property of any kind; they must be taught not to run out into the street impulsively and incur the danger of being hit by a car or truck, and whatever the methods used to teach them, or rather to condition them, not to do these things is a proper method of teaching. If force is essential at any time to provide such conditioning, and if it is used often enough, the child always associates the undesired action with the pain inflicted in the course of its forcible conditioning.

There is a proper place for adult conditioning as well as for child conditioning. Every adult should be conditioned to observe traffic regulations, to react to temptations to commit breaches of these regulations automatically in the proper manner by associating impulses to commit such actions with punishment by law. The great value of police patrolling is that every such policeman acts as a conditioning stimulus to all who see them. And of course as long as there are wars, and military forces have to be maintained to deal with them, the conditioning of adults for military service is necessary. All drilling, if its nature is carefully analyzed, is a form of conditioning. And whatever methods the drill-sargeant needs to condition the soldier to instant obedience, must be used to create armies which will operate successfully when at war. Finally, travelling at sea may be mentioned as another example calling for adult conditioning not only for the crew but for the passengers, if the safety of everybody on board is to be assured in times of stress and danger.

It is a gross abuse, however, to use conditioning to dehumanize, to deceive or mis-instruct, or to vulgarize any human being. And yet conditioning has been used from time immemorial by both State and church for this purpose, and is still being used in all three of these ways in the Marxian states in "brain-washing" and in fundamentalist Protestant and Catholic Churches in the conditioning of individuals to feel sexual shame. Only right-conditioning has a proper place in the arsenal of teaching techniques.

Conditioning, which is the method common to all forms of alogical teaching, is antithetical to both instruction and cultivation as these concepts have been defined in this study. Yet in spite of this, it is a method which must be used if students are to be truly humanized. For humanization calls for many actions and activities which must be automatically and not in each instance voluntarily performed. But to justify its use, it must not aim at what is in fact antithetical in substance and essence to right instruction and right cultivation. It is, in other words, a method of doing what other methods used to instruct and to cultivate cannot do.

1. *Teaching by Alogical Compulsion.* Though it goes against the grain for me to speak of alogical compulsion as a method of teaching, the fact that it does teach cannot be denied, and since its use by the Marxian dictatorships in what has been called "brain-washing" has enormous contemporary importance, its real nature must be understood so that not only its inhumanity but its entirely invalidity as a method of teaching is recognized. In such alogical compulsion, Pavlov's methods of conditioning dogs is used to condition human beings. What Pavlov ignored, but what his Marxist followers did not, was the fact that his method of conditioning the dogs upon which he experimented always involved the use of physical force even though the force used did not involve beating them. In "brain-washing," heretics who were imprisoned and not liquidated, and prisoners of war whom the Marxists wanted to convert, were not only isolated, prevented from sleeping and starved, but also beaten and tortured in various ways until they were finally so demoralized that they responded to their "teachers" in the manner desired.

The aim was to reduce them to such a state of mental vacuity that anything and everything which they were asked to believe would be accepted.

Compulsion of this kind is neither rational, as the use of compulsion in dealing with specific cases of indiscipline is logical, nor irrational, as is the use of compulsion in magical, mystical and other methods of illogical teaching. It is alogical.

Alogical compulsion is not, of course, new. It was used by both Catholics and Protestants up to about two hundred years ago in trying to stamp out what each considered the heresies of the other.

Bigots and fanatics, despots and tyrants, by eschewing all dictates of morality and humanity, have always resorted to it. For precisely the reason which makes its use in politics and in religion a crime, it is a crime to use it in education.

2. *Teaching with Alogical Exercises.* We take it for granted that exercise is essential in physical education, that it must be used if we are to teach health of the body; but we shrink from recognizing, what was taken for granted for over two milleniums in India, that it is also possible to promote health of mind by exercises of various kinds. *Yoga* is such a system of alogical exercises. I propose consideration of some of the *yogic* exercises for this purpose. Six of them seem to me most important — exercises which will cultivate (a) attentiveness, (b) concentration, (c) meditation or introspection, (d) imagination, (e) endurance, and what for want of a better term has to be called (f) dislinking.

It is true that the *yogic* exercises begin with physical education, with *hatha yoga*. Put in Patanjali's systematic development of the traditional *yogic* practices, they are considered merely preliminary steps in the complete process of mental and spiritual development which was their ultimate aim.

* The "Yoga-shastras" by Patanjali, the recognized systematic exposition of *yoga*, are believed to have been written during the same period as the "Laws of Manu," the "Manava Dharmashastras" which are attributed to Manu. Nothing is known of the details of Patanjali's life; he is believed to have lived during the period immediately preceding Alexander's invasion of India, in 325 B.C.

Mental yoga in contrast to *hatha yoga*, can be said to begin with *dharana*, or attentiveness.

Cultivating Attention: Dharana. No human accomplishment whatever, from such simple accomplishments as that of gardening or bricklaying to such complex accomplishments as algebra and violin-plying, is possible without attentiveness. The intellectual training to which we devote our schools and colleges today is hopelessly ineffective unless we succeed in teaching our students to focus their minds on what they are studying.

Dharana is the systematic cultivation of attentiveness. To cultivate this educational virtue, special exercises are undoubtedly needed for most students. But they do not necessarily call for the addition of a special course; the exercises can be built into any curriculum if, in every course, whatever its subject-matter, attentiveness is specifically taught.

If attentiveness is necessary to the study of everything, it is also necessary to what is most neglected today, the development of introspection and the inner self. Unless the student is made aware of the significance of faculties like attentiveness and how to use them, plainly his inner life and its expression in thought and action will not be properly cultivated.

Cultivating Concentration, or Dhyana. Attentiveness, however, is only the first step in a process of learning in which mastering the faculty of concentration is the second. The child's mind "flits from one thing to another. From play to flower, to lesson, from lesson to putting out his tongue at a companion."* The child mind is fittful and wavering, and the majority of adolescent and even adult minds are little better.

The conscious mind, however, can be trained to concentrate, and if education in the classroom is to be effective, the unconscious mind must be conditioned so as to make this possible. The system for training in concentration, the *yogis* called *abhyasa*. For the most part our students today concentrate, when they do concentrate at all, unconsciously and more

* K. M. Munshi, "Bhagavad Gita and Modern Life," p. 134, Bharatiya Vidya Bhavan, Bombay, 1955

or less accidentally; attention is not called to concentration as a distinct operation of the mind. Yet the student must concentrate intensely and purposefully if he is really to study instead of merely spending his time listening to lectures and reading text books.

Dhyana, Patanjali insisted, must be systematically practised. The student should practise concentration at a fixed time daily. He should sit alone and in a solitary place. He should seat himself firmly and in a correct posture, and in this, Mathias Alexander* would entirely agree with them though the Indian would have him sit on the floor while the Englishman would let him sit in a chair. But any posture which is unstrained and which enables him to keep steady and poised, will do. His body, head and back must be kept in a straight line; Alexander would insist that neck posture, which he has demonstrated as so essential to full and conscious control of mind and body, must be correct. Having taken his seat, he must concentrate upon one subject, and prevent his mind from flitting from subject to subject. He must control his thoughts, instead of letting them wander about.

I have personally found it possible to encourage concentration in the members of seminars which I have conducted, though the membership included graduate adults, by first very briefly outlining the subject for discussion, and then calling for a period of silent attention, concentration and reflection before discussion began.

Cultivating Meditation and Introspection: Upasana. Concentration, however, unless it is to induce a state of trance or *samadhi*, must be devoted to meditation and reflection, to what John Dewey called reflective thinking. Once the student has learned to keep the subject being studied constantly in the center of his mind, it is possible to consider all its implications and meanings, and to reflect upon its association and relationship to what he already knows.

* Matthias Alexander is an English experimenter in education whose work has the endorsement of men like John Dewey.

Cultivating Imagination: Sanyama. Yoga recognizes the supreme importance of developing the imagination; it recognizes that this extraordinary faculty which man alone in the animal kingdom possesses, is essential to the development of his creative powers and his highest potentialities as a human being. All of his introspectional faculties — his capacity for unconscious cerebration, and his powers for both self-inspiration and inspiring others — are dependent upon imagination.*

The lecturer in a classroom and the writer of a text-book can either dull or intensify the imagination of those who hear him or read him. If the substance of what he says is by its nature uninspiring — as is the multiplication table and the content of much that students must merely memorize — the form in which he expresses what he has to communicate, and the very tone-colour of the words and sentences he uses, must kindle the imagination, and so endow with life what he is teaching.

Cultivating Endurance: Titiksha. If any kind of learning is to be pursued to the utmost, the student must cultivate endurance. The revolt of the followers of John Dewey, who proclaimed the dogma that all study must be pleasant, involves implicitly a denial of the importance of endurance. The moment lessons become irksome or exercises cannot be spontaneously enjoyed, they maintained, they should be abandoned. That the popularity of this cult in education is in large part responsible for the lack of discipline in the students who have been subjected to it, is unquestionable. It is high time that the absurdity of this cult of mere pleasure should be recognized.

It is true that endurance, as many Hindu *saddhus* and Buddhist *bhikkhus*, practise it, aimed primarily at rigorous physical endurance. Discomfort, and even pain are to be endured simply to demonstrate mastery of the mind over the body. They insisted that students must learn to stand in cold water in Winter, and in the blazing sun in Summer: that they must fast to the point of starvation and go sleepless; that they must lie

* *Sanyama* means control of all impulses and desires so that they do not interfere with the process of concentration and meditation. In *yogic* psychology, this stimulates creative imagination.

on the bare ground when sleeping, and eat not merely raw but distinctly unpleasant foodstuffs. Fanatic practitioners of the cult of endurance in all religions, and not only in Hinduism, have pushed this to the extreme of bodily mortification of the most fantastic kinds. Flagellation, to the point of drawing blood, is vindicated in terms of this doctrine.

Up to a point, a regimen of Spartan simplicity and of what, by modern standards, is considered physical discomfort, is unquestionably necessary to right-education, but beyond this point, instead of making it easier to attend to and concentrate and reflect upon a particular subject, it has the opposite effect; the mind is distracted rather than focussed on the subject on which it should be centered. The endurance which is really needed is mental endurance. Training in physical endurance, apart from what is essential to the maintenance of bodily health, is justified only in so far as it makes for mental endurance — only in so far as it makes for such disciplining of the mind as is necessary to worth while studying.

Cultivating Dislinking: Phala Tyaga. Finally, *yoga* stresses what for want of any better English term might be called dislinking, or what Aldous Huxley* called non-attachment.

In the Bhagavad Gita, Krishna tells Arjuna that the discipline to which he should devote himself depends upon the observance of one supreme rule: "Do not be impelled by the fruits which the task may gain for thee." In verse after verse of the famous song, Krishna harps on the same refrain: "Conduct thyself, severing the contact between the task and its fruits;" "Remain unattached;" "Abandon the lure of the fruits of action;" "Let every enterprise or thing be without desire or motive;" "Destroy the link" between what is being done or what is being learned, and the mundane, material and profitable return which might be obtained from it.** If the highest potentialities of man are to be cultivated, knowledge must be

* Aldous Huxley discussed this at length in his anthology of mystic writings which he called "The Perennial Philosophy."

** Bhagavad Gita, II — 47-53

pursued for the sake of truth, art created for the sake of beauty, action performed for the sake of virtue, (or duty — *dharma* being the Hindu term); nothing should be done and nothing of course studied for the sake of profit and glory. The activity and the fruits of it must be dislinked. End and means must become one and the same.*

In terms of academic education, learning must be pursued for its own sake; education must be pursued for the mastery of art and for the truths of science, and not for the purpose of passing an examination, obtaining a degree, and earning a good living.

Not even the most rigid skeptic, if he interprets these exercises in terms of modern psychology, can reasonably question the suggestion that time should be allotted in the classroom, and of course outside of it, for exercises of this kind. It is, however, possible to use this as a teaching method without adding any special courses to existing curriculums.

* C. N. Patel comments as follows:

The *Gita* doctrine of non-attachment goes far beyond the attitude of indifference to material rewards. There is a natural inclination in all of us to feel a kind of proprietary right in our own actions, especially when they are what we consider to be good. As we feel our body, to be *our* body, our intellect to be *our* intellect, and feel proud of them when they are of such excellence as to deserve esteem from others, so also we feel our moral energy to be *our* energy, and feel a secret pride in its exercise. The presence of this secret pride is evidenced by the satisfaction we feel when the worth of our work is recognized, and the pain we experience, not merely when we fail in our efforts, but also when we are ignored or derided. The *Gita* teaches detachment from this self-conscious moral personality, the kind of moral personality which tends to develop into a sense of Puritan self-righteousness. Without the least remission of our moral earnestness, we must learn to conquer all tension in the pursuit of moral and ethical aims by learning to transcend the consciousness of self and feeling ourselves merely as the agent of a universal energy of purpose working for the good of humanity.

R. B. — As a mere Humanist, I cannot subscribe to so extreme a doctrine of absolute non-attachment. There is, it seems to me, a valid distinction to be made between the healthy pride which might be taken by an individual in his own achievements, and an egotistic pride in them — between pride and vanity. But entirely aside from this issue, there does not seem to me any question about the validity of the doctrine so far as it relates to any kind of creative and productive activity. The work ought to be its own primary reward; ends and means should not be divergent; whatever the reward, it should be a necessary and incidental consequence of the work; it ought not to be the primary purpose motivating the individual. Learning, above all, ought to be its own reward.

3. *Teaching by Suggestion.* Most of us today, particularly those of us who have been assiduously conditioned by the fetish of objectivity and the prestige of scientific orthodoxy, attach to suggestion and to conditioning an odor of charlatanism, superstition, and savagery. But it is high time, if the education of the whole man is to cease being a figure of speech, that we give serious consideration to the use of both as teaching methods.

Suggestion and conditioning were used in the very beginning by our primitive ancestors. Both are still used among tribes which have not been civilized; by the *shamans* or "medicine men" who are their only professional educators; and later among civilized peoples, by priests and holy men of various kinds, as the principle means for maintaining control over the people, and for keeping to themselves a monopoly of the profits from magic and other forms of superstition. But in spite of this, they performed a useful social service; they made for social cohesion and so made possible the inheritance of cultural achievements of all kinds.

Suggestion, though not by that name, came into the climate of modern thinking nearly three hundred years ago with that half-genius, half-charlatan, Mesmer.* But animal-magnetism and the esoteric vocabulary which developed around it, never recovered from its unfortunate sponsorship. Charlatans exploited it in preying upon the credulous, and professional hypnotists used it for amusement purposes. Finally, under leadership of Charcot** in Paris, it ceased to be the exclusive property of the charlatans. Unfortunately, because of Charcot's pre-occupation with the cure of hysteria, and his use of hypnotism in trying to deal with hysterical patients of all kinds, it came to be associated mainly with hysteria. It is only now beginning to be taken seriously by the medical profession.

* Franz Anton Mesmer, (1733-1815), was a German who created a furor throughout Europe with what he called animal-magnetism. In Paris he received the patronage of the most aristocratic circles. The phenomena of suggestion he developed came to be called Mesmerism.

** Jean Martin Charcot, (1825-1893), was a French neurologist. Freud began his studies of hysteria and neurosis under Charcot. Later he abandoned the use of hypnotism in favour of psycho-analysis.

Conditioning has an almost equally unfortunate history although its sponsorship was far better than that of suggestions and hypnotism. Pavlov, who made it an essential part of modern psychology, was a scientist of standing, but the concept of the conditioned reflex was used mainly for the purpose of developing a Mechanistic form of psychology. It was seized upon for actual use by various schools of thought infinitely worse than that represented by the professional hypnotists who took over the concept of suggestion. In the modern world, conditioning was first used by Mussolini in the development of Fascism, by Hitler in imposing National Socialist *gleich-schaltung* upon the German people, and by the Russian and Chinese Communist dictators in "brain washing" those not "liquidated" for refusing to submit to Communist regimentation. In their hands, conditioning was used with a ruthlessness and savagery almost without parallel in history.

Finally, in free America, the use of suggestion has fallen into the equally unfortunate sponsorship of the advertising world, and it is used with an ingenuity scientific in its thoroughness for the purpose of exploiting the credulity of the consuming public. More recently, the methods of suggestion developed by the advertising world for commercial exploitation, have been used by the politicians of both the great American political parties for the purpose of bamboozling the voting public. Because of the billions of dollars spent in advertising, (it is not called suggestion), the practice of suggestion by advertising and propaganda, (propaganda is called public relations), is a subject of scientific study and systematic education in America's great schools of business administration, of marketing, of advertising, and of salesmanship.

From all of this, it is my contention, we educators must rescue both suggestions and conditioning. There is one compelling reason for doing so. No matter how much we insist on being objective, the fact remains that, willy nilly, we cannot avoid using suggestion, and cannot avoid conditioning. The only question is whether we suggest and condition unconsciously and thoughtlessly, or use them both rationally, after taking into account the dangers implicit in their use. It is essential that

we plan and organize what we cannot in fact avoid doing, and so rescue suggestion and conditioning from the charlatans, the advertising men, and the political regimenters of all kinds.

Both are among the most neglected of all methods of teaching today. But since they are essential in imbuing students with values, moral as well as esthetic, their nature and value as teaching methods justify consideration in some detail.

Both suggestion and conditioning have a proper and important part to play in the process of educating the whole man in spite of their long history of abuse and misuse.

For the subject, suggestion and conditioning are emotional experiences; their effectiveness depends upon the depth of the impression made on the subject's unconscious mind. Like all emotional experiences, they can be either hygienic or traumatic; they can contribute either to right-education or to mis-education; they can humanize and they can dehumanize. If made a part of a programme of right-education, they will make the individual perceptually more sensitive; develop his introspective faculties; increase his will-power; cultivate his imagination; improve his memory, and so make it possible to imbue him with the values of normal human beings.

Suggestion itself, (as distinguished from conditioning), may be defined as the process by which one person, (whom I shall call the principal), secures the uncritical acceptance of some proposition or some proposal by another person, (whom I shall call the subject), in such a way that acceptance, and action upon it, is embraced by the subject with a feeling of conviction, *even in the absence of logical grounds for doing so.*

It is the non-dependence upon logical grounds which distinguishes suggestion from logical methods of teaching. But although logical grounds may be absent, this does not mean that the end sought is illogical or irrational.

The principal using suggestion can use it effectively in proportion to the respect in which he is held by the subject or subjects to whom he makes suggestions. Anything which tends to make him impressive — unusual stature or strength;

fine clothes, jewellery, residences, automobiles, and other symbols of wealth; high social position; a position of acknowledged authority; uniforms, costumes, medals, decorations, and other regalia symbolic of power and prestige; age and experience; a confident manner, personal magnetism, a reputation for special capacities and notable achievements; superior abilities of any kind—the more readily will the suggestion he makes be accepted and acted upon with conviction.

It is far easier to evoke a suggestible attitude in a group than in a single person, and the larger the group, the easier it is to evoke an atmosphere of suggestibility. A great crowd can be swayed much more readily than a small one. A class, an assembly of students, a popular mass-meeting, a theatrical audience, a church or temple congregation, are groups of this kind.

It is mainly through suggestion that indoctrination and enculturation takes place. Children accept the moral dictums, both good and bad, of the family and the culture into which they are born, just as they accept the religious, social, and political ideas of their elders, because of their suggestibility. And they continue to believe in them and to act in accordance with them until they are rendered skeptical by counter-suggestion, or by reasoning, logic, or scientific evidence which tends to insulate them against what they have previously believed with conviction.

These indisputable facts about suggestion explain why modern education, and teachers trained in the atmosphere of our scientific world, hesitate to use it. But the hesitation is primarily an outgrowth of the belief that there are only two possible attitudes to take with regard to it, a credulous attitude, and a skeptical attitude. When educators begin to recognize that there is a third attitude which teaching should aim to develop in students, this hesitation will be abandoned. This third attitude I think of as an attitude of open-mindedness rather than skepticism, of receptiveness to what the teacher has to say, but not of unthinking credulity.

In using suggestion as a teaching method, it is first of all necessary to bear in mind that well-educated individuals, particularly those who pride themselves on their sophistication and who have been trained to be skeptical about anything not acceptable to orthodox science, are usually insuggestible. They are insuggestible first because they already have convictions about most matters on grounds which they believe logical and scientific; and second because the more they have been trained to accept the scientific outlook the more their postulates and beliefs tend to hang together and mutually support one another.

If suggestion is to be used openly with students who are children of our matter-of-fact culture, this insuggestibility must be eliminated. They must be persuaded to co-operate with the educator; they must be convinced intellectually not only that suggestion will work, but also that just as they accept as true the facts the educator presents to them, so they should accept as equally valid the suggestions he makes to them. There is no more reason for ignoring what he suggests they should do than for ignoring any statements of fact which he makes to them. Once their assent to this has been won, their insuggestibility will disappear; hostility will be replaced by cooperation.

In contrast to the insuggestibility of sophisticated adults and older students today, young and unspoiled children who still have implicit confidence in their elders; uneducated and unsophisticated adults, of whom there are many even in the modern world; and primitives, still steeped in their primitive cultures, are all highly suggestible, partly because they have fewer convictions based on matter-of-fact knowledge, and partly because the knowledge they do have rarely forms a logically consistent and coherent system of assumptions and beliefs which reciprocally support one another. This makes them credulous and not skeptical, and receptive without discrimination to anyone who plays upon or takes advantage of their suggestibility. It is this fact which imposes such a high moral responsibility upon the educator who deliberately uses suggestion in teaching his students. The only thing which justifies its use is its necessity in the inculcation of values and

in all other forms of emotional education. The educator must first see to it that there is a solid basis in logic and science for the effect which he proposes to achieve through the use of suggestion.

4. *Teaching by Auto-Suggestion.* With suggestion, the teaching process involves a principal and a subject; with auto-suggestion, the principal is eliminated, or withdraws after having persuaded the subject to practice auto-suggestion; the subject is his own principal and his own teacher. A proposition to be accepted, or a directive to practice something, is formulated in the mind of the subject; he believes or he persuades himself that auto-suggestion will lead to its acceptance by his unconscious mind and to its eventual objective realization; he practices auto-suggestion until he accepts and acts upon the proposition or directive unhesitatingly and with conviction, even though there is an absence of any strictly logical or syllogistic relationship between the auto-suggestion and the effect which it produces. Like suggestion, auto-suggestion is alogical but not irrational. What counts is the fact that the evidence that it works is indisputable. But whether it works depends upon whether the subject is receptive, open-minded and persistent. It is a kind of mental exercise which the individual can practice at his own convenience, but which is most effective if regularly practised very early in the morning or very late at night when there is usually a minimum of distractions to interfere with its effectiveness.

Though called for in strengthening will-power, increasing sensitivity, developing introspection, and cultivating memory, it is probably most important in stimulating imagination. Munshi* stresses its value in stimulating the imagination. As he puts it:

"Imagination is no man's servitor. In the first place it is an unruly element. It obeys none of the orders of the will. It can be cajoled into responsiveness; it cannot

* "Bhagavad Gita and Modern Life," K. M. Munshi, Bharatiya Vidya Bhavan, Bombay, 1955, pp. 128-129. Since Dr. Munshi is himself an educator, he is president of Bharatiya Vidya Bhavan, what he says about the matter acquires additional weight.

be coerced. Reason is also its foe. Imagination will respond only if its laws are observed...

"Will can only make an effort, it cannot make it enthusiastic. The element of enthusiasm is contributed by faith; the unshakable belief that the object which has to be created already exists. It is odd, but there it is. Faith is that belief which brooks no logic and feels no doubt. And the deepest of faiths is in the thing which you *know* exists. Therefore, if you believe in a thing, it will come to be created.

"*Japa*, (repetition), alone creates this conviction. The low monotonous repetition of words that the desired result already exists, that creation is an accomplished fact, will bring the faith that it does exist and bestir the imagination to creative effort.

"Dr. Coue's* *japa* is not, 'I want to be better.' It is, 'I *am* better.' The Vaishnavite *japa* is 'Shri Krishna is my resort,' not 'I want to resort to *Him*.' The Sanyasi's, (devotee's) *japa* is 'I am Brahma,' not 'I want to be Brahma.'

"'The Charkha is Swarajya,' 'Constructive work is Swarajya,' 'The war is won,' 'We are free,' are collective *japas* popularized by men who have come by constant repetition to feel the statements to be true. These slogans create faith, stimulate creative imagination and achieve results.

"The difference between a formula expressing a wish and stating an accomplished fact is fundamental. A wish strengthens attachment for the object and the fear of its not being achieved and hatred for everything which interferes with the wish. On the other hand, the assertion of a fact made over and over again stills the distractions, inflames the imagination and calls up its creative power. It conjures up the picture of the object, makes it vivid, intense, living; it mobilizes all the latent powers of the

* Emile Coue, (1857-1926), was a French exponent of auto-suggestion whose teachings and writings on the subject created such a sensation that his doctrine was called Coueism.

personality and marshals them behind the objective. What is thus intensely pictured becomes a creation.

"This can be tried in small matters of daily life. When you are despondent, sing a spiritual song and the mood will disappear. When you want to develop a loving mood, sing a love song softly to yourself again and again and the mood will come. Again and again I have tried *japa* for conquering nervousness, for controlling small weaknesses, for tiding over difficulties. And every time it has paid me; it has left me stronger than before."

Where Munshi recommends *japa*, he is in fact recommending an exercise; where he speaks of "slogans" he is in fact speaking of auto-suggestions. To the sophisticated and skeptical modern frame of mind, it is irrational to suggest to oneself that something already exists which has not yet become an objective reality; it seems ridiculous to say "I am better" when one may not in fact have started to feel better. It will help to resolve this difficulty if one recognizes that saying "I am better" is in fact saying that "I am becoming better," or "I want to become better." What the students of auto-suggestion have discovered is that saying it in the more positive form has a greater effect in stimulating the imagination. It is, of course, absurd to say that something *is* when in fact it is impossible for it to exist or to be realized. No amount of assertion by a man who has lost a leg, that "I have leg," will have the slightest value; only auto-suggestions which are possible of realization will work.

Not even the most violently skeptical modern need balk of doing what is alogical if pragmatically it works.

In recent years, there has been a revival of interest in auto-suggestion in America, the practice of it having been rechristened as auto-conditioning. But giving it a new name, does not alter the fact that it is what was called auto-suggestion fifty years ago, and was called *japa* thousands of years ago in Ancient India.

5. *Teaching by Hypnotism.* Hypnotism is a form of alogical teaching which displays some characteristics common

to both suggestion and conditioning. With hypnotism the principal has to obtain the voluntary acquiescence of the subject for entrance into the hypnotic state, but once in the state, the principal exercises the same complete control over the subject that is exercised when compulsory conditioning is used. The subject has to do what the hypnotist tells him to do, and this is precisely what takes place with all forms of conditioning.

Hypnotism is a state resembling sleep, but differing from it in being induced by suggestions made to the subject by a hypnotist. In this state there is complete rapport between the subject and the principal, and the subject is completely responsive to whatever suggestions are made to him.

Hypnosis is induced by suggesting to the subject that he is tired and sleepy; that he is falling asleep, and finally that he is a sleep, or by having the subject accept some form of monotonous sensory stimulation — such as fixing his gaze upon a bright object before his forehead, or permitting his limbs to be steadily stroked — while the principal maintains rapport by making oral suggestions to the subject until he finally falls into the hypnotic state.

Very suggestible subjects who have been frequently hypnotized may spontaneously drop into hypnosis. This intensification of suggestibility is what makes hypnosis a dangerous teaching technique. Yet there are cases in which resort to it may be justified. Medical hypnosis for the purpose of breaking bad habits, and hypnosis for the purpose of increasing the power of recollection, makes its use justifiable. In such cases, what is involved is a form of re-education, and hypnosis becomes a form of teaching.

There are various stages of hypnosis called lethargic, somnambulistic, and cataleptic. Anesthesia, hyperesthesia, contracture, visions, blindness, hallucinations, and paralysis may be induced by subjecting the subject to deep forms of hypnosis.

Perhaps the strangest form of hypnosis, and for many purposes the most useful, is its use in making post-hypnotic suggestions. The subject, for instance, can be told that after he awakens

he is to execute some directive — perhaps “to read” a certain book, or “to feel” something to be unpleasant — perhaps that cigarette smoking will leave a nasty taste in his mouth. The subject can be told to forget all about the suggestions made to him while he is in hypnosis but simply to execute the suggestions post-hypnotically. The subject then does what he has been told to do, or feels what he has been directed to feel, without knowing why and without recollecting that he was told to do so by the hypnotist; and if asked why he does so will give some reason which simply rationalize what he has done or felt.

For dealing with certain kinds of educational problems, post-hypnotic suggestion can be obviously very useful, but it is, of course, dependent upon complete rapport between the student and the educator who uses it.

6. *Inspirational Teaching.* Though much of the content of inspirational teaching may be strictly logical, it is intellectual only as a means rather than as the end; its primary purpose is to motivate the individual; it is alogical because its effectiveness depends not upon the amount of knowledge imparted but upon the extent to which what is taught stimulates the emotions and impresses enduringly the unconscious mind.

Inspirational addresses must be a regular feature of every kind of planned education, not only to inspire right action but also to keep ideals alive.

Not every teacher, not every dean or principal, has the gift of inspirational oratory, though developing and cultivating it ought to be a part of their training as professional teachers. But every school and college staff ought to have a number of educators with this gift. And to supplement them, visiting lecturers whose achievements in the arts and sciences are in themselves inspirations, ought to be brought in regularly — visitors who also have the ability to communicate their ideals to those whom they address.

But inspirational teaching should not be restricted to addresses only. It is true that oratory is supremely valuable for this purpose because it can be at one and the same time be rich intellectually and deeply inspiring.

Inspiration can also be provided with good music, both vocal and instrumental. The value of music is increased if the students and the student-body participates in it. This requires teachers not so much with musical talent as with a talent for musical leadership. Musical talents may be limited, but musical leadership can be acquired.

It can be provided by drama, though only the greatest of dramatic creations will provide it; vulgar, sexy, gangster and other films featuring violence will have the exact opposite effect.

And to provide it, thought must be put into making the weekly services suggested in Chapter 9, in which emotional education is discussed, a really vivifying weekly event. Every such service ought to be a combination of pageantry and poetry, music and drama, intellectual and inspirational oratory which feeds the soul and introduces the students to the greatest creations of their culture and the noblest thoughts of mankind.

I have had an almost life-long fascination for the problem which Balzac* called “Lost Illusions” in his novel of that name. The novel is really a searching study of the manner, in which contact with the mundane world destroys young idealists, and the manner in which the process is rationalized by treating all juvenile ideals as juvenile illusions.

“Lost Illusions” is the story of the life of Lucien de Rubempré. Balzac, though we think of him as a mere novelist, was in fact a master psychologist, as every great novelist and dramatist must be. In “Lost Illusions” he tells the story of what happened to the young poet who is the hero of the novel.

In the small provincial French town in which Lucien was born, he wrote an epic poem. Into this poem he poured all his ardent genius and youthful enthusiasm. Everybody in his home town hailed it as a masterpiece; everybody insisted that he should take it to Paris — to the literary centre of France — and have it published.

* Honore de Balzac, (1799-1850), the French novelist, whose novels, like Shakespeares' dramas, are better studies in psychology than most psychology texts.

Lucien finally made the mistake of doing so. And within a few days from the time of his arrival, received an emotional and psychological shock from which he never recovered.

He took his poem to publisher after publisher. To his amazement he found that none of them even wanted to read what he had written. Not one publisher to whom he talked had the slightest interest in the literary merits of the masterpiece upon which he had lavished so much effort. All that they were interested in were two questions: "How many copies of the poem would his patrons and friends buy?" and "How few copies would they have to sell to the general public in order to make a profit from his book?"

The shock transformed Lucien from an idealist into a cynic. The story of Balzac's novel is the story of the disintegration of his character; of the transmutation, as a result of contact with the realities of life in a cynical metropolis, of a youthful enthusiast, who wanted to devote his life to writing great poetry, into a sordid adventurer and a corrupt journalistic hack.

I have never forgotten the lesson I learned from the reading of the novel. In the fifty years which have passed I have always been interested in the psychological problem of lost ideals, lost enthusiasms, lost hopes, and "lost illusions." For nearly fifty years I have asked myself: "How much happier might mankind be; how much higher might civilization have risen, if men and women could have been taught how to retain the faith and the vision of youth throughout their lives?"

I have studied the enthusiasms which lead the young to a conviction that they will be able to abolish ancient evils, to substitute beauty for ugliness, to make great discoveries which will end traditional errors. All of us seem to be endowed with this characteristic in what I have called the youthful emotional climacteric, but for most of us, experiencing the realities of life destroys it, and finally makes us think of these youthful ideals as youthful follies to be as promptly as possible forgotten.

The tragedies of mankind; the suffering which is inescapable in life; the filth, the poverty, the greed, the hatred, the

cruelty and violence which is all around us, become endurable only if in the midst of it all we retain a feeling for the wonders of nature; for the illimitable possibilities of life; for what art and science, what knowledge and wisdom might contribute to creating a better life and a better world.

What I am trying to do is to point out two things:

First, that if this proposal for a system of education which educates the whole man and so makes possible the humanization of mankind is to be realized, we must not only solve the practical problems with which education is confronted today, we must also have faith and vision.

And the second is this, that in all the years I have devoted to the study of higher education in America, the most terrible thing which our colleges and universities do to the young men and women who go to them, is to turn them into an army of disillusioned cynics; into men and women who know all about the seamy-side of those whom they thought great heroes; who think enthusiasm, childish; heroism, silly; sacrifice, stupid; faith, folly; vision, delusion.

Let me illustrate what I have just said with the cases of two Americans, both of whom became notorious about ten years ago, and both of whom were victims of a system of higher education which makes no provision for devotion to ideals.

Many of you may remember the case of Alger Hiss and his betrayal of America to the Russian conspirators for an American Communist Revolution. Many of you may remember that another American, Whittaker Chambers, furnished the evidence which led to the exposure, conviction, and imprisonment of Alger Hiss. Both were graduates of typical American colleges. But neither of them found any outlet for their youthful idealism in what their colleges taught them should be the activities to which Americans should devote themselves.

Alger Hiss, after his graduation, quickly made a successful career for himself. He had a charming wife; he had lovely children. Even when still a relatively young man he was made President of the Carnegie Foundation for Peace; President

Franklin D. Roosevelt took him as one of his assistants to the famous Yalta Conference with Winston Churchill and Joseph Stalin; he was in the American State Department when he was made President of the great meeting in San Francisco which led to the organization of the United Nations.

Yet all the time he was thus being trusted by leaders of the American people, he was a dedicated, secret member of the Communist Party; he was part of a Russian spy-ring; he was furnishing confidential papers from the American State Department which employed him to those who were plotting revolution.

To me the psychological problem which Alger Hiss presents is fascinating in the extreme. What was it that made him dedicate himself to Communism even when that meant the base betrayal of his own country — a country which had signally honoured and rewarded him?

The answer to this question was later furnished by his friend and fellow-conspirator, Whittaker Chambers; the man who finally awoke to the fact that an idealism which confounds means and ends; which resorts to conspiracy, to treachery, to perjury, to corruption, and to violence of all kinds for the purpose of creating a "Brave New World," is a false idealism.

Whittaker Chambers was finally driven by tortures of conscience to confess the part he had played in this conspiracy, and in the course of his testimony before a Congressional Committee in Washington furnished conclusive proof of the guilt not only of Alger Hiss but of a half-dozen other equally distinguished participants in this particular Communist conspiracy.

Chambers was professionally a writer and editor. In the autobiography which he later wrote and called "Witness," he described his conversion to Communism while a student at Columbia University. He was a typically idealistic young man, from a typical middle-class intellectual family in America. But he was a member of the generation which came to full consciousness in the midst of the worst depression in the history

of America. The great Wall Street boom had collapsed and ruined his family. Millions of farmers were bankrupt; hundreds of thousands were being evicted from the farms they had lost. Nearly one-third of the industrial workers of America were unemployed. There were bread-lines for the starving in nearly every big city in the land.

Yet in the college to which he was going, nobody criticized the worship of the bitch-goddess success; college graduates, no matter what their professions, were supposed to devote themselves to making money, and the masses of people were supposed to aim at the same thing. American higher education simply ignored those with visions of a better social order; it dismissed idealism as superfluous; it made no demand upon students for any kind of self-sacrifice.

To idealistic young Whittaker Chambers in college, the world seemed to be collapsing. Not content with the slaughter of World War I, the nations were busily re-arming for the slaughter of World War II.

The colleges of materialistic America had nothing to offer to those young men who, like himself and like Alger Hiss, were desperately anxious to know how to set things right, and how to create a just and moral social order.

Conventional education in America offered to Whittaker Chambers and Alger Hiss no doctrine, no cause, no movement, no ideology in which their idealism might function.

But the disciples of the prophet Karl Marx *did* have a doctrine; they *had* a cause, and to idealists like himself, they *offered* dangerous and exciting work in the Communist underground.

So he became a Communist. He deliberately embraced Communist dogmatism, Communist fanaticism, Communist conspiracy, and Communist ruthlessness. In his autobiography he explains why he himself — and so many men like Alger Hiss — chose this complete abdication of all humanism, complete submission of his reason, and complete devotion of his life to an organization of Marxian bigots:

"The ultimate choice I made," he wrote, "was not for a theory or a party. It was... a choice against death and for life. *I asked only the privilege of serving humbly and selflessly that force which from death evokes life, that force which might... save... what was savable in a society which had lost the will to save itself.* I was willing to accept Communism on whatever terms it presented itself; to follow the logic of its course wherever it might lead me; and to suffer the penalties without which nothing in life can be achieved.

"For it offered me what nothing else in the dying world has power to offer at the same intensity — faith and vision; something for which to live and something for which to die. It demanded of me those things which have always stirred what is best in men — courage, poverty, self-sacrifice; discipline, intelligence, life, and if need be, death."

The challenge which we educators face is that of evoking in a determining proportion of the whole population this self-sacrifice, this devotion, this enthusiasm, this dedication of the whole of life to causes which are rational and humane, and which, both as to ends and means, are subject to the criteria of the good, the true, and the beautiful.

It is part of the tragedy of mankind that it is much easier to evoke self-sacrifice by firing people with hatred than inspiring them with love. It is much more difficult to evoke selfless dedication by appealing to reason and compassion.

But it can be done.

And it must be done if educators are to find full compensation in their work, and be satisfied with the relatively niggardly wages they receive. It must be done if doctors are to get their satisfaction from healing the sick and not from making money. It must be done if lawyers are to devote themselves to seeing that justice is done, and not to serving clients who pay their biggest fees. It must be done if engineers are to find compensation not in serving commercial and industrial greed but in the unending task of planning and building a better world. It must be done if artists and architects are to find satisfaction in

creating a more beautiful rather than a more novel world. And it must be done if social scientists and philosophically minded leaders are to devote themselves to creating a more wholesome life both for man and for society.

To inspire the necessary idealism; to maintain the necessary enthusiasm; to instill a life-long dedication to the work to which the educable elite should devote themselves; and to keep them devoted to the task of ennobling the work which the rank of the manually gifted must perforce do, it is of the utmost importance that education should rise above specialization and mere technology; that it should see to it that technology is always a means and never an end; that it should keep before everybody the vision of a sublime and challenging truth — that creating a better life and building a better social order can be done in only one way, by teaching individuals to incorporate in what they do and in what they build and what they produce from day to day, beauty and harmony, reason and truth, concern and consideration, tolerance and humanism.

I have called attention to some unpleasant truths about conditions in America. But I must remind the reader that there is not one, but two Americas — the dominant Materialistic America dedicated to a higher and higher standard of living which drove young idealists like Whittaker Chambers and Alger Hiss into Communism; and the older but not quite forgotten America of Thomas Jefferson and Thomas Paine, of Ralph Waldo Emerson and Henry D. Thoreau, of Walt Whitman and James Russell Lowell, of Horace Mann and Henry Adams, of William Lloyd Garrison and Abraham Lincoln.

So in every nation.

So here in India where I am writing this. There is the Materialist India, the Industrialist India, the Urbanist India which is determined to duplicate the Materialistic West — the worst of the West; and there is the Idealistic India of Ananda Coomaraswamy and Aurobindo Gosh, of Rabindranath Tagore and Mahatma Gandhi.

The lives of all these men, and of countless men and women whose contributions have received no such world wide recognition, furnish proof positive that it is possible for a man to get full satisfaction out of a life devoted to the realization of an ideal. They furnish proof positive that it is possible to retain the initial idealism of youth throughout the whole of one's life, and to maintain through all the inevitable discouragements and defeats, the enthusiasm which is essential if ideals are to be realised and translated into action.

If a better life and a better world is realized, it will be because teachers and artists and musicians, economists and sociologists, lawyers and financiers, engineers and architects dedicate their lives to the task of right-education in all that they do.

