

LIVING ISSUES
IN PHILOSOPHY

TITUS

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An Introductory Textbook

By

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P R E F A C E

WHAT part does philosophy play amid the tensions of the contemporary world? What is the function and place of philosophy in modern education? For some years lively discussions have centered around such questions as these, and individual teachers of philosophy, departments of philosophy, and committees and commissions representing various philosophical bodies have devoted considerable thought to them. Persons outside the profession, as well as those inside, have been consulted and have expressed their views. Coupled with a feeling of dissatisfaction at the role philosophy has played in the recent past has been a conviction that philosophy should play a more prominent part in the future, both in college curricula and in world affairs. There are still differences of opinion among teachers of philosophy as to the direction in which they should move. However, there are many "straws in the wind," and a trend of thought can be clearly discerned.

The most representative and authoritative statement of the role of philosophy in modern education was set forth, after extensive study, by a commission appointed by the Board of Officers of the American Philosophical Association. This statement was published in book form in the autumn of 1945 under the title *Philosophy in American Education*.¹ From this and other reports there is evident a growing conviction that a central function of philosophy is an integration or an orientation of the various phases of human experience, that philosophy should be made intelligible to as many students and other members of the community as possible, and that it should play a more vital role in shaping world affairs.)

The author of this text is in complete sympathy with these convictions. He believes that philosophy should come out of its

¹ For further details, see page 23.

“ivory tower,” should simplify its technical language, and should deal with the living issues of today. Philosophy must set forth a unifying view of life that embraces the different areas of human experience. A first course in philosophy, according to the report mentioned above, needs to deal with vital questions of human interest in “religion, science, education, art, morality, social policy.”¹ This text is an attempt to meet that condition and need.

The author has kept four demands constantly in mind. The first requisite is that the book be clear and readable. In so far as possible, the material is presented in a language that is non-technical and is clear in meaning. Where special or technical terms are essential to make the meaning exact, the terms are defined or explained so that they will be clear to the beginning student.

Philosophy can be one of the most thrilling and intellectually stimulating subjects in the college curriculum. This is likely to be the case, however, only when the teacher of undergraduate courses in philosophy believes that his first duty is to the general student rather than to the graduate school.

The second demand is that the book deal with living issues which have a close relation to life. Philosophy can help students to see the basic issues of their age and to discern the values of life. A first course, therefore, should not place its main emphasis upon negative criticism or too much emphasis upon the history of past thought. Neither should it be merely another narrow specialty or only a methodology. Philosophy can deal in a clear way with some of the most vital or living issues of the age. A first course in philosophy should give students some appreciation of the importance of these problems for their lives, and should start them building a philosophy of their own. When it does this, many students tend to go on to the more specialized courses, such as logic, ethics, social philosophy, and the history of philosophy.

The third demand is that the text recognize the problem of organization for teachability or adaptability for classroom use. The chapters are neither excessively long nor unduly short. Questions and projects are provided at the end of the chapters for those who wish to use them. These exercises, while related to

¹ See p. 206 of *Philosophy in American Education.*

the content of the chapters, require further thought or extended reading. The division of the text into five parts makes it easy for any teacher to omit one or more of the parts or to add topics, if he wishes to do so. The order of the presentation of topics may also be changed. A teacher may wish to consider the problem of knowledge before other topics are discussed. There is much to be said, from a strictly logical point of view, for that procedure. There is no reason why chapters XII through XIV cannot be considered immediately after the introductory chapters.

The text is neither so long nor so difficult that it will prevent any student's finding time for collateral reading during the usual semester course. Teachers who desire a greater emphasis on the historical classics than this text gives can assign them as extra reading. Teachers who desire a more thoroughgoing analysis of one or more current problems can direct reading along those lines. Still others may wish to acquaint the students with a broad field of contemporary philosophical literature.

A fourth demand, which the author has recognized, is that the text be comprehensive in the sense that it opens up the field of philosophy and does not deal exclusively with some special interest of the author. A genuine attempt has been made to be fair to the various schools of thought or points of view. While many of the author's convictions are presented, the text leaves leeway for the thinking and convictions of the teachers and students who use it.

Philosophy, which at one time was helping to build the intellectual, moral, and religious foundations of civilization, has often become a narrow specialty engaged in logical analysis or in reporting the views of the philosophers of the past. Thus it has abandoned its task of integrating the piecemeal knowledge of the day and giving men a comprehensive view of life and the world.

Special thanks are due to two of the author's colleagues. Professor Alvin Pitcher read the entire manuscript and offered valuable criticisms and suggestions which improved both the style and the thought content of the book. Dr. Leon Smith of the Physics Department checked the chapters on "The Physical Universe" and "Space-Time and Relativity." Thanks are also

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Philosophy and the Contemporary Scene

We have proved that we can win military victories. Can we, in the decades just ahead, win the battle for civilization? The defeat of fascism on the battlefields of the world has not solved many of our problems, but it has given us an opportunity to face them as free men and women.

Today we live in the midst of a world revolution that affects all phases of human life and society and reaches to their very foundations. It may be a period somewhat like the Fall of Rome, the Renaissance, the Reformation, or the Industrial Revolution, with basic shifts taking place in the thinking, the values, and the practices of men.

THE TURMOIL OF OUR TIME

Many competent thinkers have been warning us for some time that our society is in a period of disintegration, and that it is time for intelligent men to be concerned about the tensions, the depressions, the revolutions, and the wars of our time. The books on the philosophy of history and civilization that have appeared at a rapid rate during the last few decades seem to agree, with few if any exceptions, that our civilization is in a state of decay. While they differ as to what can be done, most of them believe that revival is possible and that dangerous trends can be discovered and controlled if men have sufficient vision, courage, and determination.

Regardless of what is happening in society as a whole, the older interpretations and authorities seem to be disintegrating,

and many persons find it difficult to discover new and stable foundations for living. Let us quote a few statements regarding the confusion of our times. Professor E. G. Conklin, a biologist, says, "Mankind is now in the midst of one of the greatest crises in its long history."¹ President Hutchins of the University of Chicago writes, "The world is probably closer to disintegration now than at any time since the fall of the Roman Empire."² A teacher of English literature, W. Macneile Dixon, puts it a little differently in the Gifford Lectures, 1935-1937: "Since the Renaissance there has been no such upheaval of thought, no such revaluation of values, as in the century upon which we have entered."³ A student of international politics, E. H. Carr, expresses himself as follows: "Our civilization is in danger of perishing for lack of something with which we have dispensed for 200 years, but with which we can dispense no longer: a deliberate and avowed moral purpose, involving the call for common sacrifice for a recognized common good."⁴ General J. C. Smuts' frequently quoted statement of some years ago expressed his conviction that mankind is again on the move: "The tents have been struck, and the great caravan of humanity is once more on the march."

The train of events of recent decades has made it clear that something has gone tragically wrong with human affairs. Man has gained great new powers in the fields of science and technology, but too frequently these powers have been used for destructive purposes. Man has rapidly extended the range and the quantity of his knowledge, but he has advanced little if at all toward happiness and well-being. He has devised numerous plans and organizations for gaining greater security and comfort, yet he suffers from a mental and emotional insecurity as to the meaning of life, the nature of the world in which he lives, and the kind of life he wants to live with his fellows.

Civilization is basically a set of ideas and ideals by which man lives. These ideas and ideals are embodied in rules of living and in institutions. They give life its unity and meaning. When they

¹ Edwin G. Conklin, *Man, Real and Ideal*, p. 1. Charles Scribner's Sons, New York, 1943.

² Robert M. Hutchins, *Education for Freedom*, p. 23. Louisiana State University Press, University, La., 1943.

³ W. Macneile Dixon, *The Human Situation*, p. 26. Longmans, Green and Company, New York, 1937.

⁴ Edward H. Carr, *Conditions of Peace*, pp. 114-115. The Macmillan Company, New York, 1942.

are lost sight of or fail to motivate, the civilization tends to decline. Whereas medieval civilization was primarily interested in salvation and the supernatural order, as embodied in cloister, monastery, and cathedral, modern capitalistic society is centered in trade and profit-making, as expressed in factory, bank, and rapid transportation. Western civilization, which seemed so confident and so dominant at the beginning of the century, no longer seems to rest secure upon stable foundations. The modern world has lost its intellectual unity, its moral bearings, and those common convictions which alone can furnish a basis for civilization.

World War II was in considerable part a war of ideas as well as of men and material. It was a conflict between two irreconcilable philosophies which were appealing for the allegiance of men. The differences between life in the democratic and in the fascist countries was not a difference in technology or in science or even in general education; it was a difference in ideas, ideals, and loyalties. Changes in people, in ways of doing things, and in history begin in persons who are convinced of the worth of some idea or who are captured by some vision of a different scheme of things.

WHAT WE BELIEVE DOES MATTER

Occasionally it is said that it does not matter what a person believes so long as he does the right thing. There is a tendency among some people to emphasize the importance of action or deeds and to place less stress upon the importance of beliefs and convictions. But ideas are the foundation of action. A person is not likely to take any strenuous action unless he believes something. Our recent dangers appear to have arisen because great masses of people have had no deep convictions and because some men have believed strongly in false and destructive ideas. Why have the dictatorships of the modern world taken such extreme measures to control the ideas of the common man? One might think that since they had repudiated democratic ideals and methods, and since authority came from the leaders at the top, they could disregard what people thought. Yet all newspapers, books, films, radio broadcasts, and plays were shaped to build up certain ideas and to discourage other ideas. Both the positive measures of propoganda and the negative measures of censorship and repression were used to make certain that the

people thought what the leaders wanted them to think. The leaders knew that if you controlled the thoughts of men, you controlled their actions and tended to determine what the society or the nation did.

Ideas and beliefs tend to express themselves in actions. There is also a deep tendency in us all to become like that which we think ourselves to be. Ideas are probably more enduring than anything else in man's society. They have a decisive power in human history. One writer says: "This capacity to believe is the most significant and fundamental human faculty, and the most important thing about a man is what he believes in the depth of his being. This is the thing that makes him what he is; the thing that organizes him and feeds him; the thing that keeps him going in the face of untoward circumstances; the thing that gives him resistance and drive. Let neutrality, confusion, indifference or skepticism enter this inner place, and the very springs of life will cease to flow. Men will quit, lose heart, yield, give up, become bitter or cynical, become sunk in bleakness or emptiness, commit suicide, turn to criminality, or retreat into a realm of phantasy."¹

WHAT KIND OF PHILOSOPHY SHALL WE HAVE?

In a broad sense, a person's philosophy is the sum of his beliefs and convictions. In this sense everyone has a philosophy, even though he does not realize it. Probably all persons have some ideas concerning physical objects, man, the meaning of life, nature, death, God, what is right or wrong, and what is beautiful or ugly. These ideas may be only semiconscious, and they may be vague, superficial, and unorganized. Especially during the early years of our lives, we are silently but continuously engaged in the acquisition of beliefs. These views and attitudes may be taken over unconsciously or semiconsciously from our family, from companions, or from various other individuals or groups. They may come to us through the authority of custom and tradition as set forth by home, school, and church. They may be the result of some thinking on our part, or they may be largely the result of convention and emotional bias. Many persons today live on the basis of a philosophy without knowing they have one or without being able to give it articulate expression.

¹ Hugh Stevenson Tigner, *No Sign Shall Be Given*, p. 109. By permission of The Macmillan Company, publishers, New York, 1942.

The years of youth may bring an impulse toward freedom and a desire to think things out for ourselves. This is the period when we ordinarily begin to remake our beliefs. At this time of life or soon afterwards we should attempt to make our beliefs conscious, consistent, and reasonable. Given the proper conditions and direction, this desire to think things through may lead us toward a more mature and satisfactory existence.

In a simple sense, the following remarks express different philosophies of life: "This is the worst possible world and life is not worth living." "I am not interested in philosophy. I believe in taking things just as they come, and not worrying about them." "I believe in looking for the best in the people whom I meet." "I live by the best that I know today, but I shall be ready to change these beliefs if new evidence seems to require it." The big issue for each of us is not "Shall I have a philosophy?" but "What sort of philosophy shall I have?"

In *The Meaning of Culture*, John Cowper Powys says that "to be a cultured person is to be a person with some kind of original philosophy." Would such a definition of a cultured person include you or exclude you? If we were to emphasize the word *original*, it might leave out many of us. Our beliefs should not only be original in the sense that they are *our own* and express our inner convictions, but they should also tie up with the best experience of the race. They should be based on the best thought and evidence of today, including a knowledge of philosophy, science, art, and religion. Your philosophy is a real factor in your life and conduct. The late Mr. Chesterton is reported as saying that even for a landlady who takes in roomers or boarders, it is more important for her to know their philosophy of life than the amount of money they have in their bank accounts. The fundamental differences between people are largely philosophical, involving their ideas, ideals, and loyalties.

WHAT IS PHILOSOPHY?

Let us attempt to define *philosophy* a little more adequately. The word is derived from the two Greek words *φίλος*, meaning "loving," and *σοφός*, meaning "wise," and literally means "the love of wisdom." Philosophy is sometimes approached or defined from at least four different points of view, which are supplementary rather than contradictory. Each one of these view-

points must be kept in mind for a clear understanding of the meaning of philosophy.¹

1. *Philosophy is an attitude toward life and the universe.* When a person has gone through some crisis or faced some unusual or trying experience, often someone will inquire, "How does he take it?" or "How does it affect him?" Occasionally the answer is, "He takes it philosophically." This means that he sees the problem from a broad perspective or as a part of a larger scheme of things; hence he faces the situation calmly and reflectively. He has retained his poise and composure or his self-control, and he has not become emotionally unbalanced or hysterical.

The philosophical attitude is the thinking attitude, the reflective attitude. It involves the attempt to think through one's problems and to face all the facts involved. Mere knowledge is not understanding, since it does not necessarily train the mind to a critical evaluation of facts nor enable the person to live his life on the basis of consistent principles. The mature philosophical attitude is the searching and critical attitude; it is also the open-minded, tolerant attitude, or the willingness to look at all sides of an issue. It includes a readiness to accept life and the world as it is, and to try to see it in all its relationships. This does not mean enslavement to the present or the existing, however, because philosophy is willing to look beyond the actualities to the possibilities, with the realization that a thing is not only what it is but what it may become.

To philosophize is not merely to read and to know philosophy; it is to think and to feel philosophically. Philosophy frequently begins in wonder, doubt, and curiosity. It grows out of our developing awareness of the problems of human existence. Consequently, philosophy is in part the speculative attitude that does not shrink from facing the difficult and unsolved problems of life.

2. *Philosophy is a method* — the method of reflective thinking and reasoned inquiry. This method is not the exclusive method of philosophy, as will be readily seen; it is also the method of all careful or accurate thinking. Philosophy, however, tries to deal with the whole of experience in an attempt to think clearly and accurately about human experience as a whole. It is more inclusive or synoptic in its approach than are the special sciences.

¹ See Archie J. Bahm, "What Is Philosophy?" in *The Scientific Monthly* for June, 1941, Vol. LII, pp. 553-560.

This question is considered in a later chapter on "Science and Philosophy."

From another point of view, philosophical methods are many and varied, as will be seen when the problems of knowledge are studied in greater detail and the sources of knowledge are distinguished from the tests of truth. Philosophers differ in the extent to which they emphasize, and accept or reject, authority, reason, intuition, and sense experience and practical activity.

3. *Philosophy is a group of problems.* There are certain perennial problems which face mankind and for which philosophers have been seeking an answer. Some questions raised in the past have been answered in a manner satisfactory to most men. For example, the question as to the existence of innate or inborn ideas has been answered negatively since the time of John Locke in the seventeenth century. Many other questions, however, have been answered only tentatively. On many problems there has been no agreement and the issue is still unsolved.

What are philosophical questions? The question, "Did Hitler lie to Chamberlain at the Munich Conference?" has no philosophical importance. But the questions "What is truth?" and "What is the distinction between right and wrong?" are important philosophical questions.

Most of us stop at times — sometimes because of startling events, often out of sheer curiosity — and think seriously about fundamental life issues: What is life and why am I here? What is the meaning of the great variety of life — my life, also life in general? What is the place of life in this great universe? Is the universe friendly or unfriendly? Do things operate by chance, or through some mechanism, or is there some plan or purpose or intelligence at the heart of things? Is my life controlled by outside forces or do I have a determining part or, at least, some control? Why do men struggle and strive for their rights, for justice, for better things in the future? What do concepts like "right" and "justice" mean, and what are the marks of a good society?

Recently men and women have been asked to sacrifice their lives, if need be, for certain values and ideals. What are the genuine values of life and how can they be attained? Is there really a fundamental distinction between right and wrong or is it just a matter of one's opinions?

What is beauty? Should religion still count in a person's life?

Is it intellectually respectable to believe in God? Is there any possibility of surviving death? Is there any way by which we can get an answer to these and many related questions? Where does knowledge come from, and can we have any assurance that anything is true?

These questions are all philosophical problems.

4. *Philosophy is a group of theories or systems of thought.* To many persons philosophy means the various philosophical theories or systems of thought which have appeared in the history of philosophy and which are attached to the names of the great philosophers. They think of men like Socrates, Plato, Aristotle, Augustine, Thomas Aquinas, Descartes, Spinoza, Locke, Berkeley, Kant, Royce, and James, to mention only a few and to omit our contemporaries. Without these men and their thoughts, philosophy would not have the same rich content it has today. Even when we are unconscious of the fact, we are often influenced by the ideas which have come down to us in the traditions of the race.

Others when they think of philosophy think of certain world views and certain terms like idealism, realism, pragmatism, humanism, and materialism. These theories are a part of philosophy, and some philosophers consider them so important that their whole study of philosophy is built around them.

SOME DEFINITIONS OF PHILOSOPHY

There are many and varied definitions of philosophy. According to W. P. Montague, "Philosophy is the attempt to give a reasoned conception of the universe and of man's place in it." J. A. Leighton says that "a complete philosophy includes a world-view, or reasoned conception of the whole cosmos, and a life-view, or doctrine of the values, meanings, and purposes of human life." E. S. Ames defines it as "the endeavor to achieve a comprehensive view of life and its meaning, upon the basis of the results of the various sciences."

Most of the definitions of philosophy emphasize the use of methods of reflective thinking. They state or imply that the aim is to gain unity and to see life whole. Consequently, we may say that philosophy is a study of nature, both in its inorganic and organic aspects, and of the social and spiritual orders. Philosophy seeks to unify the results of the special sciences with the principles of morality and of religion.

So far we have been talking about philosophy in general. The beginner will do well to remember, however, that one may have a philosophy which deals with some one area of experience. Such a philosophy will deal with the systematic body of general principles and assumptions underlying that field or area of experience. For example, there are philosophies of science, of education, of art, of music, of history, of law, of mathematics, and of religion. Any subject pursued far enough tends to run into philosophical problems.

PHILOSOPHY AND RELATED FIELDS

Human aspiration, interest, and activity have expressed themselves in four basic directions — the fields of philosophy, science, art, and religion. Since each of these fields is considered later in this study, we shall merely distinguish between them at this time.

Philosophy, as we have seen, is an attempt to understand the world, its meaning, and its values. Its field is broad and inclusive. We hear much talk, especially around educational institutions, about preparing students for life. But how can we prepare persons for life without asking, and attempting to answer, questions about the kind of universe in which we live and what the ends of life may reasonably be? Philosophy, while using the facts and descriptive material presented by the specialized fields of study, goes beyond description to inquire into the nature and the values and the ideal possibilities of things. Its key words are *understanding* and *wisdom*.

Philosophy and science have much in common. Both grow out of the reflective, inquiring attitude and are prompted by an impartial love of truth. The sciences, however, deal with special or restricted fields. Their purpose is to describe the world so that it may be interpreted in exact or mathematical terms, and then to control it mechanically, where possible. In science the key words are *description*, *prediction*, *experimentation*, and *control*. Chapters III to VII consider the interpretations of the universe given us by the natural sciences and the relation between philosophy and science, so further discussion is omitted at this point.

An important part of man's life has to do with his visual and auditory enjoyments in such realms as music, drama, poetry, painting, sculpture, and architecture. This is the field of *aesthetics* which deals with the problems of the nature of beauty and the

arts. In order to live a full life, man needs to cultivate his appreciations in this area of human experience. The key words in art are not *knowledge* and *understanding*, as in philosophy, nor *description* and *control*, as in science, but *creativity*, *perfection*, *form*, *beauty*, *communication*, and *expression*.

A philosophy is not a religion, but any mature religion will have or will imply some philosophical background or some set of beliefs about life and the universe. Religion, it has been said, begins at the point where philosophy moves into action. A religion is more than a mere belief or an understanding of something; it implies the reaction of a man's whole being to that on which he feels dependent. It is life lived in the conviction that "what is highest in spirit is deepest in nature."

Religion implies devotion and an object of worship. In religion, worship rather than knowledge is central. The person wishes to secure harmony or adjustment between himself and his world. A study of philosophy should help men to build their religious convictions on foundations which are intellectually respectable. Philosophy may support one's religious beliefs, provided such beliefs are not dependent on pre-scientific, outworn, and narrow and dogmatic conceptions. Some of the key words in the field of religion are *harmony*, *adjustment*, *commitment*, *companionship*, *loyalty*, *worship*, *peace*, *righteousness*, *salvation*, *supreme good*, and *God*.

WHY WE NEED A PHILOSOPHY

Let us summarize briefly some of the things that philosophy may do for us, showing why it is that a person needs a philosophy for living.

1. *Each person must make decisions and act.* If we are to decide well and to act consistently, we need a philosophy. Life forces us to decide questions of truth and falsity, of beauty and ugliness, and of right and wrong. A football player once ran eighty yards and made a touchdown — behind the wrong goal posts! Some men who are very successful in their businesses make rather complete failures of their lives. What are our goals?

Philosophy may furnish a basis for social action as well as for personal conduct. There is a growing emphasis upon social and political philosophy. A study of this field may help us to deal with modern social problems and to understand contemporary social trends.

2. *Our conduct is our own, and we are really free, only when we rely upon inner controls or self-chosen ends.* If a man does what he does merely because of custom or tradition or the law, he is not genuinely free. When asked what good his philosophy did him, Aristotle is said to have remarked that because of it he did willingly what other men did merely because of fear of the law. That man is free who is the author of the principles and the laws by which he lives. In a good society — ideally, at least — each person agrees to every law. If he does not like some custom or law, he can criticize it and agitate for a change. He ought to be able to do this on the basis of facts and principles which are consistent.

3. *Philosophy is one of the best means by which to foster the habit of reflection.* Philosophy can help us to press out the areas of our awareness of life and the world, to become more alive, more discerning, more critical, and more intelligent. In many specialized fields of knowledge there is a definite and specific body of facts. Students are given problems so that they will gain practice in arriving at the right answers quickly and easily. In philosophy, however, there are different points of view to be considered, and there are unsolved problems which are important for life. Consequently, the student's sense of wonder, his curiosity, and his speculative interests are kept alive. These may easily be dulled if we confine ourselves continuously to definitely known facts.

4. *Philosophy may help us to cultivate a wide range of appreciations and sympathies.* One of the most significant things about life is its capacity to expand in ideal directions. A wide range of interests and appreciations is a condition for high and wholesome living. We need to reach out to the great masters who have lived and thought deeply and who can open up for us new vistas of thought and feeling. We need to reach out to the less fortunate who need our sympathy and understanding. Whatever we do, we should develop a sufficient depth of inner life and a wide enough range of appreciations and sympathies in art, literature, nature, and great ideas to have life bring us zest and happiness.

5. *We live in an age of uncertainty and of change, when many of the older beliefs and ways of doing things are inadequate.* Under such conditions we need a scale of values and a sense of direction. Just as we feel a physical discomfort when we are in the midst of material disorder, and a moral discomfort when we are confronted with cruelty and injustice, so there is a mental discomfort when we are in the presence of fragmentary and confused views of the

world. Unless there is some wholeness and unity of outlook and response, as Irwin Edman has pointed out,¹ there may result a divided self, which in turn may lead to psychological tension or to a nervous collapse. One way in which we can gain unity in a world in turmoil is to achieve an inner integration, to know what to approve and what to disapprove, and to gain a sense of the meaning of human existence.

»» QUESTIONS AND PROJECTS ««

1. Write out a statement entitled, "What I Believe" or "My Philosophy," not over 1200 words in length. Please do not read for this — merely organize some of your present convictions regarding life and the world in which you live. If you are unable to write this statement, hand in a note indicating that you have made the attempt.
2. Has your college course built up in you any convictions, values, or disciplines which will aid you in life? This might include convictions regarding your personal life, social relationships, or attitudes toward life and the universe in general.
- 3.) Look up the meaning of such terms as *metaphysics*, *epistemology*, and *axiology*. Find the subdivisions within these areas of study. Then outline the field of philosophy, exhibiting graphically its main divisions and subdivisions. The following will help you: George T. W. Patrick, *Introduction to Philosophy*, revised edition, Chapter VI, "Philosophical Themes" (Houghton Mifflin Company, Boston, 1935); Daniel S. Robinson, *An Anthology of Recent Philosophy*, Chapter IV (The Thomas Y. Crowell Company, New York, 1929).
4. What are some possible dangers and handicaps in the study of philosophy? See Edgar S. Brightman, *An Introduction to Philosophy*, pp. 14-18 (Henry Holt and Company, New York, 1925); Walter S. Gamertsfelder and D. Luther Evans, *Fundamentals of Philosophy*, pp. 68-77 (Prentice-Hall, Inc., New York, 1930).
5. Philosophers do not always agree. What are some of the reasons for the differences of opinion? See Edward G. Spaulding, *What Am I?* Chapter III, "Why Men Disagree" (Charles Scribner's Sons, 1928).
6. Do you agree with the following statements?²
 "There is no more direct way of elevating our life than by elevating our ideas."
 "Our choice is between saying insignificant things, saying nothing, or reading and thinking before saying anything."

¹ See "Philosophy" in *On Going to College; A Symposium*, pp. 196-198. Oxford University Press, New York, 1938.

² From Ernest Dimnet, *What We Live By*. Simon and Schuster, New York, 1932.

Philosophy and a Liberal Education

Whenever a serious problem arises in society, whether it has to do with personal, domestic, or international relations, someone is almost certain to insist that "education is the cure." No one seems to think that we should have less education or fewer educational institutions. There is almost universal agreement that education is a good thing *if* we can get the right type or right kind of education. We cherish our schools and colleges as among the basic institutions of a society that is free and democratic. In the first three decades of this century our high school population multiplied tenfold. Colleges, universities, and professional and technical schools of all kinds have multiplied rapidly. In recent years the junior colleges have shown a remarkable growth. Whereas in England, France, and Germany less than two per cent of the population, in the age group eighteen to twenty-four, attend institutions of higher learning, in the United States the percentage for the same age group is between nine and ten. To close the schools or to have the books and records unread for even a few generations would lead to the loss of our cultural heritage and our civilization.

Mere education, however, is not enough. The important thing is the kind of education. One can train a dog either to kill sheep or to protect them. We can teach persons to be selfish, narrow, and jingoistic or we can give them an education which broadens their sympathies and outlook and makes them co-operative members of a world society.

CRITICISMS OF CONTEMPORARY EDUCATION

While educational institutions have developed rapidly and while there is much faith in education, there is a widespread and growing dissatisfaction with present educational methods and practices. Mark Van Doren goes so far as to say that "it is impossible to discover a man who believes that the right things were done to his mind." Most persons seem to feel that they were taught too much or too little or the wrong things. Some of the more extreme indictments of education are represented by Walter Lippmann's statement:

"That during the past forty or fifty years those who are responsible for education have progressively removed from the curriculum of studies the western culture which produced the modern democratic state;

"That the schools and colleges have, therefore, been sending out into the world men who no longer understand the creative principle of the society in which they must live;

"That, deprived of their cultural tradition, the newly educated western men no longer possess in the form and substance of their own minds and spirits, the ideas, the premises, the rationale, the logic, the method, the values, or the deposited wisdom which are the genius of the development of western civilization;

"That the prevailing education is destined, if it continues, to destroy western civilization, and is in fact destroying it."¹

This is a serious indictment, one which should give us concern if there is any truth in it. Let us consider some of the criticisms that are being directed against contemporary education.

In the first place, while the student may get many good courses on a large variety of subjects, this knowledge is not organized or integrated into any consistent whole. Knowledge exists in separate packages and is likely to be presented that way. Departmentalization and specialization have gone so far that we tend to see life and the world in small, unrelated fragments and to lose a sense of their unity and meaning. There is a widespread feeling that "colleges have lost sight of the value of liberal education and their curricula have deteriorated into a hodgepodge of training in technical skills."² In pointing out how the colleges have

¹ Walter Lippmann, "The State of Education in This Troubled World," in *Vital Speeches of the Day* for January 15, 1941, Vol. VII, pp. 200-203.

² "Commission on Liberal Education Report," by James P. Baxter 3d, in *Association of American Colleges Bulletin*, Vol. XXIX, May, 1943.

added department to department and "raised marginal interests to the status of full-fledged subjects," Stewart Cole says, "Thus the curriculum ranges from Latin to fly casting, dynamics to dictation, marketing to marital relations."¹ The result has been to trivialize the intellect and to confuse large numbers of students. We cannot assume that by gathering more and more "facts" a person gains understanding and wisdom regarding the world in which he lives.

In the second place, the stress in our educational institutions is too frequently upon hours, points, grades, courses, and the passing of examinations at set intervals. The system, it is said, has tended to place emphasis in the wrong place and to fix attention upon false standards. The symbols or externals tend to usurp the place of the goals. Students tend to work for marks or for credits on the registrar's records. Often they are willing merely to "get by," and they exhibit a passive attitude.

The educational "system" is a means of recording certain facts regarding the student's progress and of maintaining certain standards. In actual practice it is a system of motivation. The student, however, is sometimes led to cover up his ignorance and to reveal his knowledge, even though the disclosing of his ignorance may be a condition of further progress in the field. If he is able to get the credits, he may feel satisfied whether or not he knows very much. The genuine goal of the educational process is understanding or wisdom.

In the third place, our schools and colleges, it is said, do not impart any common set of ideas, ideals, and convictions to their graduates. Frequently it is difficult for one graduate to talk to another on any high level of conversation because they have little common knowledge and few, if any, common interests. Practically the only thing that present-day undergraduates have in common is the fact that they have successfully "passed" 120 to 128 semester hours of work.

Even more serious than the lack of a common store of knowledge is the lack of common ideals and convictions. Education too frequently fails to build up any vital affirmations, convictions, and disciplines. There has been a dangerous separation of science and research from human values and loyalties. As a nation of specialists, we tend to apply our technical skill to our separate

¹ Stewart G. Cole, *Liberal Education in a Democracy*, p. 17. Harper and Brothers, New York, 1940.

fields and to assume little or no responsibility for human affairs and our social relationships. As a result of this attitude, our knowledge and our new techniques may be used by vicious men to destroy our civilization, as well as by men of good will to advance human welfare. Confusion, moral indifference, and even cynicism have too frequently been products of the exposure of young persons to the "educational process."

Men are left without convictions, it is charged, because our educational institutions are not passing on to the oncoming generations the moral, religious, and cultural heritage of the race. Since civilization is essentially a set of ideals or the pursuit of certain common ideals, this is a serious matter. Teachers have been so busy with the acquisition of knowledge that they have lost sight of the moral and social goals toward which such knowledge may be used. Education has divorced itself from the spiritual heritage of the past and has failed to supply any adequate substitute. Consequently, even educated persons are left without convictions or a sense of values as well as without a consistent world view.

In the fourth place, our educational institutions, it is asserted, have no clear and consistent conceptions of their educational aims. There is no adequate sense of direction or of mission or of goals to be achieved. Consequently, our educational institutions often fail to deal with the basic or living issues which men must face or be shallow and superficial.

For some decades the liberal arts curriculum has been losing ground relative to other educational interests. This process has been intensified by the wartime expansion of technological training and the consequent contraction of general education. Today a spirited controversy rages over the issue of the nature, aims, and future of liberal education. Let us consider briefly the historical origins or background of the contemporary educational situation.

HISTORICAL BACKGROUND

To trace the history of the liberal arts curriculum would carry us back to early classical times. A liberal education was the kind of education that was suitable for a freeman as distinguished from the kind of education that was adequate for the slave. It was education for the cultural minority or for leisure in contrast to vocational training or education for the worker. Among the

Romans as well as the Greeks, the *artes liberales* were the studies which were regarded as appropriate for the free citizen.

For nearly two thousand years tradition has considered certain subjects essential for the educated person. During the medieval period there were seven liberal arts, divided into two groups: first, the *Trivium*, literally the "three ways," which included the three basic disciplines of grammar, rhetoric, and logic, or dialectic; second, the *Quadrivium*, literally the "four ways," which included the higher studies of arithmetic, geometry, astronomy, and music. Education during the medieval period was dominated and motivated by a religious or theological interest.

In colonial times in America every one of the nine colleges was founded with a view to propagating the Christian faith. The curriculum stressed the Greek, Latin, and Christian classics, as well as the art of argumentation. During the Revolutionary Period there was a growing emphasis upon civic-mindedness. Thomas Jefferson founded the University of Virginia free from church control. Other privately endowed colleges and universities, dedicated to the education of youth for citizenship in a free secular society, were founded. During the nineteenth century the states entered the field of higher education. Land grants from the Federal Government to the states for the purpose of subsidizing higher education stimulated the growth of state universities. Cities or municipalities also entered the field and appropriated funds for institutions of higher education. Higher education thus came to be divided among church-supported institutions, privately endowed schools, and state and municipal institutions.

In response to demands from business, the professions, and special-interest groups of various kinds, there has been a rapid multiplication of courses, especially in the more technical fields. To these have been added new courses that have grown out of special research or study on the part of teachers and research workers. A study of college and university catalogues over a period of years reveals that more and more courses have tended to be added from year to year.

Until the latter half of the nineteenth century, most college courses were prescribed, or required, so that students had little choice in the selection of the subjects to be studied. The courses usually required at that time included English, the classical languages, mathematics, moral philosophy, and the Bible, or the Christian religion. All college graduates at that time had fairly

identical backgrounds, since they had studied the same subjects in similar ways. Two conditions, however, were to lead to the introduction of the elective system which would permit college students to select the courses they desired to study. The first was the rapidly increasing number and the importance of the new courses, especially in the natural sciences and the social studies. The second was the growing emphasis upon the "individual." The interests and needs of the individual, it was said, should come before any fixed program of studies. About 1870 President Charles W. Eliot of Harvard was advocating the elective system. By 1884 the only required courses at Harvard University were freshmen courses, and only a few of these were prescribed. In spite of considerable opposition, the method of free election spread rapidly throughout the United States, although the amount of freedom varied considerably from institution to institution.

The rapid multiplication of courses and a marked increase in student enrollment, along with the elective system, led to certain potential dangers which the critics were soon to point out. One was that the individual tends to be neglected in such a system of mass education. Another source of criticism was a noticeable shallowness, superficiality, and confusion of ideas on the part of many of the products of the system. This was due in considerable part to the lack of integration in the student's course of studies. We have already considered some of the criticisms which arose.

The attempt to meet the criticisms and to avoid the dangers mentioned above led to various changes in educational methods and requirements. For example, students were required to select a field or department as a "major" in which to concentrate during the last two years of their college course. Sometimes the student was required to select one or two "minor" fields for similar but less thorough concentration. In some cases "group requirements" were set up. The student might be required to select a certain number of courses or hours from three or four groups or divisions, such as: natural sciences and mathematics; the social studies; the languages; philosophy; religion; and the fine arts.

Today there is a trend in the direction of orientation programs and survey or general courses which cut across departmental lines. There is a growing emphasis upon programs and devices, such as supervision and guidance, honors courses, tutorial systems, seminars, comprehensive examinations, workshop courses,

and field trips. A considerable number of schools are now requiring a "core" of general subjects which are felt to be necessary for all students, regardless of their future plans for life. The reader will do well to investigate the educational programs or the special "plans" at institutions such as Harvard, Columbia, the University of Chicago, Colgate, Swarthmore, Antioch, and St. Johns, to mention only a few of the many institutions at which educational experiments are being conducted.¹

IN WHICH DIRECTION SHALL WE MOVE?

A major conflict in educational theory and practice is between "formalism" in education and what is known as the "progressive education" movement. The formalists tend to emphasize subject matter. There is, they claim, a certain body of knowledge which forms the basis of human culture. This fundamental core of knowledge should be transmitted to each generation. The primary duty of a teacher or of an educational system is to see that the essentials are passed on to the coming generation in some systematic and orderly way. To withhold the presentation of such material because it may require effort and discipline on the part of the individual is to fail to cultivate strength of character in the individual. Formalists are sometimes called "essentialists." They tend to stress thoroughness, industry, discipline, subject matter, and logical organization.

The movement known as progressive education has its roots in the writings of Rousseau (1712-1778), Pestalozzi (1746-1827), and, more recently in America, Horace Mann, Francis W. Parker, and John Dewey. In 1918 the Progressive Education Association was organized. Progressivism is a protest against formalism. It places emphasis upon the interests and desires of the individual, upon freedom, and upon the child rather than upon any particular subject matter. Stress is also placed upon democracy and co-operative living in a social group. Young persons, it is claimed, learn as they live. Consequently, prominence is given to activity programs and projects.

At present there is much discussion and a considerable amount of experimentation going on in educational circles. This is a sign of vitality and growth. There are voices calling us to come in this

¹ Many special studies have been made and reports published. For example, see *General Education in a Free Society*. Harvard University Press, Cambridge, Mass., 1945.

direction and in that. Shall we look to the classics for inspiration and direction? Shall we attempt to train young persons for specific vocations? Shall education train men for citizenship in present-day society? Let us look at the claims of the three groups that give affirmative answers to these questions. While some educational institutions fall within one of the categories, many institutions are trying to give a balanced recognition to the merits of all three positions.

1. *The Classical or Traditional Ideal.* — The task of education, according to this approach, is to transmit to oncoming generations the cultural heritage of the past. Liberal education, it is said, should rely on the subject matter which has withstood the test of time, that is, upon the great books, or the classics. Human problems are similar from age to age. We face much the same problems that Plato, Aristotle, the prophets of Israel, Dante, and Kant faced. To study the great masters and see what they have contributed will give us a keen analysis of the timeless elements in these problems. It will also give us a common background and a common fund of information, which is so essential among educated persons.

The primary function of education is to teach men how to think, to inculcate in them the moral virtues, and to give them an understanding and an appreciation of the cultural and spiritual heritage of the race. Standards of criticism and selection, whether in art, literature, or politics, cannot be obtained from vocational and informational studies alone. "The classics of our world, the great books, ancient and recent," says Mark Van Doren, "are more essential to a college than its buildings and its bells, or even perhaps its teachers. . . . They are the one accessible source of whatever ideas have existed and survived their times."¹ The common ignorance of this rich cultural heritage is the reason why so many persons think they have not been adequately educated in college.

This great literature, which is the source of so many of our religious, philosophical, and scientific concepts, abounds in great ideas, rich insight into human nature, timeless wit and humor, and in nearly everything that is worth while in our cultural heritage. There are some studies, it is claimed, which no young person can afford to miss. These are the studies which disclose

¹ Mark Van Doren, *Liberal Education*, p. 148. Henry Holt and Company, New York, 1943.

the meaning of the human past and the basic resemblances between the human beings of all ages. The powers of the person need to be developed and increased. A study of the great minds of the past, as well as of the present, is the most effective way to develop our latent human capacities.

2. *The Vocational Emphasis.* — In sharpest contrast to the classical ideal is the view that education should be a preparation for one's lifework, for one's trade or profession. The trend in the rapid multiplication of courses in recent decades has been in this direction. The industrial, technical, and professional schools have been devoting their entire attention to preparation for some specific profession or job. Mechanics, engineers, accountants, lawyers, and doctors have been trained for their respective skills and callings. The emphasis upon vocational training, however, does not stop with these specialized schools. In recent years, because of pressure from students and parents and because of the desire of the schools to attract or to hold students, liberal arts colleges have been adding more and more courses of this same technical nature. Each department, in its bid for students, is likely to stress the immediate and practical value of its courses.

With the increase in the proportion of youths who seek a college degree there is an increase in the number of students who come from homes where earning a living is an ever-present and immediate problem. The result is the constant increase of subjects which are vocational rather than broadly "cultural" in the traditional sense. Due largely to economic pressure rather than to any conscious desire, the common core of liberal education has been reduced until educated men lack a common store of knowledge and standards. Occasionally they become warped persons who view things from a very narrow perspective. They tend to lack a common language and a sense of their common humanity.

3. *Education for Citizenship in Contemporary Society.* — According to this approach, the crucial question to be asked of any educational program is, "What does it contribute toward the promotion of the culture of contemporary society?" Information regarding the past and skill in the manipulation of modern techniques are instruments which may be used in helping to solve the pressing problems of our time. The great thinkers of the past, whether in philosophy or science, were concerned with the culture and the pressing problems of their own day. We should

follow their example, not merely learn their ideas, language, and methods.

Education, it is claimed, is essentially growth in the direction of freedom, democracy, tolerance, and co-operative living, and a mutual recognition of the rights of others. "The function of the liberal college is tied to broad social purposes," says Algo D. Henderson of Antioch, and the "focal point for this program lies in the vital problems of present-day society."¹ The campus is or ought to be a laboratory of living by means of which faculty and students are searching for a better way of life and a more perfect society. The influence of progressive education is clearly seen in this emphasis.

In a few educational institutions the educational program of the student includes alternatives between periods of instruction on the campus and periods of work experience in industry, agriculture, or the profession in which the student is interested. Such a program is expected to produce a more mature and intelligent person who has learned to apply his knowledge to the vital issues of the society in which he lives. In such a program it is of course possible to combine to some extent the classical, vocational, and social emphases.

THE PLACE AND FUNCTION OF PHILOSOPHY IN EDUCATION

At one time philosophy included all the special sciences within its scope. The influence of that earlier position is still with us. For example, one may earn a degree of Doctor of Philosophy (Ph.D.) in fields such as physics, chemistry, biology, and psychology, as well as in the study of philosophy itself. The Ph.D. degree is the highest that can be earned in any field of study. During and after the Renaissance, mathematics and physics separated from philosophy. Later the other special sciences and disciplines became separated. Psychology has been a separate science only in recent decades, and in some institutions it is still linked to philosophy. Today there is such a large number of special sciences and such a maze of specialities within some of these sciences that many persons tend to forget the matrix or the whole of which they are only a small part.

In 1938 the Western Division of the American Philosophical

¹ Algo D. Henderson, *Vitalizing Liberal Education*, pp. 181 and 182. Harper and Brothers, New York, 1944.

Association appointed a special committee on the role of philosophy in universities. Commenting upon the papers and discussions at the meeting the following year, the chairman of the committee said that the tenor of the papers and the burden of the discussion were that "philosophy is primarily an orientation of experience which is needed in every aspect of life; . . . it should be made intelligible to as many students and other members of the community as possible as well as applicable to their problems."¹

In 1943 a Commission on the Function of Philosophy in Liberal Education was appointed by the officers of the American Philosophical Association. This commission undertook an extensive study of the role which philosophy might play in modern education and in the postwar world. In 1945 this commission published a report in the form of a book entitled *Philosophy in American Education*.² Writing on "The Climate of Opinion," Brand Blanshard says that "the major demands on philosophy" are for "integration," for "community of mind," for a "reinterpretation of democracy," and for a "philosophy of life." Speaking of the demand for integration, he says, "One of the great historic tasks of philosophy has been the putting together of the results of human inquiry, religious, historical, scientific, into a consistent view of the world." Philosophy should not be just another specialty, as it is occasionally represented as being.

The great issues of our time are philosophical problems. They have to do with questions of right, justice, freedom, man, society, and nature. Tomorrow's inventions will not make them obsolete. Philosophical problems are not only central but timeless. "No civilization can survive," says Robert Ulich, "without a deeper and uniting definition of truths and values. . . . Only the mediocre person is satisfied with a mass of incoherent and isolated knowledge."³ Facts alone are not enough. The mature person wants to understand himself, the society in which he lives, and his relation to the universe. Philosophy should provide the means of enabling the student to systematize, assimilate, and evaluate

¹ "The Place of Philosophy in Universities," by Charles M. Perry in *Journal of Higher Education*, Vol. XIII, No. 9, December, 1942, p. 464.

² Published by Harper and Brothers. The members of the commission were Brand Blanshard, Curt J. Ducasse, Charles W. Hendel, Arthur E. Murphy, and Max C. Otto. The study was aided by a grant from the Rockefeller Foundation to the American Philosophical Association.

³ Robert Ulich, *History of Educational Thought*, p. 341. American Book Company, New York, 1945. —

the vast mass of knowledge. Philosophical reflection and discussion is one of the best means by which to develop perspective.

We shall mention only three of the many areas of study within the field of philosophy. A knowledge of logic, ethics, and the history of philosophy appear indispensable to any educated person. A knowledge of logic is essential to the sciences, as well as to law and statesmanship. Logic deals with the principles and the techniques with which we do our thinking in any field of human experience. Ethics is also a field that is coextensive with life itself. An ethical or a moral problem is never just an ethical problem. An economic, a political, or an international problem is usually also a moral problem. Ideals, standards, and loyalties are among the crucial issues of our lives. Finally, to be ignorant of the history of philosophy is to fail to understand the origin and significance of many of the leading terms and concepts of modern science and philosophy. A well-organized liberal arts course cannot afford to neglect these fields, since such neglect tends to lead to intellectual confusion and shallowness.

In a sense, philosophy is taught in many departments in college. It springs up everywhere in discussions of basic issues. There is a philosophy of every subject, as was pointed out in the previous chapter — a philosophy of physics, of history, of economics, of language, and of art. Every specialist, if he is to maintain a balanced judgment, needs to find for himself both an historical and a philosophical orientation or perspective.

WHAT IS A LIBERAL EDUCATION?

Most writers on education seem to agree that the future in some way depends upon giving each new generation a broad liberal training. They do not always agree, however, on the definition of *liberal education*. The term is used in various ways. It may refer to a philosophy of education that emphasizes individual freedom, especially freedom of thought and speech, and the determination of one's own life and activities free from external dictation. It may mean the attitude which is friendly to modern change and reform or to social progress. Again, it may mean an education that places emphasis upon mental discipline and moral stamina or upon the development of the basic qualities of personality. Ramsay MacDonald probably had this last meaning in mind when he said that to be educated means "a certain subtle spiritual quality which enables one to be calm in adversity, . .

happy when alone, . . . just in one's dealings, . . . rational and sane in all the affairs of life."

"The essence of liberal education," says Frank Aydelotte, "is the development of mental power and moral responsibility in the individual." He points out that the plays of Shakespeare may be strictly technical, whereas engineering or the study of law may be liberal. Much depends upon the attitude, method, and point of view. "The exclusive preoccupation with techniques, with means as opposed to ends, may deprive the study of literature, or philosophy, or history, or religion of any liberal element."¹

There is considerable agreement that liberal education includes some if not all of the following aims: (1) Education should train men to think critically and constructively. (2) Education should give some insight into the moral, aesthetic, and religious values of the race, and help men to discriminate between values. (3) Education should train men for constructive citizenship in a free and growing society. That is, it should make men free and enable them to use their freedom wisely. (4) While liberal education, as such, does not include all the special or technical skills, it should prepare men so that they are likely to succeed in socially constructive vocations and professions.

During recent years many commissions and special groups have been studying liberal education and its role in modern society. We shall conclude our discussion with quotations from two of these studies. The Commission on Liberal Education of the Association of American Colleges, in a report, says in part: "The purpose of a liberal education is to help man to acquire certain human qualities that manifest themselves in characteristic habits and attitudes. . . . The final test of any pattern of education is the kind of men and women it produces. . . . In a democracy, liberal education should be of value to men and women both as private individuals and as free, self-reliant, and responsible members of the community to which they belong. It should help them, as individuals, to grow in self-mastery and personal depth, to develop wider and deeper appreciations, to acquire an enthusiasm for hard work, to love good talk and good books, to delight in the adventures of intellectual curiosity, to become fair-minded, open-minded, and generous in all their

¹ Frank Aydelotte, *Breaking the Academic Lock Step*, pp. 7 and 8. Harper and Brothers, New York, 1944.

human responses."¹ Speaking of the cultural heritage of the human race, the same report says: "The individual can best achieve this cultivation of character, mind, and spirit by studying what is already known to have most worth. Civilized mankind has treasured and passed on to successive generations a precious cultural heritage. It is the capital with which men have won their way increasingly to the freedom we are still striving for today — if only to preserve it. In this heritage is a rich fund of proven knowledge and well-tested opinion concerning man himself and his physical and social environment. It provides the long perspective of history that enables him to understand his present social and political order in the light of the past, and to grasp the point of departure for a future where man can act. It is also the inexhaustible many-sided record of man's persistent striving to shape historical events to his own ends — the expression of human aspirations, ideals, and spiritual faiths in the forms of art, literature, ethics, philosophy, and religion. These are the things man first needs to know in order to see and solve his contemporary problems. By learning what other men have thought and believed he is started on the road to his own discovery of truth, justice, and good. Contact with great minds elicits the original spark of independent thought and makes him ask his own questions and solve them for himself. Thus he advances not only in learning but in the power to take care of himself in a troubled world."²

A committee appointed by the American Council of Learned Societies Devoted to Humanistic Studies concluded its report with the following statement: "Our central thesis can perhaps be stated most briefly and dramatically in negative terms. Would we not all agree that a person was *not* liberally educated who was illiterate and inarticulate, uninformed and with no knowledge of how to acquire knowledge, insensitive to aesthetic, moral, and religious values, provincial, unintegrated, and enslaved? Does it not follow, then, that a person *is* liberally educated in proportion as he is literate and articulate in the 'languages' of human intercourse, verbal, symbolic, and expressive; as he is possessed of the basic facts concerning the world of nature, human nature, and human society, and, in addition, a master

¹ Adopted April 18, 1943. *Association of American Colleges Bulletin*, Vol. XXIX, No. 2, May, 1943, pp. 287-288.

² *Op. cit.*, pp. 289-290.

of the main techniques of acquiring new knowledge in these realms; as his native sensitivity to values is cultivated and as he is capable of reflective commitment in the realms of aesthetic, moral, and religious value; as he is freed from the tyranny of provincialism through temporal, spatial, and systematic orientation — in short, as he is an intelligent and responsible agent, able to participate richly in the good life, and ready and eager to contribute all he can to the welfare of his fellow men? Is not this the positive freedom which democracy should cherish and which a liberal education should foster? And is it not our duty and privilege, as citizens, as scholars and teachers, and as human beings, to make liberal education in this country a powerful instrument for human freedom, a bulwark of human dignity, a source of human values?"¹

⇒ QUESTIONS AND PROJECTS ⇐

1. What are the trends in contemporary education? Are any trends to be discerned at the institution with which you are connected?
2. In your opinion, what is the primary function of education in general, and of liberal education in particular? How widely available should liberal education be made?
3. Does belief in liberal education imply any basic convictions or philosophy concerning men and human society? If so, what are these convictions?
4. What courses, if any, should be required of all students in a liberal arts education? Should a subject be required because it is : (1) a tool subject, (2) a good discipline, (3) valuable, (4) one that may be needed at some time, (5) necessary as a cultural background, or (6) necessary for all persons to have in order to live well in a world like this?
5. How do you explain the difference between the ideal educational situation, in which students are eager to learn and in which students and teachers feel a sense of comradeship in a common cause, and what is the situation too often found, in which students exhibit a passive attitude and are content merely to "get by"?
6. How far should the state or nation participate in higher education? What are the advantages and what are the dangers to be guarded against? Is there any truth in the statement, sometimes made, that

¹ American Council of Learned Societies Devoted to Humanistic Studies, *Liberal Education Re-examined*, by Theodore M. Greene and Others, p. 120. Harper and Brothers, New York, 1943. Used by permission of the publishers.

education will always be biased in favor of the dominant class or party in any society?

7. Should philosophy be required or optional in a liberal education?
8. How may courses or studies in philosophy be most adequately conducted? Here are some possible ways:
 - (1) Have a separate department of philosophy.
 - (2) Offer courses in philosophy in many different departments or divisions of study (*e.g.*, Philosophy of Science in the division of natural sciences, Social Philosophy in the social studies' group, etc.).
 - (3) Let persons trained in philosophy participate in co-operative or inter-departmental courses of various types.
 - (4) Use some combination of the above.

»» PART ONE ««

THE WORLD IN WHICH WE LIVE

The Physical Universe

Philosophy uses and builds on the work of the sciences. During recent years the special sciences such as astronomy, mathematics, physics, chemistry, and geology have greatly extended our knowledge of the physical world, but we need to know more of these sciences. While we cannot go into details in a work like this, we can indicate briefly the general outlook, the trends of thought, and some of their implications.

The term *universe* is used to refer to the totality of things or the entire natural world, including the earth, the sun, the stars, and all that they contain. The term *world* may also be used in this sense, although it is limited in many minds to the earth and its inhabitants. The term *universe* includes the whole of space and time and their contents.

In his *Physics and Philosophy*, Sir James Jeans speaks of “the three worlds of modern science.”¹ There is, first, the world which man has known with his unaided senses. Man became acquainted with the properties of matter and with the laws of nature which were applicable to the behavior of physical objects comparable in size with man’s body and his tools. He experienced them, furthermore, under the conditions existing on the earth. His thinking about time was in terms of seconds, minutes, and hours. He measured space in terms of inches, feet, and yards. He gave little or no attention to motion that was faster than the speed of man or of beast. Man and his world were thought to occupy a central place in the scheme of things. This is a world which we know fairly well, and we shall not attempt to describe it.

¹ See Sir James H. Jeans, *Physics and Philosophy*, pp. 42ff. The Macmillan Company, New York, 1942.

During recent generations two new worlds have been opened to man's vista. The second world, which stands in contrast to the man-sized world, is the world opened up largely by the development of the telescope, although other instruments, including the spectroscope, have played an important part. The third world, which also stands in contrast to the man-sized world, is the world of the very small. In this area the microscope, the electromagnet, and various photoelectric devices have played important parts.

In all of these fields man's imagination and reason and his powers of mathematical analysis and scientific and philosophical speculation have been at their best.

THE EARTH AND THE CELESTIAL SPHERES

THE EARTH

A few thousand years ago, the "world" comprised a very small section of the earth's surface. Men knew only a few countries bordering the eastern end of the Mediterranean Sea. Even a few hundred years ago, most men thought that the earth was flat and stationary. It was a neat little world. Just overhead in the canopy of the sky were the sun, the moon, and the stars, with heaven beyond. Underneath the earth were hell and purgatory.

Some of the early Greek thinkers, including Pythagoras, who died 504 B.C., held that the earth was round. The fact that the hull of a ship disappears before the mast does and that the stars rise gradually above the horizon as one travels north or south suggests such a conclusion. The views of Ptolemy, formulated about 140 A.D., dominated the thinking of the intellectuals during the medieval period. Ptolemy taught that the earth is a fixed sphere at the center of things. This view was not seriously questioned until the time of Copernicus in the sixteenth century.

The view that the earth is the center of the universe and that all other bodies revolve around the earth, or at least are subordinate to it, is known as the geocentric or earth-centered view of the universe. The Copernican astronomy changed this geocentric view of the world and led to what is known as the heliocentric or sun-centered view. The earth became one among many planets that revolve about one of many suns.

The earth, while but a tiny speck in the universe, is important to us because it is the planet upon which we live. It is a mighty

globe or spherelike body about 8000 miles in diameter, having either a solid or a molten core bounded by a crust of rock many miles in thickness. It has a thin outer layer of land and water. The great bodies of water, the oceans, lie in the deeper hollows of the crust of rock. The land and the water swarm with living creatures. The atmosphere surrounding the surface of the earth rises to a height of several hundred miles, becoming thinner or more rarefied as the distance from the earth increases.

The earth has several motions. Once a day it rotates on its axis, an imaginary line passing through the earth from the North Pole to the South Pole. This explains why the sun "rises" and "sets." Most of the apparent motion of the sun, moon, and stars is due to the rotation of the earth. Once a year, traveling at the rate of about $18\frac{1}{2}$ miles per second, the earth completes a slightly elliptical path around the sun. This motion on its elliptical orbit around the sun, in addition to the fact that the north end of the earth is inclined toward the sun in summer and away from the sun in winter, accounts for the seasons. The distance from the earth to the sun, varying from around 91,500,000 miles to 94,500,000 miles, averages 93,000,000 miles. Life on the earth is dependent upon the light and heat from the sun for its existence.

Estimates of the age of the earth vary from around 1400 million years to 3400 million years. These estimates are based on the deposit of sediment which produces stratified rock and the deposit of salt in the sea; on the "uranium clock," which is based on a study of the constant rate at which uranium disintegrates and becomes lead; and on the "astronomical clock," which is based on the changes, according to known laws, in the orbits of various planets and satellites. From all this evidence a number of scientists suggest 2000 million years as probably the best estimate of the span of geologic history.

THE SOLAR SYSTEM

The earth on which we live is one of nine planets revolving around the sun. The term *solar system* includes our sun and all the bodies which revolve about it or are otherwise attendant upon it. In addition to our sun, the solar system comprises the nine planets, hundreds of asteroids or small planetlike bodies, and the satellites or attendant bodies of the planets, such as the moon, comets, and meteors.

Our sun is an ordinary star or "a star in the foreground." It

looks large because of its comparative nearness to us. It has a diameter of 864,000 miles and a mass about 332,000 times that of the earth. The sun is said to contain $99\frac{6}{7}$ per cent of the mass of the solar system, which leaves only one seventh of one per cent for the planets and other bodies. Since gravity depends on mass, this explains the rotation of the planets around the sun. The sun is a self-luminous body, so hot that it is in a gaseous or a molten condition.

Planets seem to human beings the most important part of the universe, since it is only on planets that human life as we know it can exist. Whether or not there are other stars like our sun that are surrounded by planets, we do not know, because planets are relatively small and have only reflected light. If they do exist, we cannot see them even through our most powerful telescopes.

According to modern scientific theory, all the planets and lesser bodies of our solar system, whose movements in space are governed by the gravitational pull of the sun, have had their origin in the sun. According to the earlier *nebular hypothesis* suggested by Immanuel Kant in 1755, and worked out and published independently by the mathematician and astronomer Laplace in 1796, the solar system resulted from the cooling of a gaseous nebula. This rotating and contracting mass, which became the sun, threw off or left behind it rings or spiral knots which became the planets and their attendant bodies. This theory is untenable today and has been replaced by the "planetesimal" or the "tidal" theory.

The planetesimal theory was set forth by Professors F. R. Moulton and T. C. Chamberlin of the University of Chicago in 1900. According to this theory, the planetary masses were separated from the sun and were subjected to the gravitational pull of a passing star. Ordinarily such masses, when erupted from the sun, return to it at once, due to the gravitational pull of the sun. Professor Rollin T. Chamberlin puts it this way: "Materials ejected from our sun will be drawn out farther by the pull of the visiting star, and in addition they will be given a cross-direction of movement by the other moving star. If the passing star is large and comes sufficiently close to the sun, the cross-motion which it imparts to these separate masses will prevent their returning to the sun, and will cause them instead to revolve around the sun in ellipse-like paths."¹ When we realize that the pull of the moon

¹ *The Nature of the World and of Man*, edited by H. H. Newman, p. 33. The University of Chicago Press, 1927. Used by permission of the publishers.

raises tides on the earth, we can imagine the attraction of a star or a sun which passes relatively near to our sun. These solid masses were built up by the infall of planetesimals. Atmosphere formed from liberated gases and moisture led to the beginnings of the oceans and of weathering. When the earth became favorable, life appeared, probably first on the shores between the land and the warm waters.

Various modifications and restatements of the planetesimal theory have been made. Sir James Jeans calls his statement of it the "tidal theory."¹ When two stars pass close to one another without contact, each raises tides in the other. If the stars are close enough, gaseous matter will be drawn out and condensation will begin. This matter, or new-born planet, will be acted on by the gravitational pull of both stars, and complicated orbits will result. Jeans thinks that the masses forming the planets passed from the gaseous to the liquid stage and that solidification took place gradually. He gives relatively less attention to the building up of the planets through planetesimals.

This general theory may also be called the "encounter theory." Another modification is the "double-sun theory" as proposed by R. A. Lyttleton. He suggests that our sun was a double star and that the passing star struck or came very near to the star which was the companion of our sun. There are still questions and difficulties regarding the origin of the solar system, and some doubt has been expressed regarding the encounter theory.²

THE STELLAR SYSTEM

As we look up into the heavens on a clear night, we can see numerous stars. These stars are suns, some of which are many times the size of our sun. Our sun looks relatively large simply because it is comparatively near to us. Something like 5000 stars can be seen at different times by the unaided human eye. Hundreds of millions of them can be viewed by means of powerful telescopes. Light from our sun reaches us in a little over eight minutes, but light from the nearest "fixed" star takes about $4\frac{1}{3}$ years, and light from some distant stars may take millions of years. These stars are called "fixed" only because their rapid

¹ See Sir James H. Jeans, *The Universe Around Us*, pp. 224ff. The Macmillan Company, New York, 1931.

² See Henry N. Russell, *The Solar System and Its Origin*, p. 144. The Macmillan Company, New York, 1935.

motion is not seen by us. During the brief periods of human history, they have maintained the same relations to one another.

The stars of which our sun is one are grouped in a great watch-shaped figure. If we consider our solar system to be somewhere near the center of this cluster of stars and look toward the circumference or rim, we see more stars than we would if we looked in other directions. This light streak seen in the sky at night as we look toward the point where the stars are thickest is the Milky Way. The term *galaxy*, from the Greek *gala* meaning "milk," is applied to this cluster of stars. It is estimated to contain 100,000,000,000 stars. The stars in our galaxy all move at the same rate through space, and they move in the same direction. Our galaxy is also said to be rotating about a center. By means of the analysis of light with the aid of the spectroscope, the chemical constitution of the sun and the stars is fairly accurately known.

There is much speculation about "the evolution of the stars." They appear to "pass from the early youthful stage of red through orange-yellow and white, to the hottest stars of all, the blue-white, down again through the same series in reverse order to the cold, old, red dwarfs."¹

This vast system known as our galaxy is apparently surrounded by even vaster spaces. For years astronomers have observed spiral nebulae among the stars, but only in the last decade or two has there been sufficient evidence to warrant calling them distant galaxies. There appear to be external and independent galaxies. Now we read about "exterior galaxies," "extra-galactic nebula," "island universes," and even "super galaxies." Although light travels at a speed of 186,000 miles per second, men are talking in terms of millions of light years. Such conceptions tend to stagger the imagination.

SPECULATIVE ISSUES

1. Is the universe running down? This question is frequently raised in discussions regarding the nature of the universe.² The principle of the "conservation of energy," included in the first law of thermodynamics, holds that energy cannot be destroyed

¹ G. Clyde Fisher and Marian Lockwood, *Astronomy*, p. 128. John Wiley and Sons, New York, 1940.

² See Sir Arthur S. Eddington, *The Nature of the Physical World*, Chapter IV (The Macmillan Company, New York, 1937); and Sir James Jeans, *The Universe Around Us*, Chapter VI (The Macmillan Company, New York, 1931).

or created; that there is a constant amount of it. The second law of thermodynamics, however, indicates that all self-acting processes in nature are tending toward a common temperature and energy level. The energy is not lost but is unavailable. If energy tends to pass from available forms to unavailable forms, then, it is claimed, the universe is tending toward equilibrium, or is "running down."

The loss of energy seems to be true for man's machines and for the processes which he manipulates. It may be true for some processes and systems and not for others. That it is true for the universe as a whole is doubtful. If the universe is infinite and has no beginning nor end, there must be infinite energy or a creative source of energy. If, on the other hand, the universe is finite and had a beginning, there must be some creative source of energy which causes creative processes to overcome or outweigh the destructive processes. The universe itself may be a continuous creative process.

This is a speculative issue that does not have much meaning for us. Astronomers tell us that our sun has existed for a million million years and has a long life ahead of it. For all practical purposes, we live in a universe of unimaginable energy and creative power. The answer we give to the question of the universe's finiteness or infiniteness will depend upon which of several possible world views we are inclined to accept.

2. Are there other habitable worlds than ours? This is a question which naturally arises when we think of the numerous suns in the universe. Is the earth the one favored spot in all this vast extent of space? In our solar system it is thought that only Mars and Venus, in addition to the earth, offer conditions at all favorable to life as we know it. Even on these other planets the atmospheric conditions are thought to be different from those that exist on the earth.

While it is possible that no other parts of the universe offer conditions favorable to the development of life as we know it, it is also possible, as some have suggested, that the universe contains a multitude of inhabited planets, some with human beings much further advanced than we are. Even if other suns are surrounded with planets, we cannot see them because of the great distance and because they are lost in the bright light of their sun. If the encounter theory has any basis in fact, it is probable that the star which passed our sun has planets revolving about it. If there is

purpose or some plan in the universe, then of course life is likely to be present in many parts of it.

SUMMARY CONCLUSIONS

What is the impression left in the mind of the reader from the facts and theories just set forth? Two points are often emphasized in the literature of these topics and in discussions of them:

1. *The Tremendous Size of the Universe.* — Its extent is great, both in space and in time. It is difficult for our minds to grasp such conceptions as light traveling at the rate of 186,000 miles per second, or the meaning of such terms as “millions of light years.” Passing by the greatest figures for the age of the sun, estimates of the age of the earth average 2,000,000,000 years; of life on the earth, 300,000,000 years, and of the age of man on the earth, 300,000 years.

2. *The Orderliness of the Universe.* — While there may be some spontaneity and a degree of uncertainty even in the physical realm dealt with by the natural sciences, there is nothing capricious and chaotic. Here is what one astronomer has to say on this point: “To the astronomer the most remarkable and interesting thing about that part of the physical universe with which he has become acquainted is not its vast extent in space, nor the number and great masses of its stars, nor the violent forces that operate in the stars, nor the long periods of astronomical time; but that which holds him awestruck is the perfect orderliness of the universe and the majestic succession of the celestial phenomena. From the tiny satellites in the solar system to the globular clusters, the galaxy, and exterior galaxies there is no chaos, there is nothing haphazard, and there is nothing capricious. The orderliness of the universe is the supreme discovery in science; it is that which gives us hope that we shall be able to understand not only the exterior world but also our own bodies and our own minds.”¹

THE NATURE OF MATTER

Equally fascinating with the scientific researches into the nature and extent of the planets and the stars are those which have been delving into the nature of matter and energy, working with the world's minutest parts. We might ask: Why is there a

¹ From “Astronomy” by Forest Ray Moulton in *The Nature of the World and of Man*, p. 30. The University of Chicago Press, 1927. Used by permission.

problem here? Why not just accept physical objects as physical objects and let it go at that? Why should a tree or a stone or a human hand be anything different from a tree or a stone or a hand?

In the first place, particular things like trees, stones, and hands seem to change. At least, they undergo alterations in their outward form. The desk on which I am writing, for example, was once part of a growing tree or trees. Before that the tree was once elements in the soil and the atmosphere. Even seemingly permanent things like rocks and minerals are in the process of being built up or broken down. Through weathering or erosion, the stone may become dust and blow away. These processes are going on about us all the time.

In the second place, physical objects undergo or are affected by inner transformations of various kinds. They may pass back and forth from a solid state to a liquid state to a gaseous state. Are these three states to be treated as completely different, to be described in different terms, or are they to be brought under one explanatory principle? The change from ice to water to steam is only one of the more common transformations which may occur in our experience. With sufficient increases in temperature even the metals become liquids or gases. Objects vary in many ways. Some things are hard and brittle; others are soft and pliable. Under pressure different objects behave differently.

In the third place, we can contact or experience particular physical objects by means of our various sense organs, but matter itself seems to be something different. *Matter* is an abstract term, a concept, which is applied to any or all conceivable physical things. The history of human thought indicates that a great variety of interpretations of matter have been set forth. Equally perplexing is the ease with which some outstanding thinkers have been able to deny the fundamental reality of matter or, at least, to relegate it to a secondary place in the scheme of things. For the natural sciences, however, matter has been a primary reality.

SOME EARLY VIEWS OF MATTER

During the sixth and fifth centuries B.C., certain men became curious about the nature of the world in which they lived. They started a new line of thinking and investigation which, by devious paths, has led to our modern conceptions of matter. To trace this development in detail would carry us too far afield and would

embrace a considerable portion of the history of philosophy and of science. Thales, Anaximander, and Anaximenes, Greek colonists living at Miletus in Asia Minor, each sought a natural explanation in some one substance. They selected, in turn, water, the "boundless," and air, or vapor. Heraclitus later said that all was flux or flow and that fire was the basic substance. He distinguished between an upward and a downward tendency in all things. Empedocles, later in the fifth century B.C., was the first pluralist. He stressed earth, air, fire, and water as the four original substances, thus combining some of the earlier explanations. To explain motion and the changes in things, he set forth the two principles of love (attraction) and hate (repulsion). The later term *chemical affinities* carries some of the same general influence down through the medieval period.

Anaxagoras, c. 500-428 B.C., working in Athens, carried pluralism a step further. He said that there are as many "seeds," or elements, as there are qualities. Hence reality consists of a countless number of elements representing every quality. *Nous*, or mind, is the cause of motion and order. This qualitative atomism was changed to a quantitative atomism by Leucippus and Democritus (died about 362 B.C.), who give atomism its final form so far as the early Greeks are concerned. Democritus, one of the first materialists, said that the universe is made of two parts: the plenum (full), or matter, and the vacuum (void), or empty space. Matter is composed of an infinite number of self-moving atoms which differ only in their size, shape, and velocity. All qualitative differences are explained in terms of these indivisible particles (atoms). The views of Democritus had a profound effect on later thinking. The student will profit by an examination of the views of matter held by Plato, Aristotle, Descartes, Locke, Berkeley, Leibnitz, and others.

SOME MODERN VIEWS OF MATTER

Early in the nineteenth century, when the sciences of chemistry and physics were turning their attention to the constitution of matter, John Dalton (1766-1844) found in the atomic theory of Democritus a possible explanation of certain chemical and physical actions and reactions. He laid down the general outlines of the atomic theory, which was widely accepted during the nineteenth century. He thought that atoms were tiny spheres with unchanging weights, and that the atoms of any one element were

alike. A union of the atoms of different elements formed molecules of the compound. Dalton was impressed with the numerical order and relationship among the atoms, and he achieved considerable success in working out these relationships.

A number of chemical elements, like iron, copper, silver, and gold, have been known since ancient times, but most of the chemical elements, which now number ninety-two, have been discovered during the last two hundred years. These elements have been arranged in the order of their atomic weights, starting with hydrogen, the lightest, as number one, and ending with uranium, the heaviest, as number ninety-two. The chemist has found that in the great diversity of materials in the world, whether minerals, organisms, liquids, or gases, the same chemical substances appear again and again. A few of the more familiar, in addition to hydrogen and uranium, are oxygen, carbon, nitrogen, calcium, chlorine, copper, silver, gold, iron, and lead. Not only man's body and the earth but the sun and the stars are composed of combinations of these same ninety-two elements.

Until the end of the nineteenth century, chemists believed that the elements were definite or fixed and that the atoms of any one element were alike and indivisible and indestructible. Since then, however, the atomic theory has undergone extensive revision. Two methods of studying the nature of matter have gone on, side by side: the method of chemical and physical analysis with the use of instruments and apparatus, and the method of mathematical or logical speculation and the checking of these hypotheses. The investigations are too complicated to describe here, but a few of the significant steps and conclusions can be pointed out. The decades ahead will undoubtedly see further changes.

A significant advance in the knowledge of the nature of matter was made when Pierre and Marie Curie in 1898 discovered radioactive elements. The emission of rays at high velocities and without any apparent external cause was somewhat of a shock. Apparently the elements were not so definite and fixed as men had assumed, and the atom was not indivisible. The careful and elaborate research of men like J. J. Thomson, Ernest Rutherford, Niels Bohr, Max Planck, W. Heisenberg, Albert Einstein, and others has enabled us to penetrate the interior of the atom.

During the second decade of this century Sir Ernest Rutherford set out to explore the interior of the atom by bombarding it with particles from radioactive elements. He was led to the

conclusion that the atom consists of a small, heavy core, or nucleus, which contains almost the entire mass of the atom and bears an excess of positive electric charge. This is surrounded by one or more *electrons* at relatively great distances from the nucleus and from each other. The simplest of all atoms, that of hydrogen, consists of a single proton as nucleus and a single electron; for other elements the composition is more complicated. Niels Bohr worked out models of the atoms which were found useful for some years but are now inaccurate. Recent changes have been additions to, rather than denials of, the work of Rutherford and his collaborators. During the last few decades many able investigators have offered both mathematical and empirical evidence in support of the view that the atom is an exceedingly complicated system, a little world in itself.

THE STRUCTURE OF THE ATOM

The atoms appear to form a tiny planetary system which has a minute nucleus only "one-millionth of one-billionth of the volume of the atom." Yet this nucleus contains above 99.9 per cent of the total atomic mass. The center, or nucleus, is no simple unit. In 1932 James Chadwick in England obtained evidence of a new kind of particle, the *neutron*, evidently emitted by certain nuclei, which was electrically neutral.¹ The same year Carl Anderson in the United States distinguished another particle which was named the *positron*. It is similar to the electron, but positive instead of negative. More recently the *positive mesotron* and *negative mesotron* have been recorded. The positron and the mesotron are short-lived and join other particles after they are formed.²

The electrons, which we might call negatively charged planets revolving around the nuclear sun, circle around the center. There are a varying number of electrons whirling around under the action of the electrostatic attraction of the nucleus. The positive nucleus has a certain number of positive units of charge, hence it can hold an equal number of negative units. The number of electrons determines the physical and chemical properties of the atom. The number varies from one for hydrogen

¹ Protons and neutrons are now considered to be two different electric states of the same heavy particle, called the *nucleon*.

² See Konrad Bates Krauskopf, *Fundamentals of Physical Science*, pp. 287-292. McGraw-Hill Book Company, New York, 1941.

up to ninety-two for uranium. While there are unexplained circumstances and much work yet to be done, it does appear reasonably certain that the atom is composite and active.

THE NEW QUANTUM THEORY

The quantum theory was set forth in its early form by Max Planck in 1900, and later developed with the help of Albert Einstein and others. According to this theory, not only matter and electricity but all forms of radiant energy are atomic in the sense that they are made up of separate items, discrete particles, or drops of electricity. There is an atomicity in the way energy acts on matter. The unit of energy Planck called the *energy quantum*. When a material structure such as a vibrating electron or proton emits light, the light goes out as a definite quantity of energy, such as one unit, two units, or more. The quantity or amount of energy is not always the same, and it is greater for short waves than for long ones.

An example may be taken from the study of light. From the time of Newton to the nineteenth century men accepted the corpuscular theory of light. This meant that light travels in the form of tiny, rapidly-moving, material particles. During the early nineteenth century this theory was discarded in favor of the undulatory or wave theory of light. Light as a form of continuous wave motion travels through space by means of an imaginary ether, much as waves or ripples cover the surface of a pond. Recently, however, the evidence seems to indicate that light has an atomic character and travels in bundles, or packets, or in a stream of particles, something like bullets coming rapidly from a machine gun. For some purposes the wave theory serves more satisfactorily; for other purposes, the quantum theory. "Light seems to have a Jekyll-and-Hyde personality, in one experiment behaving like a hail of tiny bullets, in the next like a series of waves."¹

The quantum theory may mean that happenings in the microscopic world lose the continuity which we experience in our everyday affairs. We may need to think in terms of concepts and laws which are different from those of our ordinary common-sense notions.

¹ Krauskopf, *op. cit.*, p. 303.

THE PRINCIPLE OF UNCERTAINTY OR INDETERMINACY

Something quite new, and even astonishing from the point of view of the objective science of a few decades ago, is the principle of uncertainty or of indeterminacy as set forth by Werner Heisenberg and others. Some persons have been led to wonder if the foundations of science are undergoing radical change. According to Heisenberg, the physicist is forced to choose whether to determine the location of an electron or to ascertain its speed with precision, since he cannot do both. Position and velocity seem to be so related that no two particles can occupy the same state or have the same conditions of potential energy, kinetic energy, and direction of spin. At least one of the conditions must be different. Furthermore, electrons appear to jump from one orbit to another in an unpredictable manner. Physicists are unable to predict where these electrons will go or how long they will take to reach their new position. The very act of observation, in that some signal must be transmitted from the particle or system to the observer, seems to change what is under observation.

Just what this uncertainty or inaccuracy means cannot be stated with any degree of assurance. Is it merely something lacking in the conditions of the observer, or is there a real element of spontaneity and chance (tychism) in nature? Does the uncertainty principle contradict the law of causality and the older views of determinism and mechanism in nature? These questions are considered in another chapter. However, there is a tendency to stress the statistical character of natural law. Such formulations are not statements of inherent necessities but merely references to probabilities.

SUMMARY CONCLUSIONS

1. Matter appears to be something quite different from the qualities of physical objects as experienced by us in our daily affairs. There seems to be little similarity between the two ways of looking at the same object, yet the scientific account is needed to explain some things that happen in our everyday experiences. Some decades ago scientists and philosophers made clear-cut distinctions between the primary qualities of matter, like extension, solidity, figure, and motion, which were supposed to be permanent fundamental properties of matter, and the secondary

qualities, like color, sound, odor, and taste, which were often thought to be more subjective or the way in which the primary qualities affect knowing organisms. Primary qualities were thought to be objective, existing in the things themselves, while secondary qualities were supposed to be subjective, existing only in minds that experience them. We consider this issue later when we discuss the nature of knowledge. In the newer scientific account of matter, both the primary and the secondary qualities seem to disappear, leaving us centers of energy or force. Matter and its qualities may both be permanent and real. They may be approaches or aspects of our world from different points of view.

2. The older conceptions of a mechanical world of "dead" matter, the "Newtonian world machine," and the "indivisible atom" (the "building blocks" of the universe) seem to be breaking down or undergoing change. A revolution is under way in the physical sciences, which appears to indicate that nature is not to be compared to the exact functioning of a machine, that it is not so rigidly determined as men once supposed, and that the concepts of possibility and of becoming are not vain human illusions.

3. The studies of the nature of matter lack finality. We are told that matter is energy. When we ask, "What is energy?" we are told that it is electronic in nature. When we ask, "What is electric energy?" we are likely to be told that it is process or potentiality for doing things or that the question itself is unanswerable. There may be some truth in the whimsical remark of a physicist friend that "energy is a thing that is defined so that it can be understood and conserved." We shall need to follow carefully the investigations which are still under way. The physical world is more fascinating than many of us have supposed. It is possible that matter cannot be studied successfully by itself; it may be inseparably connected with a series of processes and events yet to be considered.

»» QUESTIONS AND PROJECTS ««

1. What are the most recent trends in: (1) astronomy, (2) physics, (3) chemistry, and (4) geology? Do they affect philosophy? If so, in what way? In getting your information you may wish to consult some persons who are working in these special sciences, as well as some of the latest books.
2. In addition to those mentioned in the chapter, what impressions or reactions do you have from the facts and theories set forth?
3. Present a more detailed account than that given above of the Newtonian view of the universe and its influence upon human thinking. See John H. Randall, Jr., *The Making of the Modern Mind*, revised edition, Chapter XI, "The Newtonian World-Machine" (Houghton Mifflin Company, Boston, 1940); John Macmurray, *Some Makers of the Modern Spirit*, Chapters V and VI (Methuen and Company, Ltd., London, 1933).
4. How do you explain the following statement, attributed to Father Inchofer (1631)? Outraged at the suggestion that the earth moves, he is reported to have said, "The opinion of the earth's motion is of all heresies the most abominable, the most pernicious, the most scandalous: the immovability of the earth is thrice sacred; the argument against the immortality of the soul, the existence of God, and the incarnation should be tolerated sooner than an argument to prove that the earth moves."
5. A number of writers have spoken of "the two tables," the familiar substantial one of everyday experience and the table as science interprets it. Are these two different tables or just two interpretations of one table? See Sir Arthur S. Eddington, *The Nature of the Physical World*, Introduction, pp. ix-xvii; Bertrand Russell, *The Problems of Philosophy*, Chapter I (Oxford University Press, London). What is your reaction to Eddington's statement that science deals with a world of symbols?
6. In his *Invitation to Philosophy*¹ (pp. 200-207), Durant Drake discusses "four illusions concerning matter." Give a brief exposition and evaluation of his point of view.

¹ Houghton Mifflin Company, Boston, 1933.

Space-Time and Relativity

The world about which we must philosophize is a rapidly changing world, whether we look upon it from the point of view of material things or from that of our thought forms and the intellectual climate of the day. We are likely to be especially impressed with the fact of change as we look at the problems of space, time, motion, and relativity. From early days, views of space and time have changed as the horizons of human knowledge have been extended.

With the growth of reflective thinking and abstract thought, men have come to use the terms *space* and *time* in two different senses. A distinction has been made between perceptual space and perceptual time on the one hand, and conceptual space and conceptual time on the other hand. Perceptual space is the space in which we live and move; for example, the distance between objects and the areas through which these objects move. Perceptual time is the time which we experience day by day — the time at which we get up in the morning, eat our meals, meet our friends, continue at work, and retire at night. These experiences are elements of direct awareness or sense perception. We walk a certain distance, and we wait a specific time.

Conceptual space and time are the idealized space and time of geometry and other forms of mathematics. Here we will be thinking about solids, surfaces, lines, and points, or about duration in general. Conceptual space and time are the space and time about which we think when we ask about their nature and whether there is some whole of which all the particular spaces and times are a part. They are the space and time to which the philosopher refers when he asks whether they are limited or unlimited, subjective or objective.

EARLIER VIEWS OF SPACE AND OF TIME

Apart from a few philosophers like Immanuel Kant, who argued that space and time were not in the outer world but were ways in which the mind of man perceives and organizes the world, most men until very recently have thought that space and time were real, separate entities. Space was distinguished by the property of extension. All the elements of space were of the same nature. Space extended in all directions indefinitely unless stopped by something different from space. Time was characterized by duration. Each instant or division of time was similar to every other bit of time. Time would go on forever unless stopped by something different from the outside. Two different events were distinguished and separated by two kinds of relations or of intervals. One kind of relation had to do with their location or position in space; the other relation had to do with time, or their location in the continuous flow of duration. The two were fixed and definite. Not only were time and space different in nature, but they were essentially the same for all normal persons. While motion takes place through space and in time, it does not materially affect them.

About 140 A.D. Ptolemy Claudius of Alexandria formulated a view of the universe which tended to replace the earlier view of the earth as being flat with the canopy of heaven a short distance above it. According to the Ptolemaic system, accepted by most intellectuals during the medieval period, the world is a hollow sphere with the round earth in the center. The earth is fixed in space, since rotation on its axis or through space would cause objects in the atmosphere, like birds in the air, to be left behind. The planets move in circular orbits and epicycles around the earth. The universe is divided into heavenly and terrestrial realms. God resides outside this terrestrial sphere and supervises its activities. At this time men recognized that right-hand and left-hand directions, as well as forwards and backwards, are interchangeable when a man turns his body through an angle of ninety degrees, but they regarded upward and downward directions as fixed.

The Copernican revolution, discussed in the last chapter, brought in the heliocentric view of the universe. In his work, "Of the Rotation of Celestial Bodies," published in 1546 after his death, Copernicus described the motions of the planets and calcu-

lated their orbits quite accurately. Tycho Brahe, Kepler, Galileo, and others made significant contributions. Sir Isaac Newton, 1642–1727, combined their separate results into one unified system which appeared to operate by means of undeviating mechanical laws. In this theory, not only did the earth give up its position as the center of the universe but the laws of planetary motion and of gravitation were formulated with mathematical precision. If the earth rotates on its axis and moves around the sun, then up, down, east, and west are relative to the earth's surface and are not absolute. Until early in the twentieth century, however, the traditional views of space and of time were not seriously questioned.

THE MODERN REVOLUTION

During the last five or six decades a new “Copernican revolution in human thinking” has been taking place. In 1887 Michelson and Morley obtained experimental results which did not fit into the nineteenth century ideas of the physical universe. In succeeding years the difficulties increased. In 1905 Einstein suggested a new approach. With the publication of further papers ten years later and with the verification in 1919 of some of his predictions by English astronomers, Einstein's theory of relativity came to be almost universally accepted. Soon men were talking about space-time, the curvature of space, relative motion systems, and frames of reference. The work and thought which led to the new theories were not the effort of any one man. Investigations were carried on in such fields of research as the nature of light, electricity, and electromagnetism, as well as in the field of astronomy. The mathematical evidence is too difficult and complicated to be discussed here.

RELATIVITY

What is meant by the notion of relativity? Let us start out by considering some common human experiences. We all know that one's distance from particular cities or points on the surface of the earth varies or is relative to the position of the observer. To ask the distance to New York is meaningless unless we have some particular point of reference in mind. When we are happy or elated, time seems to pass quickly. When we are in pain, an hour may seem like an age to us.

Have you ever stood on the bridge of a wide river, looking over the railing at the water below, and then had the sudden impression that the river is standing still and the bridge is moving? If one loses sight of the banks of the river, it is possible to get a sensation similar to that which one ordinarily experiences when he is looking over the rear of a moving boat. Leaning over the rear rail of a boat, one may suddenly get the notion that he is at rest and the water is moving. If you lie on your back on the grass, looking at the clouds as they go by, you may get the feeling that the clouds are still and you are moving.

Rest and motion are said to be relative. Most of us have had the peculiar experience of sitting in a railway train at a station and receiving the impression that our train was moving, only to find in a minute or two that it was the train on the next track that was in motion. Until we could see the station or some other "fixed" object, we could not be certain. Again, if a train beside ours or other objects about us move as we move, we may get the impression that we are not moving but are at rest.

The literature on relativity contains various illustrations from moving ships. Imagine a ship with a flat topdeck steaming along a bay fairly near the shore. A man standing on the deck at a point exactly halfway between the bow and the stern of the ship rolls two balls along the deck, one toward the bow and the other toward the stern. He starts them at exactly the same time and with the same force. Another man, standing on the cliff, watches this operation from the shore. Do the two balls, the one that moves toward the bow and the other that moves toward the stern, travel the same distance? Do they travel at the same speed? Do they arrive at the bow and at the stern at the same time? Will the answers be the same for both men? Stop at this point and think this through before reading further.

For the man in the middle of the deck, the two balls will appear to arrive at about the same time, traveling the same distance at the same speed. For the man on the cliff, however, one ball will appear to move much faster and farther than the other ball, even though they both arrive at the same time. He will insist that the ball that rolled toward the bow moved at the original speed on the deck plus the speed of the ship, and that its distance was half the length of the deck plus the distance which the boat moved while the ball was in motion. He will insist that the ball that moved toward the stern traveled a length equal to half the length

of the deck minus the distance the boat moved while the ball was in motion, and that its speed was the original speed on the deck minus the speed of the boat. Which man is right? Obviously, they are both right. Their answers differ because one man has viewed the performance from the point of view of the ship while the other man took the cliff as his point of reference or measurement.

Much more depends upon motion and the point of view of the observer than was formerly recognized. There is no one true movement or frame of reference when we are thinking about the events of our world. After pointing out the multiplicity of frames of space and of time and how all of these frames are relative, Eddington says that "nature provides no indication that one of these frames is to be preferred to the others."¹ This concept will become clearer as we consider a number of related questions.

SPACE-TIME

Why is the concept space-time coming into use? Recent investigations have shown that space and time are somehow inter-related. Such leaders in this field of study as Einstein, Minkowski, Lorentz, Eddington, and Alexander have come to think that neither space nor time is fundamentally separate and distinct. Both are cross sections of what might be called *space-time*. Time is sometimes said to be a fourth dimension of space.

Let us look for a moment at this problem of dimensions. If we wish to locate a particular point on a plane, a sheet of paper, a blackboard, or even on the surface of the ground, two dimensions of space are necessary. If we wish to locate some point within space, not on some recognized surface, as within the walls of a room, we need three dimensions of space. If, however, we wish to locate an event like an explosion in midair on a moving aeroplane, we need three dimensions of space and one dimension of time, or three dimensions of *where* and one of *when*.

The above facts seem sufficiently commonplace until we are told that these four dimensions are interchangeable, so that what is a period of time for one person may be distance in space for another. For example, if a person remains at one spot relative to the earth for a length of time, say five hours, and someone could observe him from Mars, the observer would state what he saw in terms of distance in space, since the earth is moving rapidly.

¹ Sir Arthur S. Eddington, *The Nature of the Physical World*, p. 61. The Macmillan Company, New York, 1937.

Each observer, we are told, "slices up" space-time into space and time in a manner which is dependent upon his motion system or his point of view.

Expressions of time order, such as *before*, *after*, and *simultaneously*, are relative. At the point where I am standing, let us say, there is a sound, followed a moment later by a flash of light. I say that the sound came before the light, but a person standing at some other location may hear the sound and see the light at the same instant and say that they are simultaneous. A person at some distant point, however, might say that the light came first and the sound second. We are told that "the simultaneity of distant events cannot be verified." It is quite arbitrary, and it depends on the frame of reference. It can, however, be defined.

A further complication arises when we are told about the Fitzgerald contraction. Mass, length, and duration are not only relative but dependent on the speed at which the observer is moving. Objects, including our measuring apparatus, become slightly shorter when placed in line with the earth's motion than when placed at right angles to this position. An object in motion is subject to a new magnetic stress which affects the electrical particles of matter, regardless of the nature of the material. For the speed of the earth this contraction is negligible. At the fantastic speed of 161,000 miles a second, the contraction is one half, so that a journey at noon, if we are at right angles to the motion, might be only half the distance it would be at 6 P.M., due to the planet's rotation on its axis.¹ The speed of light is 186,000 miles per second, regardless of the motion of its source. If objects moved at the speed of light, their length along the line of motion would tend to shrink to zero. We are also told that as velocity increases, such mechanisms as clocks tend to slow down and the human body ages more slowly.

In discussing questions of space and time, Clifford Barrett says that "the universe of stars and planets, as we may see it tonight, does not and never has existed."² This seems at first like a very startling and questionable statement. Yet if we stop to think, we "see" one star as it existed four or five years ago, another as it existed a few thousand years ago, others as they existed a million years ago. A star could go out of existence and we could continue

¹ Eddington, *op. cit.*, p. 8.

² Clifford Barrett, *Philosophy*, p. 199. The Macmillan Company, New York, 1935.

to “see” it for many years. Surely, we live in an amazing and fascinating world.

A famous and often quoted statement from Minkowski is that “From henceforth space in itself and time in itself sink into mere shadows, and only a kind of union of the two preserves an independent existence.” We have been accustomed to think of the earth’s view of things and the earth’s motion as the correct ones. Yet while time and space seem to be interrelated and interdependent from our point of view, there are important differences. Whereas space exhibits three dimensions — length, breadth, and height — and we can come and go in space, time exhibits one dimension — from the past to the future — and there appears to be no return.

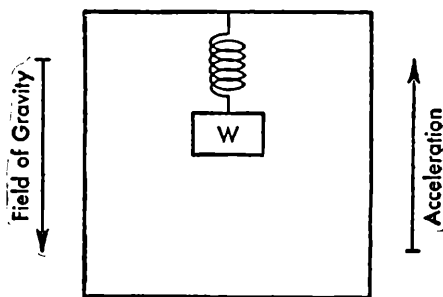
The following illustration, which was taken from a little book with the subtitle *A Romance of Many Dimensions*, shows that other points of view are possible: “Doctor Abbott pictures intelligent beings whose whole experience is confined to a plane, or other space of two dimensions, who have no faculties by which they can become conscious of anything outside that space and no means of moving off the surface on which they live. He then asks the reader, who has consciousness of the third dimension, to imagine a sphere descending upon the plane of Flatland and passing through it. How will the inhabitants regard this phenomenon? They will not see the approaching sphere and will have no conception of its solidity. They will only be conscious of the circle in which it cuts their plane. This circle, at first a point, will gradually increase in diameter, driving the inhabitants of Flatland outwards from its circumference, and this will go on until half the sphere has passed through the plane, when the circle will gradually contract to a point and then vanish, leaving the Flatlanders in undisturbed possession of their country. . . . Their experience will be that of a circular obstacle gradually expanding or growing, and then contracting, and they will attribute to *growth in time* what the external observer in three dimensions assigns to motion in the third dimension. Transfer this analogy to a movement of the fourth dimension through three-dimensional space. Assume the past and future of the universe to be all depicted in four-dimensional space and visible to any being who has consciousness of the fourth dimension. If there is motion of our three-dimensional space relative to the fourth dimension, all the changes we experience and assign to the flow of time will be due

simply to this movement, the whole of the future as well as the past always existing in the fourth dimension."¹

GRAVITATION AND SPACE

How is the theory of gravitation affected by these newer views of relativity and space-time? The mechanics of Newton recognized the static force of gravity which is exerted even by bodies at rest. Recent studies of electricity and electromagnetism have shown that an electric charge in motion has effects in addition to those which it has when at rest. In the neighborhood of matter, space-time is curved (warped or puckered) in a possible fifth dimension. This curving of space around matter leads such physical objects as are free to move to draw together. The curvature is greatest in the vicinity of bodies of greatest mass. While this condition may be difficult to imagine or to visualize, it has received striking mathematical and experimental verification. For example, a ray of light passing near a great mass like the sun does show a deviation from its ordinary course. These newer views have supplemented the laws of Newton; they have not replaced them.

The following illustration shows that it is possible to explain an effect by a field of gravity or by accelerated motion. "Einstein



The Einsteinian Box

begins his considerations with an imaginary experiment, and thus, by aiding us to visualise them, makes them more accessible. He thinks of a box, of the size of a room, let us say; we can, as a matter of fact, characterize such a box as small in size, since, in

¹ Edwin Abbott, *Flatland; a Romance of Many Dimensions*, by A. Square, pp. xi-xii. Little, Brown and Company, Boston, 1926. Used by permission of the publishers.

discussing celestial mechanics, we are dealing with such enormous dimensions that those of a room almost vanish in comparison. In the box a physicist is experimenting; he has, however, only such effects at his disposal for observation as can be noticed in its interior. The box has, then, no windows. Let us suppose that it is in accelerated motion upward (if we may, for the moment, express the imagined state of affairs in naïve language); can the physicist ascertain this motion by experiments within his box?

“He can, indeed, do so. Let us suppose, for instance, that he has hung a weight w from the ceiling of the box with the help of a spiral spring; then, during the upward motion of the box, the weight will stay behind, just as, when the railway train starts, a piece of luggage is at first reluctant to take part in the motion. The result is tension, and, with it, lengthening of the spring. Reasoning in the opposite direction, the physicist can recognize from the lengthening of the spring that the motion of the box has begun; that is, he has established the fact of motion.

“But is this proof conclusive? That the spring has been lengthened is certainly unquestionable; but is there really only *one* possible explanation? No, there is a second explanation also. If we assume, for the moment, that great cosmic masses had accumulated below the box in the interim, they would generate a gravitational field which would express itself in the increase of weight, and would, therefore, like the accelerated motion, cause the spring to lengthen. Because of this double possibility of explanation, then, the physicist cannot conclusively reason from the observed facts that the box moves; there may, instead, be a gravitational field at work while the box rests.”¹

LIMITED OR UNLIMITED SPACE AND TIME?

Are space and time limited or unlimited? The problem as to whether space and time are limited or unlimited, finite or infinite, has puzzled men at different periods in history. Many scientists and philosophers have thought of time as proceeding without beginning or end, and of space as extending in all directions without limit. We can move bodies, but space and time seem to remain fixed. We can imagine that an object, like a building, does not

¹ From Hans Reichenbach, *Atom and Cosmos*, pp. 77–78. Used by permission of The Macmillan Company, publishers, New York, 1933. See also Reichenbach's *From Copernicus to Einstein*, pp. 86ff. Longmans, Green and Company, Toronto, Canada, 1942.

exist, but we cannot seem to think away the space which such an object occupies. If we think of space as unlimited, then we can go in imagination to the most distant star and beyond to space that stretches out without limit. In that case, is the material universe also unlimited in mass, extent, and duration? This is hard for many persons to believe.

Yet if we think of space and time as limited or finite, we seem to run into difficulties here, also. We find ourselves thinking of an edge to space. Then what is beyond? If we could go to this edge and hurl a javelin outward, as the early Greeks suggested, it would either go on, in which case there is more space, or be thrown back, in which case there is some object or obstacle which must occupy space. To think of an edge to space or of non-space is difficult. If we think of time as limited, we may find ourselves saying, "There was a time when time was not."

The theories of space-time and relativity offer a new approach which seems to leave behind, or to solve, the older paradox. From this point of view, space may be finite though unbounded, for, in addition to the curvature of space in the neighborhood of matter which is said to produce a gravitational attraction, there is a curvature of space which is inherent in the nature of space. The surface of the earth, for example, is limited, yet it is unbounded, since it curves back on itself. There is no edge nor end to the surface of the earth. We are told that, apart from irregularities or a "puckering" near matter, the curvature of space is uniform, so that space is spherical.

SOME IMPLICATIONS AND CONCLUSIONS

Since the special sciences furnish philosophy with a large part of the factual, descriptive, and theoretical knowledge on the basis of which philosophy formulates its interpretations of life and the world, the philosophy of any age is always inseparably connected with the science of that age. Any basic changes in scientific outlook are likely to produce reactions in philosophy. What are some implications and conclusions to be drawn from the discussions of this and the previous chapter?

1. The notion of the "standpoint of the observer" is coming to be recognized more fully than it was during the late nineteenth century. This may be part of the effect of the breakup of the older mechanistic and deterministic world view which seemed to leave

little or no place for man. Much more depends upon the "knower" or the point of view of the observer than was formerly thought. The scientist cannot leave himself out of the picture without running the danger of developing a blind spot or some dogmatism.

Some philosophers will protest at this point and say that the "observer" need not be a person or a mind but may be a recording instrument, such as a photographic plate. The photographic plate, however, must be analyzed, interpreted, and explained; by itself it is not knowledge; it is an instrument. Our minds take part in interpreting the world. Do they also play some part in creating our world?

2. The physical universe in which we live is a fascinating and challenging abode. On the basis of the facts we have been examining, it is evident that first perceptions are sometimes superficial and incomplete. We shall need to press our inquiry beyond surface impressions. In addition to the "man-sized world" in which our daily experiences seem to take place, we are surrounded by the vast universe which astronomy discloses, and, from another point of view, we are introduced to a minute, invisible world of electronic energy. We are led to ask: What are physical things? What is the fundamental nature of this world in which we seek fulfillment? Is the world "out there" a world of "real" objects? Is it friendly or alien? Are we confined to the world of our own experiences so that we cannot make affirmations about what is beyond experience? Is mind the primary fact in the world, or is mind a by-product of a nature that is different?

The problems raised in this and the preceding chapter have also made clear that we need to consider the problem of the nature of human knowledge, and to rethink the traditional conceptions of substance and cause. The emphasis on the point of view of the observer has placed a new emphasis upon human sense perception. Yet reflection and reason must reach beyond the senses, since only a small portion of space-time can be viewed by the senses. Concepts like "energy" and "process" appear to be replacing the older notion of separate substances. We are discovering regularities and uniformities in our world. If a cause is to be interpreted as more than an invariable antecedent to an effect, then what is its nature? Is it essentially mechanistic or teleological in nature?

3. Developments in the physical sciences make it appear that

matter, motion, space, time, and relativity are all bound up together and cannot be considered as separate entities. While we have yet to consider the evidence from the sciences which deal with life, including man, the emphasis on the point of view of the observer probably means that the concepts mentioned above are also bound up with evolution, life, mind, and the field of values.

One of the main fallacies of the nineteenth century was to select one or a small number of the aspects of reality and to ignore other aspects. As a consequence, the non-living was considered to be the basic reality. Materialism was the resulting philosophy. Today, however, there is less emphasis on dead matter. Life and matter seem to overlap and interpenetrate. From now on, valid thinking must recognize many frames of reference.

»» QUESTIONS AND PROJECTS ««

1. Are the immensities of space and time revealed by modern scientific views a source of inspiration and encouragement for you, or are they a source of depression and discouragement? Give a reason for whatever answer you make.
2. Zeno, a Greek philosopher of the fifth century B.C., found it necessary to deny the reality of motion. Get acquainted with his famous illustrations of "Achilles and the Tortoise" and "The Flying Arrow." Consult a standard history of Greek philosophy. For a brief account, see Gamertsfelder and Evans, *Fundamentals of Philosophy*, pp. 319ff. (Prentice-Hall, Inc., New York, 1930).
3. Look up and then state as clearly as you can the philosophy of time set forth by the French philosopher Henri Bergson. Consult these works of Bergson: *Creative Evolution* (Henry Holt and Company, New York, 1911); *Time and Free Will* (The Macmillan Company, New York, 1913). For a brief account, see Joseph A. Leighton, *The Field of Philosophy*, fourth edition, Chapter XXIV on "Temporalism" (D. Appleton-Century Company, New York, 1930).
4. Review the following books:
 Wyndham Lewis, *Time and Western Man*. Harcourt, Brace and Company, New York, 1928.
 John W. Dunne, *An Experiment with Time*. The Macmillan Company, New York, 1938.
 Edwin Abbott, *Flatland; a Romance of Many Dimensions*, by A. Square. Little, Brown and Company, Boston, 1926.
5. See John B. Priestley, *Midnight on the Desert* (Harper Brothers, New York, 1937). State Priestley's view of time as given in the latter part of the book (especially pp. 24off.), and critically evaluate it.

The World of Living Things

As man looks over the earth on which he lives, he is impressed by the amazing variety of living things on and in the earth, in the waters, and in the air. Furthermore, the microscope discloses an invisible world of life. Ranging from bacteria and other unicellular organisms to man, we find an almost unlimited variety of forms and functions in organisms. Living forms appear to occupy almost every conceivable spot in nature. Where did life come from, and what are some of its characteristics?

THE ORIGIN OF LIFE

Since primitive times, men have observed that living things tend to reproduce their kind. Does all life come from some one source or are the different kinds of life completely separate and distinct? There are at least five possible answers:

1. All matter is alive, and there is no need to make any clear-cut distinction between living and non-living matter. The theory that all nature is alive or animated, a view held by a number of early Greek thinkers, was known as *hylozoism*. From the days of ancient Greece to the present, most men have thought in terms of a rigid separation between the organic and the inorganic. Recently the discovery of "viruses, bacteriophage, and filter passers" appears to bridge the gap, and the trend of modern science is toward a more unitary conception of nature.

2. The theory of spontaneous generation appears in the philosophical poem *De Rerum Natura*, written by the Roman poet Lucretius in the first century before Christ. It was still held by many in the nineteenth century until about 1860, when Louis Pasteur proved fairly conclusively that it was false. Men had

noticed that animal forms, such as worms, insects, mice, and frogs, seem to come at times out of the earth. Men assumed that the earth, under the proper conditions of warmth and moisture, could generate living forms. Decaying meat and water exposed to the air were found to swarm with living things. Pasteur, by comparing sterilized and unsterilized liquids, proved that these microorganisms are propagated by their kind, and that they are carried in the dust-laden air.

3. The theory of direct creation by a special act of God has taken several different forms. One form, a literal interpretation of the first chapters of Genesis, confines the entire creative process to six days of twenty-four hours each. According to this view, all living species were created at some one time and place. A second group of interpretations attempts to mediate between the Biblical and modern scientific accounts. The geological-day theory, the vision-day theory, and the restitution theory are examples of such interpretations.¹ To many persons these views seem to fail to do justice either to the Biblical accounts or to the scientific accounts of creative processes. The scientists who believe that nature's processes are continuous, orderly, and progressive are likely to reject the idea of a special act of creation at one time and place. If, however, God is interpreted as the creative agency, the creative synthesis, or the élan of life that makes toward wholeness and personality, the view that God created the world is generally acceptable.

4. The view that life came to earth from some other planet was set forth by Helmholtz, Lord Kelvin, and Svante Arrhenius (1859-1927). While life might conceivably arise from ultra-microscopic living forms driven by light radiation, from cosmic dust, or through organisms hidden in the crevices of meteorites, this theory is highly improbable and really provides no answer. It merely transfers the origin of life to another planet or star.

5. Living creatures emerged or developed gradually from non-living material. From what we know today, life always seems to arise from other life. Yet as the story is pressed back, the distinc-

¹ The geological-day theory interprets the "days" in the Genesis account as long geological periods. The vision-day theory assumes that the writer had visions, on six consecutive days, of these things being created. They were not actually created in six days. The restitution theory assumes that evolution took place, then a catastrophe destroyed everything, and God restored it as related in the book of Genesis. Read the first two chapters of Genesis. Many scholars believe there are two accounts, one given in Genesis 1:1-2:4a, the other in Genesis 2:4b ff.

tion between animals and plants and between living and non-living forms tends to disappear. Now and then some biochemist announces that he has succeeded in creating life artificially by combining carbon and other inorganic substances. What could have happened or what did happen in the past is difficult to say, except that life, through some kind of creative process, appeared on earth. If living matter should be created from the non-living, it would not seriously affect our general outlook on life. The chief effect of the idea would be to increase our appreciation of what has been called the "non-living," or matter. "If the dust of the earth did naturally give rise very long ago to living creatures, if they are in a real sense born of her and of the sunshine, then the whole world becomes more continuous and more vital, and all the inorganic groaning and travailing becomes more intelligible."¹

Philosophers and scientists today, with few exceptions, believe that the present living forms on the earth, including man, originated and developed through some process of evolution, that is, through a slow, gradual, and progressive change. But when we have recognized this fact, we have only begun to solve the problems related to the idea or notion of the creation of life.

THE NATURE OF LIVING FORMS

While it is usual to make a fairly clear distinction between the organic and the inorganic, the two are very closely related in all living creatures. Many characteristics of the inorganic world, such as physical and chemical actions and reactions, are also present in the organic realm. Organisms have bodies which follow the laws of matter. The chemical elements in living matter, including man, are the same as those found in such things as water, air, earth, and the stars. Apparently no material that is present in living matter leaves it when it is not living. The decomposition products of protoplasm, which is the chief constituent of all body cells, consist of the common, simple elements found elsewhere in nature, such as carbon, oxygen, hydrogen, nitrogen, sulphur, sodium, calcium, and magnesium. These do, however, appear in combinations that are found only in living matter, unless they appear in a combination produced artificially in the laboratory.

¹ From *The Outline of Science*, edited by J. Arthur Thomson, Vol. I, p. 62. Courtesy of G. P. Putnam's Sons.

Certain internal and external conditions appear to be necessary for life. For example, there must be a certain chemical balance, or equilibrium, in the blood, spinal fluid, and glandular secretions. A slightly alkaline balance between acidity and alkalinity is needed in the blood stream. Certain physical equilibria of temperature and pressure need to be maintained, and supplies of oxygen, hydrogen, carbon, and nitrogen must be present in breathable, eatable, and drinkable forms. These are only a few of the conditions which are necessary for life. There is a continuous interchange of substances between all animal organisms and the surrounding environment.

Among the distinctive characteristics of organisms are some general traits. There is, first, the *will to live* which seems to run through all life. It is everywhere, universal and persistent. In the plant, the animal, and in man there is a constant struggle toward the expansion and fulfillment of life. Living things behave as if they were the expression of some purposive agency whose aim is to continue and to extend life. There is, second, an *interdependent relationship between the parts and the whole*, that is not characteristic of non-living things. Under normal conditions the parts of an organism grow and develop as one integrated whole. Organs are found to develop for some future use, and there seem to be functions toward which they are directed. Some living forms can restore lost parts or have their functions taken over by uninjured parts. A third general characteristic of protoplasm is *the ability to learn by experience, or memory*. This is the basis for adaptive behavior. The satisfactory response is repeated, and the unsatisfactory one tends to be eliminated.

Among the more specific traits are metabolism, growth, reproduction, rhythmicity, irritability, and adaptability. *Metabolism* consists of the processes of building up (anabolism) and breaking down (katabolism), two processes which go on simultaneously throughout life. In early life the building-up processes are dominant, whereas in later life the breaking-down processes are more in evidence. While living continues, there is a constant assimilation and transformation of matter and energy. *Growth* toward maturity is a characteristic of all living creatures. The young must increase in size and be prepared for the more complex functions of later life. There are definite limits to the size which any given species of animal ordinarily attains. *Reproduction* is essential if the species is to survive. Apart from some simple forms of reproduc-

tion like cell division or budding, every animal begins life as a fertilized germ cell and develops through the embryonic and infancy stages to maturity. *Irritability* is the power to respond to stimuli, both internal and external. This sensitivity is the basis of adjustment. In higher organisms it functions by means of an elaborate nervous system. *Adaptability* is closely related to irritability and indicates changes which lead to harmony or to satisfactory adjustment to environmental situations. Living forms which are adaptable are more likely to survive changes in external conditions.

Within broad limits, we see that life tends to be insurgent. It presses out in all directions and endeavors to increase its range and powers. It is autonomous in that it functions on the basis of its own laws. It is selective and inventive and is able to meet new situations and emergencies. It is self-adjusting, self-maintaining, self-preserving, and self-perpetuating. When we reach the very complex and highly integrated members of the animal kingdom, other characteristics and powers appear, such as heightened sensations, a higher form of memory, selective choice, consciousness, and intelligence. These new qualities are dealt with later in our study.

A description of the world of organic nature is important and interesting, but the philosopher is especially interested in the question as to the meaning and causes of the manifold forms of life. Is life simply some different combination of the elements found in the inorganic world, or is it some new and different kind of reality? The three most popular answers today are in terms of *mechanism*, *vitalism*, and the *theory of emergence*. Not only are they fundamental issues in the realm of biology, but they have most important implications for the social studies and for philosophy in general. The positions are presented here briefly, since they are discussed more fully in later chapters.

1. MECHANISM

Can the structure, functioning, and behavior of living creatures be interpreted satisfactorily in terms of physics and chemistry? We know that the same physical elements are found in organisms that are found in rocks and stars. Does this mean that the same mechanical laws operate universally? Mechanism, in the narrower sense, is the theory which holds that all things may be explained in terms of matter and motion and the laws which gov-

ern them. It is the view that all things are a necessary consequence of previous facts and conditions. The organic or "higher" forms are merely more complex; they contain no new materials or forces. The principles of the physical sciences are sufficient to explain all that exists. All of nature's processes, whether inorganic or organic, are deterministic and predictable when all the necessary facts are available.

HISTORICAL SKETCH

From the earliest Greeks we have inherited the belief that the universe can be interpreted in terms of physical properties. The atomism of Democritus has already been mentioned. His philosophy is probably the first systematic presentation of mechanism. Animals and man are interpreted, as are all other things, in terms of atoms in motion. Psychic activity is merely the motion of the very fine, round, smooth, highly mobile atoms. There is need neither for a vital principle nor a directing mind. Epicurus and the Roman poet Lucretius popularized similar views for a short time before mechanism went into almost total eclipse during the medieval period.

During the period of great scientific advance starting in the fifteenth century, mechanism gained considerable support in European thought. It was encouraged by the development of the mathematical sciences and objective, experimental methods. The Newtonian system of classical mechanics, which attempted to show that the physical laws which men discover on the surface of the earth are valid for all objects in space, was a strong influence in the direction of a wider application of mechanistic principles. The discovery of the circulation of the blood by Harvey in 1628 seemed to indicate that the blood was driven by pressure from the heart, and this could be explained by quantitative mechanics instead of a mystical life-giving force. Later, when Lavoisier discovered the process of oxidation, the "breath of life" seemed to be explained in chemical terms and to be subject to a mechanical interpretation. These and other discoveries in such fields as anatomy and physiology led some men to talk about organic systems as "mechanical machines."

The philosopher René Descartes, 1596-1650, was a mechanist in so far as the physical universe was concerned; but Thomas Hobbes, 1588-1679, went further and raised the new science to a philosophy by presenting a thoroughgoing mechanistic natural-

ism. Descartes had excluded "mind" from the realm of mechanism. Hobbes included all mental processes in his mechanistic interpretation. Conscious life was explained in terms of sensations, which are movements in the brain and the nervous system.

During the eighteenth century, La Mettrie and various leaders of the French Enlightenment were mechanistic in their outlook. La Mettrie claimed that man, as well as animals and plants, is essentially a machine. All are parts of one graduated series and, apart from more elaborate wants, the higher forms are no different from the lower. A century or more later, Haeckel in his *Riddle of the Universe* and Huxley in his *Physical Basis of Life* were popularizing similar views.

By the end of the nineteenth century and the beginning of the twentieth, many physiologists and biologists and some psychologists were employing physical and chemical explanations in their interpretations of all living creatures, including man. For example, Jacques Loeb, in his *Mechanistic Conception of Life*,¹ set forth an explanation of living things in physico-chemical terms. In raising the question as to whether the "inner life should be amenable to a physico-chemical analysis," he says that he believes that "it is attainable." Such a development, according to Loeb, will enable us to put our social and ethical life on a scientific basis and to bring our conduct into harmony with a scientific biology.

A REPRESENTATIVE MECHANIST

In a series of books, C. Judson Herrick, a neurologist, has elaborated a thoroughgoing mechanistic interpretation of life and the universe.² He thinks that his explanations will remedy and answer some of the objections to the earlier interpretations of biologists like Jacques Loeb, who had interpreted living processes as physical and chemical systems. Professor Herrick says that mechanistic biology recognizes that vital processes are different from dead mechanisms and does not claim that the behavior of organisms can be expressed in the formulas of inorganic physics and chemistry. He does claim, however, that all living creatures be-

¹ The University of Chicago Press, 1912.

² Charles Judson Herrick: *The Thinking Machine* (The University of Chicago Press, 1932); *Brains of Rats and Men* (The University of Chicago Press, 1926); *Neurological Foundations of Animal Behavior* (Henry Holt and Company, New York, 1924); "Behavior and Mechanism" in *Mind and Behavior*, Vol. 3 of *Man and His World*, edited by Baker Brownell (D. Van Nostrand Company, New York, 1929).

long to the same natural order and are causally related to these inorganic processes.

There are, it is true, different kinds or types of mechanism. What any particular mechanism does depends not only on how it is constructed but also on the situation in which it functions. In living bodies new patterns appear. A living bird can do some things, such as laying an egg and hatching a chicken, that a mechanism like an airplane cannot do. The bird and the airplane are constructed differently. Man is also a mechanism, but he is constructed still differently. He is a machine that can feel and think. "Man is an animal, and mechanistic biology cannot be accepted, even as a working hypothesis, unless it can embrace the whole of human life, physiological, psychological, esthetic, moral. If these last components of our personalities must be excluded, if our scheme breaks down at the finish, as many mechanists seem to believe, then the whole fabric crumbles. The trouble with these naïve mechanists is that they have too primitive a notion of mechanism."¹ Mechanism must take account of all the facts we discover in our world. Awareness and our various conscious experiences may complicate the problem of interpretation, yet they do play a part in our conduct, and we must reckon with them. Mind is a function of the body, some of whose acts are conscious and some unconscious. Man is higher than other living forms because he can take more kinds of things from nature, do more with them, and leave the impression of his life upon nature. "Living mechanisms do it differently from inorganic mechanisms and with much more complicated machinery, that is all."²

We live in a mechanistic universe, and the whole process — "galaxies, planets, rivers, molecules, electrons, plants, animals, men" — works according to natural laws. "With better understanding of the mechanisms of erosion, of species formation, of thinking, of desiring, and of aspiration, we see that all of these things are determiners in a unitary mechanistic cosmos. We have a conception of emergent evolution that has nothing mystical about it. We need no categories which are not related in cause-and-effect series with inorganic mechanisms to embrace all there is in life and in human nature. The unity of the natural order

¹ From Charles Judson Herrick's essay on "Behavior and Mechanism" in *Mind and Behavior*, p. 36, Vol. 3 of *Man and His World*, edited by Baker Brownell. D. Van Nostrand Company, New York, 1929. Used by permission of the publishers.

² Charles Judson Herrick, *The Thinking Machine*, p. 68. The University of Chicago Press, 1932. Used by permission of the publishers.

remains unbroken. But we do need to recognize that the vital patterns of combination of simpler inorganic processes are different and that the conscious patterns are different from the unconscious."¹

CRITICAL EVALUATION

Mechanism as the method of the physical sciences has gained considerable prestige. On the basis of this method, the most exact inductive sciences have built up a body of precise and accurate information. Not only have these sciences made great progress in the direction of mechanistic explanations but related fields like medicine have benefited by the practical use and application of the method. As a science develops, it tends to become more mechanistic rather than less. Men do not feel that they can explain things adequately until they can explain them in mechanical terms. Thus mechanism has appealed to a considerable number of persons as giving a simple interpretation of the universe in line with the scientific temper of the age.

On the other hand, nature does not seem to be as completely determined and as mechanistic as earlier physical scientists had thought. It is not to be compared to the exact and rigid functioning of a machine. Some biologists who prefer the mechanistic interpretation regard the term *mechanistic* as unfortunate because it suggests "machinelike," a concept which is quite inadequate to interpret the intricate processes of living things.² Studies in the nature of the atom, the quantum theory, Heisenberg's principle of uncertainty, and the emergence of new qualities have tended to turn our attention more to concepts such as organism, novelty, possibility, and becoming. These concepts imply a greater degree of spontaneity and freedom than does the concept "mechanism."

Complete mechanistic interpretations arise when the postulates and methods of the physical sciences are taken as the only ones. The mechanist constructs his world view out of the parts of the universe that are objective and can be measured. Then he tells us that this is the only valid view of the universe.

The operation of mechanism may be universal or practically so, yet it may be secondary or only one of a number of possible

¹ Charles Judson Herrick, *The Thinking Machine*, pp. 305-306. The University of Chicago Press, 1932. Used by permission of the publishers.

² See Arthur Ward Lindsey, *The Science of Animal Life*, p. 3. Harcourt, Brace and Company, New York, 1937.

approaches. As a working method in the objective sciences, it may be satisfactory. As a complete and exclusive philosophy of life, it is only an abstraction in that it interprets reality from one narrow point of view and refuses to recognize other points of view. In its more extreme form it is based on the postulates of the physical sciences plus a failure to realize the limitations of those sciences.

2. VITALISM

Vitalism is the view that living organisms owe their organization and distinctive characteristics to some principle or element not found in non-living things. There is a life principle, a capacity, an entelechy — something in addition to the chemical and physical properties — that gives direction to the process. While there are various kinds of vitalism, they all agree that concepts like matter, energy, electronic charge, space, and time as used in the physical sciences are inadequate when we enter the area of the living.

HISTORICAL SKETCH

With comparatively few exceptions, vitalism was taken for granted by all and was not seriously questioned until the time of Descartes in the seventeenth century. In a broad sense, it can be associated with such primitive conceptions as animism, “animal spirits,” and all other theories which view the world as animated and living creatures as possessing a “soul” of some kind.

Aristotle, under the influence of Plato’s Doctrine of Ideas, made a distinction between “form” and “matter.” Form was the organizing, dynamic principle, everywhere present in particular things. The true nature of a thing is constituted by its form. He used the term *entelechy* to refer to the tendency within things to express or to complete their form. In life, entelechy is the realization of form-giving factors in accordance with their own inherent pattern. Entelechies are the “forces of life” which make an organism what it is. The thinking of Aristotle had a profound influence upon the thoughts of men, especially during the medieval period. It still influences us today.

Vitalism remained dominant until about the middle of the nineteenth century. Since then mechanistic interpretations have become popular with many physiologists, biologists, and psychologists. Vitalism, however, has never been without able support-

ers. The writings of Hans Driesch, a German biologist, Henri Bergson, the French biologist who became a philosopher, J. S. Haldane, an English biologist, and William MacDougall, an American psychologist, are well known as supporting theories of vitalism in some form.

A REPRESENTATIVE VITALIST

In a series of books, J. S. Haldane has defended a modified form of vitalism. While he finds objectionable the term *vital force* as used by some vitalists, he stresses the utter impossibility of interpreting life in a satisfactory way as a physico-chemical process. Mechanism, he thinks, directs attention away from clear facts. There is a "regulative principle" which requires suitable physical and chemical processes, but the organism as a whole cannot be defined in terms of those conditions alone.

Vitalism cannot be refuted by measurements of the intake and output of energy in living creatures, as the mechanists seem to think. In the organic world there is a co-ordination of structure and activity that is not found in the inorganic realm. Taking examples from such functions as respiration and reproduction, as well as from the life history of the organism, Haldane maintains that there is a tendency in the organism to maintain activity and to preserve constant the conditions of life in the internal environment. We cannot separate living structure from its encircling environment, as we can in the case of inorganic bodies. Organisms may restore functions after they are disturbed, and in some cases may restore parts after they are removed. Haldane tells us that "in physiology, and biology generally, we are dealing with phenomena which, so far as our present knowledge goes, not only differ in complexity, but differ in kind, from physical and chemical phenomena: and that the fundamental working hypothesis of physiology must differ correspondingly from those of physics and chemistry."¹

Every organism is a "whole" which is more than the sum of its parts. At the level of protoplasm, new qualities, which we have already considered, come into play. To try to interpret life and yet to ignore these things which are characteristic of life is folly indeed. Such a reduction is a mere metaphysical prejudice. The physical and chemical conditions are limiting conditions, it is

¹ From *The Sciences and Philosophy*, by J. S. Haldane, copyright 1929 by Doubleday, Doran and Company, Inc.

true, but they are not the sole causal factors in the realm of life. Some organic processes can be explained only teleologically, or in terms of purpose.

EVALUATION

The fact that the controversy between the mechanist and the vitalist has continued for so many years and is still unsettled probably means that there is some truth on each side. Undoubtedly the study of the physical and chemical conditions which go on in the organism has furnished us with a mass of very valuable information that serves us daily. No one can deny that there are processes in the living creature which for all practical purposes are mechanistic. On the other hand, the vitalist wants to recognize a clear distinction between living and non-living forms. In this he is probably right. We are forced to make these distinctions in order to live our lives. I get into trouble at once if I try to treat my fellows or even my dog as a mere thing.

The contention of the vitalist that the living creature is an organized whole, with considerable power of adjustment and an unpredictable element, is probably sound. There does seem to be a co-ordination of function and structure and a directive tendency that is not found in inorganic processes. A biologist sums up the position of vitalism in this way: "By *vitalism* is meant a directive tendency beyond the inherent properties of mere molecules or chemical elements which manifests itself in and is peculiar to the living organism. Such remarkable adaptive restorations of mutilated embryonic or mature organisms as those just cited, the apparent effort of an organism to maintain its individuality in spite of all disturbing factors, the fact that often the formative processes at work in the development of an organism if prevented from producing a given organ in the usual way may nevertheless produce it by a different method, and other evidences of what seem to be a kind of purposive striving toward an end result, constitute the stronghold of the vitalists. They believe they find evidence of purpose in life-activities and that such activities are inexplicable on the basis of mere physics or chemistry."¹

On the other hand, life is not something mysterious and elusive which cannot be studied as we study other processes and func-

¹ Michael F. Guyer, *Animal Biology*, p. 23. Harper and Brothers, New York, 1931. Used by permission of the publishers.

tions in our world. The biological sciences have made much progress in explaining organisms mechanically, and many workers in this field will claim that only in so far as we are successful in giving a mechanistic interpretation of life processes do we make them intelligible. One biologist puts it this way: "The mechanistic interpretation is essential in biological study, because only those things are within the scope of scientific methods which can be observed and measured and manipulated."¹

3. THE THEORY OF EMERGENCE, OR THE THEORY OF LEVELS

Is there any way out of this controversy which has disturbed the biological sciences for many years? On the one side, we have mechanism and predictability which, if carried to extreme, means that there is really nothing to control. On the other side, we have a vital principle — *élan vital*, or "entelechy" — which seems to evade control and imply a degree of capriciousness. The twentieth century has produced an alternative in the theory of emergence, or the theory of levels. This theory has taken many forms, with some writers preferring the terms *creative synthesis* and *creative evolution*. Supporters of this approach claim that it gives adequate acknowledgment of the mechanistic elements, as well as of the qualities of spontaneity and novelty which we find in the realm of life. Thus they claim that it bridges the gap and solves the main difficulties in the other approaches.

The term *emergence* means that in the on-going process of the universe new qualities or new forms which appear cannot be explained in terms of the previous level. The higher levels bring real additions which are not mere duplications or regroupings of previously existing elements. Out of one level grows something "new," which in turn emerges into something else that is novel. *Repetitive evolution*, in contrast to emergent evolution, holds that nothing really new appears, since each level is merely a more complex arrangement of the same elements that existed previously. From the point of view of emergence, we cannot reduce personality and mind to biological processes or reduce life to physical and chemical processes without loss or damage to the unity with which we began.

According to the theory of emergent evolution, there are new

¹ Arthur Ward Lindsey, *The Science of Animal Life*, p. 3. Harcourt, Brace and Company, New York, 1937.

combinations taking place that give more than the additive result. A synthesis takes place, and new qualities, powers, or activities appear. For example, protons and electrons are organized into atoms, and atoms in turn unite to form molecules. When water, a liquid, emerges from two gases, hydrogen and oxygen, we get a whole range of new qualities which the parts did not have. The most searching study of these separate gases would not have revealed the new liquid. Molecules may unite to form crystals or even living cells. With living matter we get another group of new qualities, such as growth, reproduction, and sensitivity. With the emergence of mind, important new qualities and capacities appear, and these lead to reflective thought and the field of values. The new qualities which appear cannot be interpreted adequately in terms of the previous parts, and, until the emergence takes place, we can never predict just what will happen. Once emergence has taken place, we can repeat the combination and get the same result. There are a countless number of levels. The more obvious ones are electrons and protons, atoms, chemical elements, molecules, crystals, plants and animals in numerous levels, mind, and reflective thinking.

A REPRESENTATIVE OF EMERGENT EVOLUTION

In a number of books and articles, but more especially in his *Emergent Evolution*, C. Lloyd Morgan has set forth a philosophy of emergent evolution that has had a wide influence. He repudiates vitalism because he finds creativity and the emergence of new qualities in the realm of matter, as well as in the realm of life. He prefers to accept the facts of creativity as he finds them. If we talk of vitalism, why not also talk about atomism, moleculism, and crystalism? Likewise, he rejects mechanism as an adequate interpretation because it fails to recognize a creative element operative through all nature. Mechanism rejects the "something more" that we must accept as emergent. Mechanism regards life as an elaborate "regrouping of physico-chemical elements," and it does not recognize a new kind of relatedness which is expressed in an integration of these parts. An emergent is a qualitative change of direction.

At each stage or level there is a new kind of relatedness. There is, however, "no mind without life; and no life without some physical basis." There are matter systems; there are life-matter systems; and there are systems involving mind at various

stages of development. "Life stands to matter in the same kind of relation as mind stands to life."¹

In the child as he develops from birth to maturity, we recognize the development of new powers and capacities which were not in evidence at an earlier period. Likewise, in nature there is an orderly advance and the development of the new. This unexplained emergence of the new introduces no disorder in nature. The new is no less orderly than the old. There is an "orderly constructiveness" in nature. Nature is still in the making.

"Emergent evolution works upwards from matter, through life, to consciousness which attains in man its highest reflective or supra-reflective level. It accepts the 'more' at each ascending stage as that which is given, and accepts it to the full. The most subtle appreciation of the artist or the poet, the highest aspiration of the saint, are no less accepted than the blossom of the water lily, the crystalline fabric of a snowflake, or the minute structure of the atom.

"Emergent evolution urges that the 'more' of any given stage, even the highest, involves the 'less' of the stages which were precedent to it and continue to coexist with it. It does *not* interpret the higher in terms of the lower only; for that would imply denial of the emergence of those new modes of natural relatedness which characterize the higher and make it what it is. Nor does it interpret the lower in terms of the higher."²

What makes emergents emerge? There is a *nisus*, or pull, or evidence of a purpose which is operative in nature. From an emergent point of view, an "alien influx into nature" is rejected. Morgan does accept, however, a vast cosmic tendency and the creative and directive power of God, but this power is immanent, or indwelling, in every one of the multitudinous entities which make up the whole.

The reader will need to ask himself, first, whether he thinks that the recent developments in the physical sciences have weakened or strengthened the position of the mechanist, and whether mechanism, vitalism, the theory of levels, or some other approach is most adequate.

¹ C. Lloyd Morgan, *Emergent Evolution*, p. 29.

² C. Lloyd Morgan, *Emergent Evolution*, pp. 297-298. Henry Holt and Company, New York, 1923. Used by permission of the publishers.

Second, he will need to consider whether the organization characteristic of living things is different in kind from the organization we find in inanimate nature. How real and how fundamental are those distinctions which common sense has made in the past between the different levels, or orders, of nature?

Third, he will need to ask whether life can be studied as if it were one of the constituent elements of the living creature or whether it tends to disappear as the parts are separated for analysis. "Life does seem to be swallowed up in matter; but in view of its apparent directive and selective control over matter, transforming physical energy in its own interests, it does not appear that life is mere matter. In organisms matter seems to be pos-sessed and controlled by life."¹

»» QUESTIONS AND PROJECTS ««

1. A central principle in the philosophy of Albert Schweitzer is "reverence for life," by which he means the whole span of life. He says, "A man is ethical only when life, as such, is sacred to him."² Should we feel under obligation to promote the will to live, and destroy life only when or where it is necessary?
2. Is it possible to know life from without or is life, as some persons claim, something which we can know only from within?
3. We can predict phenomena fairly successfully in the inorganic or physical world. How do you explain the fact that we are unable to predict with the same degree of assurance in the organic realm?
4. Do you think that the development of elaborate mechanisms like the eye are best explained on the basis of mechanism, vitalism, or some directive intelligence at work in nature? See Edwin G. Conklin, *Man, Real and Ideal*, pp. 5ff. (Charles Scribner's Sons, New York, 1943); Henri Bergson, *Creative Evolution*, pp. 76, 88ff. (Henry Holt and Company, New York, 1911); James B. Pettigrew, *Design in Nature* (Longmans, Green and Company, New York, 1908).
5. Comment upon the following statements:
 - (1) "We have passed from a dead universe to a living one."
 - (2) "If man is a mechanism, either all other machines must acquire rights or men can have none."

¹ Walter S. Gamertsfelder, and D. Luther Evans, *Fundamentals of Philosophy*, p. 399. Prentice-Hall, Inc., New York, 1930. Used by permission of the publishers.

² Albert Schweitzer, *Out of My Life and Thought: An Autobiography*, translated by C. T. Champion, p. 188. Henry Holt and Company, 1933.

- (3) "We eat, drink, and reproduce not because mankind has reached an agreement that this is desirable, but because, machine-like, we are compelled to do so." (Jacques Loeb)
6. What criticisms may be directed against the theory of emergence? See William McDougall, *Modern Materialism and Emergent Evolution* (D. Van Nostrand Company, New York, 1929).

Evolution and Its Implications

The term *evolution* in a broad sense means an unfolding, unrolling, or development. It means "that the present is the child of the past and the parent of the future." We hear about the evolution of the stars (astral evolution), of the solar system, of the earth (geologic evolution), of matter or the chemical elements (atomic evolution), of human society (social evolution), of species or living forms (organic evolution), as well as of the evolution of language, of religion, and of ideas and ideals. Some persons have used the term *cosmic evolution*. It is difficult to say whether or not there is universal evolution connecting all the various forms or types of change. Certainly many of the concepts used in one area, like heredity and the struggle for existence in the area of organic evolution, are quite inappropriate when we are talking about other types of evolution. Unless it is understood that we are speaking from some one frame of reference, we should always put some distinguishing adjective before the term *evolution*.

In this chapter, we consider organic, or biological, evolution. In this field the changes which take place are of a different nature from the changes which occur in the other realms.

The story of life on the earth as told by the various sciences is a thrilling one. There are, it is estimated, over 600,000 species of animals already recorded. Probably a greater number remain unknown. Did life originate in each species separately or did it begin in some simple organism from which the present varieties of species have evolved? Practically without exception, scientists and philosophers today accept organic evolution as a fact, since the evidence appears so conclusive. Differences of opinion do exist regarding details, regarding the theories or interpretations of evolution, and as to whether the concept should be applied to

all realms and areas of the universe or only to the realm of animate things.

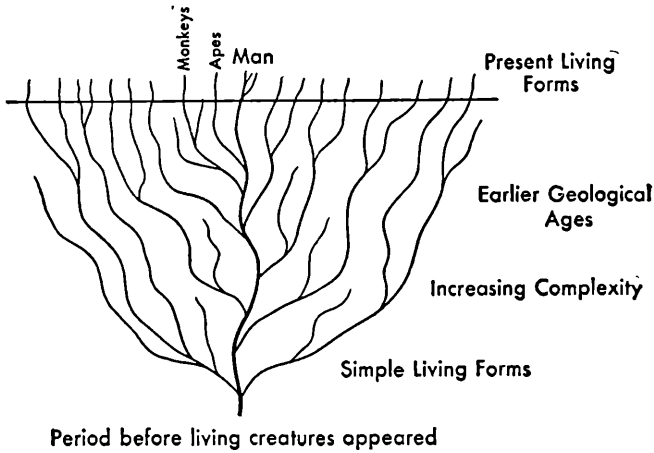
WHAT IS ORGANIC EVOLUTION?

Evolution in the biological sense, or organic evolution, is the doctrine of growth or development applied to all forms of life. It affirms regarding the race what we all know about the individual. Just as the individual comes to his present form as the result of growth and change, so the race and all living forms have come to their present state as the result of an age-long process of development. Organic evolution affirms that the plants and animals we see about us today are the descendants of ancestors which were, on the whole, somewhat simpler. These ancestors were in turn the offspring of still simpler ancestors, reaching back for millions of years to exceedingly low forms of life or to life's beginnings. Evolution is the doctrine that the numerous species of animals and plants have developed by natural descent, with modification, from previously existing types. In general, it claims that life proceeds "from the simple to the more complex" or "from the lower to higher forms."¹ Evolution is the name for this process of change. Evolutionism, or the theory of evolution, is the interpretation of how the process proceeds.

In order to understand clearly what evolution is, it may be necessary to eliminate some rather prevalent misinterpretations of evolution. In the first place, evolution does not mean or imply that all living forms are tending toward man or that any present species is changing into any other species. It does not mean that man came from the monkey or is a "made-over monkey." Man has had a long ancestry, extending back through earlier species of man. The other mammals which exist today have also had a long ancestry. Most students of evolution illustrate the relationships among living creatures by a tree which has many long branches. Once a branch has been separated from the trunk, or main branch, it does not return; it has gone off in a new and separate direction. Existing species are represented by the tips of the branches only. Many of the branches have probably reached "dead ends," so to speak. A few others have died and disappeared in the past. There is no possibility of any present

¹ The term *higher* is sometimes questioned. Here it means increased structural complexity and range of functions or powers.

species of animal giving rise to animals which are in a different evolutionary line. To locate connections and relationships it is necessary to delve into the distant past.



Genealogical Tree of Animals (Oversimplified)

In the second place, *evolution* is not synonymous with *Darwinism*. Darwinism is one explanation of how one species may have arisen from another. A few years ago, when an outstanding scientist said that he did not accept Darwinism, he was quoted, falsely, as stating that he disbelieved in evolution. One may reject Darwin's theory of natural selection, as many do, and still accept the theory of evolution.

In the third place, evolution is not the explanation of life or the origin of life. It is the history of a process, or the descriptive interpretation of how one species was derived from another. Such interpretations may be mechanistic, vitalistic, or teleological; they may be non-theistic or theistic. Just as a knowledge of the development of the individual does not imply any single attitude toward life, so an acceptance of the theory of evolution does not in itself force upon us any single philosophy of life or any one interpretation of the universe.

HISTORY AND THEORIES OF EVOLUTION

The doctrine of evolution originated, as did so many other ideas, with the ancient Greeks. Their views, however, were

largely speculative and deductive. Anaximander, c. 611–546 B.C., thought that living creatures were brought into being on the seashore by the heat of the sun. Man was descended from other kinds of animals. Empedocles, c. 490–430 B.C., said that from the evolving earth came plants and animals and every form of structure. He had the bizarre notion that organs or members of all kinds were developed and brought together later, at which time only the fittest survived. Anaxagoras, c. 500–428 B.C., thought that seeds of life came from a source outside the earth and developed in the moisture under the influence of the sun's heat and the guidance of a directing mind. Aristotle, 384–322 B.C., studied about 500 species of animals and classified them. He recognized development and relationship within species only. He rejected Empedocles' idea of the survival of the fittest. Charles Darwin later paid his respects to Aristotle when he said: "Linnaeus and Cuvier have been my two gods, though in very different ways, but they were mere schoolboys to old Aristotle."

The idea of development within nature and of gradations of living creatures from lower to higher forms is found in the writings of various philosophers. It was not until the nineteenth century, however, and more especially 1859, when Charles Darwin published his *Origin of Species*, that the theory of organic evolution gained widespread acceptance. During the previous one hundred years the ground was being prepared by a considerable group of careful investigators. For example, Linnaeus, a Swedish naturalist of the eighteenth century, had discovered that plant and animal forms could not be rigidly separated when he made a classification of species. Buffon and Cuvier in France had carried on studies in comparative anatomy. Lyell, in the field of geology, had set forth the principle of uniformitarianism, pointing out the universal and uniform operation of causative factors in history. He said that the past must be explained by the present unless there is evidence to the contrary. Erasmus Darwin in England and Lamarck in France had set forth a theory of evolution that is still known as Lamarckianism, or the theory of the inheritance of acquired characters.

LAMARCK: THE INHERITANCE OF ACQUIRED CHARACTERS

Lamarck (1744–1829) was the first man to set forth a theory of organic evolution to account for the transformation of species. He claimed that characteristics acquired by an organism during

its lifetime are inherited by its offspring. In this way changes are brought about. Muscles and organs which are used tend to strengthen and develop, whereas those which are not used tend to atrophy or become weak. For example, animals like the cat which spring at their prey develop strong hind legs; animals which run from other beasts become swift of foot; the giraffe by stretching its neck to get the tender leaves of trees has developed a long neck. If we assume that these slight changes, brought about by use and disuse during the life of the individual, are passed on to each succeeding generation of offspring and that the effect is accumulative generation after generation, we have a possible explanation of how evolution has taken place. This interpretation places emphasis upon the importance of the environment in modifying the organism, although Lamarck also recognized the influence of effort and desire on the part of the individual.

The theory that traits or capacities gained during one's lifetime can be passed on through inheritance to one's offspring is simple to understand, and it has appealed to many persons as reasonable. The fact of social or cultural influence or inheritance is clear, but there is little evidence for such physical or biological inheritance. Consequently, most biologists reject the Lamarckian interpretation.

DARWIN: THE THEORY OF NATURAL SELECTION

Charles Darwin (1809-1882) and Alfred Russel Wallace (1823-1913), working independently, arrived at similar conclusions, which we are now to consider. Because of Darwin's long and painstaking accumulation of evidence, together with his publication of *Origin of Species* in 1859 and of *Descent of Man* in 1871, these views are usually termed *Darwinism*.

To understand Darwin's theory of natural selection, four things need to be recognized and kept in mind.

1. *Heredity*. — Like tends to produce like. This is a clear fact of human experience and observation that seems to operate throughout the realm of animate things. Furthermore, nature is very prolific. Some animals multiply in geometric ratio and would soon fill the earth if all their offspring survived.¹

2. *Variations*. — While an animal tends to produce offspring like itself, no two animals are exactly alike. There are always

¹ For figures of enormous fertility see Michael F. Guyer's *Animal Biology*, pp. 621-622. Harper and Brothers, New York, 1931.

slight individual variations in structure or in function. These variations occur because of organic causes or through mere chance.

3. *A Struggle for Existence*. — Because many more living creatures are produced than can survive, there is fierce competition for life, or a struggle for existence. There is not enough food nor enough space for all.

4. *The Survival of the Fittest*. — Those offspring with the most favorable variations or those best adapted to the conditions under which they must live are the ones that survive. The rest go down in the struggle and do not propagate their kind. Those selected and preserved by nature will bring forth offspring, again with chance variations or modifications. Eventually these changes will give rise to new species.

The entire process described above is known as *natural selection*. Lamarck claimed that the adaptations made by the individual organism in its effort to survive were passed on to offspring, or inherited. Darwin claimed that organisms with the most favorable chance variations survived; hence the only organisms which remained to have offspring were those with the special ability to adapt themselves to their environment. Because of variations in these offspring, certain of them possessed further special ability to adapt themselves, that is, to survive in the struggle for existence. After this process of variation and selection had gone on for a period of many generations, the organisms which survived would differ markedly from those which first struggled to adapt themselves, and a new species would have arisen. In other words, nature (the process of struggle for existence) selects the organisms most capable of adaptation to the environment. Such, then, is Darwin's famous interpretation of organic evolution — the *origin of species by natural selection*.

GERMINAL CONTINUITY AND THE MUTATION THEORY

Since Darwin's time various changes or modifications in the theories of evolution have been set forth. We can take space to explain only two which are of the utmost importance, those connected with the names of Weismann and DeVries. If the reader is not acquainted with them, he will do well to consult biology books on Mendel's law of inheritance and Morgan's elaboration of the *gene* theory.

Weismann, 1834-1914, set forth the theory of germinal con-

tinuity. According to this theory, the germ cells, which are not affected by changes or variations in the body cells, are passed on from generation to generation. The parent is the carrier, or the trustee, of the germ plasm which goes to produce the offspring. The germ cells are subject only to their own variations or mutations and are unaffected by what happens in the life of the parent. This explains why each generation of organisms tends to produce offspring like itself. The germinal material is increased by a process of cell division.

In 1900 Hugo DeVries, a Dutch botanist, published a treatise on "The Mutation Theory" which gained widespread attention and acceptance as an interpretation of evolution, or the origin of species. A mutation is a sudden change or variation which breeds true from the first. The notion that evolution might proceed by abrupt and comparatively permanent germinal changes, instead of by slight variations, was a new idea. The evidence set forth by DeVries has been confirmed and supported by additional evidence, so that the theory has gained wide support.

The views of Weismann and DeVries may be incorporated into the Darwinian theory and the result spoken of as Neo-Darwinism. After mutations occur, as permanent changes in the germ cells, why is it that some survive and others do not? The answer given by the biologist is "natural selection."

THE EVIDENCE FOR BIOLOGICAL EVOLUTION

The evidence for organic evolution has been accumulating for more than a hundred years. The evidence itself cannot be presented in our limited space. All that we can do is list the fields from which the evidence comes and give a few examples. Courses are offered and books have been written dealing with the evidence in each of the eight fields listed.

THE FIELD OF COMPARATIVE ANATOMY

In this field a study is made of the structural correspondence which exists in the great divisions of animals.¹ A comparison is made of the bones, muscles, bodily organs, and tissues. Such comparison shows that the same limb bones and muscles have

¹ See Michael F. Guyer, *Animal Biology*, pp. 521ff. Harper and Brothers, New York, 1931.

adapted themselves to meet a variety of uses as different animals have turned to running, climbing, jumping, burrowing, flying, or swimming. For instance, a resemblance can be traced between the arm of man, the forelimb of dog, sheep, or horse, the wing of the bird, the flipper of the seal or whale, and the foreleg of the lizard. A study of the nervous system or the heart shows an interesting increase in complexity from its early beginnings through numerous intermediary stages up to man.

THE FIELD OF VESTIGIAL REMAINS

Some of the organs in animals, like the heart, are essential to life and are called vital organs. Other organs, like the spleen, may be removed without causing death. A few organs and glands are useless or degenerate. The latter are the vestigial organs. They are organs which are developing and functioning in some lower animal forms, but which have lost their functions or use in later forms. Some examples are the wings of the female gypsy moth, which are never used; degenerate eyes in various cave animals; and the well-known vermiform appendix in man. Such organs, whether now functionless or serving new functions, are taken as clear evidence of an evolutionary development.

THE FIELD OF EMBRYOLOGY

Embryology deals with organisms in the early stage of development from the fertilized ovum. In its individual life history, each individual organism tends to recapitulate or pass through various main stages through which its ancestors have passed in their racial history. In the embryos of the whalebone whale there are rudiments of hind legs and dentition of numerous teeth which disappear before the adult stage is reached. The early ancestors of the whale lived on the land. All higher animals, in their embryonic development, pass through a fishlike stage with gill arches and gill clefts. In the embryos of animals with four-chambered hearts, the heart is first two-chambered, then passes through the three-chambered stage, as in amphibians. The embryos of the different species of animals tend to be alike in the early stages. The lower animals stop their development at certain points, whereas the embryos of the higher animals go on through additional stages.

THE TESTS OF THE BLOOD AND FLUIDS OF ANIMALS

Comparative studies of the chemical constituents of the various fluids and tissues of animals, particularly the blood, show the relationships among the various species of animals. The *precipitation tests* for the blood are the most interesting and convincing. Samples of blood from the closely related higher animals agree in a marked way and can be mixed, whereas an antagonistic reaction is set up if there is a wide separation between the species.

THE FIELD OF FOSSIL FORMS

The science of paleontology deals with the life of past geological periods in so far as it may be studied through fossils, or remains which have been preserved in the earth's crust. Remains of extinct animals which once roamed the earth and of earlier forms of animals that continue to live today have been found. The age of the fossil may be known approximately by the stratum or layer of the earth's crust in which it is embedded. The best known and most complete set of fossils among the vertebrates is that of the horse. His development can be shown from a small animal about eighteen inches in height, through various modifications, to the majestic animal of today.¹

THE FIELD OF GEOGRAPHICAL DISTRIBUTION

This is the study of the location and distribution of the plants and animals in the various parts of the world. It takes account not only of the distribution throughout the various counties, states or provinces, and countries, but also of their distribution in relation to climate, altitude, mountains, valleys, bodies of water, the food supply, and the presence of enemies. For example, oceanic islands, far from continents, which have originated through the elevation of the land from the oceans exhibit flora and fauna that contrast with those of continental islands which have been cut off from the mainland at some time in the past. Both areas show differences from the continental mainlands. Australia affords a good example, since it was separated from the Asiatic continent at an early time (Cretaceous period). At that time the marsupials, animals having a pouch for carrying the young, were prob-

¹ See *The Outline of Science*, edited by J. Arthur Thomson, Vol. 1, illustration opposite p. 101 (G. P. Putnam's Sons, New York, 1922). For a general pictorial representation of fossils in the earth's crust, see the illustration opposite p. 92.

ably the highest animals. Australia contains more old-fashioned relics of these earlier mammals and a greater dearth of the higher mammals than any other large island or continent. There is a break in the development which coincides with the geological evidence. Apparently these facts can be explained only on the basis of the concept of evolution.

THE FIELDS OF DOMESTICATION AND EXPERIMENTATION

These fields seem to be closely related, so they may be considered together. Most persons are aware of the fact that dogs are domesticated wolves or related animals. A great variety of changes in size, form, and appearance have been produced in recent years by selective breeding. New conditions of climate and food supply, as well as of training, have probably played some part. The work of Mendel with the sweet pea and of Luther Burbank with flowers, fruit, and vegetables is fairly well-known. Man is sometimes able to do in a short time what the slower processes of nature might do over a long period.

THE FIELD OF CLASSIFICATION

After attempting other types of classification, the only one that has proved satisfactory and useful to students of living forms is that which groups them according to their fundamental structure. Animals are classified into a dozen or more groups, or *phyla*, with many subdivisions. They are arranged in an ascending order of comprehensiveness, from unicellular organisms to man. It is evident that all living organisms are related in some degree. Furthermore, there are no sharp distinctions between species.

Probably the strongest argument for evolution is the fact that the evidence from the other fields of research dovetails or fits into a single pattern, forming one united whole. While there are still many unknown factors to be determined and much work to be done, the evidence appears to be conclusive.

SOME CRITICAL QUESTIONS

Such, then, are some of the basic facts regarding the scientific theory of evolution. There seems to be little doubt about the fact of evolution. Does it explain everything, or does it leave much unexplained? Does it explain the will-to-live, the insurgency of life, heredity, and why there are variations and mutations to be selected? From a philosophical point of view, natural selection

leaves a great deal unexplained. It does not explain the origin or the nature of life and of mind.

A biologist, pointing out that natural selection is "not the primary factor in evolution," says: "The chief shortcoming of the process of natural selection as a causative agent lies in the fact that the mere act of sifting out the fit by exterminating forms which have varied unfavorably cannot of itself initiate *new* variations. It guides but does not create, since it can operate only after variations have appeared. Whatever it is that causes the variation to appear is plainly the primary factor in evolution."¹

Are we imprisoned sparks of life in a mechanical universe which is blindly grinding out new forms of life to little purpose, or are we only partially alive in a universe which is pulsing with life and striving toward individuality, freedom, social co-operation, goodness, beauty, and truth?

THE PHILOSOPHICAL IMPLICATIONS OF EVOLUTION

The theory of evolution has had a profound effect upon all areas of human thinking. The revolution in the intellectual outlook which it has caused can be compared only to the changes brought by the group of astronomers and physicists of which Copernicus and Newton were members, or to the theories of relativity and matter that have been propounded in recent decades. For many, the concept of evolution is the most far-reaching, since it involves so directly man's status and place in the universe. It involves not only the fields of science and philosophy but man's religious outlook and his educational methods. It has become the basis of research in fields as widely separated as those of history and modern medicine. In this chapter we can merely suggest the main implications for our view of man, the universe, mind and knowledge, ethics and morality, and religion and our concept of God. Succeeding chapters deal with these fields in greater detail.

FOR OUR VIEW OF MAN

Since man is related to all other living creatures and is a part of the order of nature, men are forced to reconsider the whole question of the nature of man and his status in the order of nature. Does evolution degrade man, in that it relates him to the

¹ Michael F. Guyer, *Animal Biology*, p. 632. Harper and Brothers, New York, 1931. Used by permission of the publishers.

animal kingdom, or does it imply a loftier view, in that man seems to be the crowning achievement of a long process of evolution? Is man still the center of things, or is he merely like a dizzy fly whirling on the surface of a "third-rate planet revolving around a tenth-rate sun"? At first, some men thought that the newer views were degrading to man. There are many expressions of this attitude in literature.¹ Others bitterly assailed the theory of evolution and even sought laws to prevent the results of such research from being taught in the schools.² Philosophers and many religious leaders, however, point out that no matter how man came to be, he is no less than what he is — a self-conscious person with unique characteristics, yet to be considered. The nature and character of a thing is determined not so much by its beginnings as by its ends. Man's upward reach gives him his place and his importance.

FOR OUR VIEW OF THE UNIVERSE

The theory of evolution, especially in its larger aspects, has forced man to give up the older notion of a static society in a fixed world. The key words henceforth are more likely to be *change*, *development*, *growth*, and *progress*. There is a tendency to think of "reality" not so much in terms of substance and being as in terms of becoming and process. Numerous philosophies of emergent, or creative, evolution have arisen. When we consider the various types of philosophy, we shall see that they all recognize the concept of evolution but interpret it in different ways.

Modern views of the universe tend to be definitely this-worldly and mainly humanistic and naturalistic in their approach. They think in terms of one world of reality, and the older dualisms tend to disappear. Ultimates, absolutes, and finalities either drop out of the picture or are likely to be kept more in the background. This trend is due not only to the theory of evolution but also to the entire scientific development in recent centuries.

¹ See Stewart G. Cole, *The History of Fundamentalism*, Chapter XII, for a discussion (Harper and Brothers, New York, 1931). See also William A. Williams, *Evolution of Man Scientifically Disproved in 50 Arguments*, published by the author at Camden, N.J., in 1925.

² See "Anti-Evolution Laws," a pamphlet published by the American Civil Liberties Union, New York, in January, 1927; Maynard Shipley, "The Forward March of the Anti-Evolutionists" in *Current History* for January, 1929, and "Growth of the Anti-Evolution Movement" in *Current History* for May, 1930; H. Harbor Allen, "Anti-Evolution Campaign in America" in *Current History* for September, 1926.

FOR OUR VIEWS OF MIND AND OF KNOWLEDGE

According to earlier interpretations, mind was something quite apart from nature. The "spectator view" of mind and knowledge was taken for granted. The "mind" attempts to contact and to know "ultimate reality." Now the problem is to bridge the gap between the mind and its world. The mind is not just an observer outside the process but a growing instrument, developing in the process of evolution. If the world and life are in process of evolution, then it would appear that truth, too, may be growing and changing. More stress is being placed on experimentation and research, tentative attitudes, and degrees of probability.

FOR OUR VIEW OF MORALS AND OF VALUES

At one time morals were thought to be as fixed and specific as the species of animals; but with the coming of the theory of evolution and an emphasis on historical research, it was recognized that there was a history of morality and an evolution of morals to be discovered and described. Instead of an authoritative and fixed system, morality came to be viewed more as a dynamic, progressive discovery of the means and conditions necessary for a well-rounded life for the individual and for society.

Morality is grounded or based on life itself. It grows out of life and its needs, and it matures along with the intelligence and culture of men. As morality becomes reflective, there is a far-reaching and impressive uniformity among the codes of men. Morality shifts its base and emphasis, but it neither declines nor loses its importance.

FOR OUR VIEW OF RELIGION AND OF GOD

The theory of evolution had far-reaching implications for religion. Three possibilities presented themselves to the religious leaders of the modern world: (1) They might attempt to retain the older pre-scientific views of religion and of God and to deny the theory of evolution and endeavor to discredit it. A small and belligerent group took this stand. They affirmed "the faith once and for all delivered unto the saints" and attempted to discredit or to ban the evidence. (2) They might set forth interpretations of religion that preserve religious loyalties without engaging in scientific controversies. In the main this is an attempt to keep the two fields apart. Religion may be said to be concerned with value

judgments, not with factual judgments, or religion may become a matter of personal piety. (3) They might accept quite frankly the theory of evolution, think of the world and life and religion in terms of evolution, and make whatever intellectual adjustments seem necessary. This was the course eventually taken by the majority of religious leaders.

Religion is an evolutionary product, and men are religious because they live in a universe that calls forth in them the religious response. Religion thus comes to be grounded not on outside authority but on the authority of human experience and reason. These in turn are dependent upon the nature of man and the nature of the universe. For the religious man, God is present throughout the entire process. God did not create the first man and then stop. The world is still in the making, and every day is a creative day.

A NEW INTELLECTUAL CLIMATE

The facts presented in Chapters III to VI inclusive show that we are living in a new intellectual climate of opinion. During the last one hundred years, a revolution in human thinking has led to far-reaching changes in all fields of human knowledge. We have presented in broad outlines the scientific view of the universe. We have indicated briefly some of the philosophical implications of these newer views. These implications are developed further in later chapters.

The world in which men live is a fascinating and challenging abode. In addition to the "man-sized world" in which we have lived and thought for many generations, we have recently discovered a universe of vast extent in space and in time, and a minute, invisible world. In all three of these realms we have been impressed with the progressive orderliness of the universe.

Our concepts of "matter," "space," "time," "motion," "energy," and "life" are undergoing changes. Concepts of "relativity," "process," "development," "growth," and "progress" are coming to the fore. These concepts are probably all related to other processes and activities yet to be considered. There is a close relationship and interchange between the organism and its environment. The point of view of the observer or the knower is receiving greater recognition.

The concept "evolution" has played a prominent part in the creation of the modern outlook. Practically all biologists have

come to believe that all living creatures have developed from simple ancestral forms of life, possibly from a single form. While we have given attention to organic evolution, the concept "evolution" has been extended to include many other areas. Changes are known to take place in the physical world and in human society. Whether one considers the physical universe or the world of living things, he gains an impression not only of order but also of change, movement, development, growth. Surely we live in a dynamic world rather than in a static one. Growth appears to be one of its laws. Is the universe a great mechanism to be interpreted by the analogy of the machine? Is it a living whole to be explained by the concept of organism, as A. N. Whitehead suggests? Is the universe operating on the basis of some intelligent purpose, "more like a great thought than a great machine"?

Progress in the realm of living forms expresses itself in structural development, in greater control over the environment, and in greater independence of external conditions. Progress, as Julian Huxley has so effectively pointed out, is "all-round biological improvement."¹ It consists in the ability to achieve higher levels of organization and complexity without blocking the way for further advance. One-sided specializations tend to lead to biological "dead ends." Insects, birds, and other animals have probably reached such dead ends. An unlimited capacity for advance is rare. Progress may now be confined to a single species — man. If this is true, then the direction of progress and the level on which it occurs may be radically changed. There is the possibility that any major advances in the future will be merged into or succeeded by conscious or social evolution.

Science, too, is on the move and is involved in all the changes which are taking place. There is a history of science as well as of living forms and the physical order. The progress of one age is caught up in a new synthesis by a later generation of investigators. Orderliness continues, but it is a progressive orderliness which expresses itself in new forms and which operates on the basis of different categories and principles as it proceeds from level to level. Science has become a dynamic factor in all areas of modern life and thought — morals, religion, art, education, political and social life, and philosophy in general.

¹ Julian S. Huxley, *Evolution, the Modern Synthesis*, p. 567. Harper and Brothers, New York, 1942. See also Huxley's *Evolutionary Ethics*, pp. 36ff. Oxford University Press, New York, 1943.

Let us turn now to a more specific consideration of the relation between science and philosophy.

»» QUESTIONS AND PROJECTS ««

1. After studying the scientific views we have been considering in this and the preceding chapters, one student asked, "Do we have to accept this?" How would you answer such a question?
2. What has been the influence of the theory of evolution on: (1) educational theory and practice, (2) medical theory and practice, and (3) the field of religion?
3. Various lists have been set forth, called the "great steps" in organic evolution. In your opinion, what were the most significant steps? You may wish to consult J. Arthur Thomson's *Evolution*, pp. 21ff. (American Library Association, Chicago, 1931), or *The Outline of Science*, Vol. I, Chapter V (G. P. Putnam's Sons, New York, 1922).
4. How do you explain "orthogenesis," or the fact that variations and hence evolution proceeds in "straight lines" or definite directions? Can that be explained by natural selection, or is there some other law or principle of organic growth?
5. What is your reaction to the objection that some persons raise when the word *progress* is connected with the word *evolution*? Some say that we only think it is progress because we view it from the point of view of man.
6. What is the relation between the theory of evolution and the account of creation in the first two chapters of Genesis? Read those two chapters and list the events as they are related verse by verse. Is there any evidence for two accounts, as many Biblical scholars claim? Note carefully Genesis 1:1-2:4a and Genesis 2:4b-3. Why are different words for *God* used in these two sections?
7. What are some of the effects of laws like the following, which was passed March 21, 1925?
 "Be it enacted by the General Assembly of the State of Tennessee that it shall be unlawful for any teacher in any of the universities, normals, or other public schools in the State, which are supported in whole or in part by the public school funds of the State, to teach the theory that denies the divine creation of man as taught in the Bible, and to teach instead that man has descended from a lower order of animals."

Science and Philosophy

Now that we have seen the marvelous triumphs of modern science in the inorganic and organic worlds and are able to understand the great prestige of science today, it will be well to stop and consider the relation between science and philosophy with greater care. This is necessary for two reasons.

In the first place, many persons have come to claim that science is the *only* avenue to human knowledge, that it is the "sole authentic mode of revelation," and that to know is to measure, to count, or to state things in quantitative terms. Some scientists and a considerable number of young persons who have specialized in some one field or area of science have come to claim that there is nothing else worthy of consideration. Scientific method, they say, has no limitations whatever.

In the second place, there are numerous attacks upon science, or upon what is sometimes called "scientism."¹ Phrases like "the superstition of science" are occasionally seen, and books with titles like *Science, the False Messiah* are occasionally published. These attacks are made more frequently upon the interpretations and the philosophy of the scientist than upon the facts which he observes.

In the opinion of the author, scientific method is a valid method, and it is here to stay. It has brought great gains to our civilization, and it will bring many more in the future. Let us examine more carefully scientific method, some possible limitations of that method, and the relation between science and philosophy.

¹ See Fulton J. Sheen, *Philosophies at War*, pp. 50ff. (Charles Scribner's Sons, New York, 1943), and Hugh Stevenson Tigner, *Our Prodigal Son Culture*, Chap. IX (Willet, Clark and Company, Chicago, 1940).

WHAT IS SCIENTIFIC METHOD?

In a general way, we may say that *scientific method* is a collective term denoting the numerous processes and steps by the use of which the various sciences are built up. More specifically, it is a method of reflective thinking which ordinarily passes through the following six steps:¹ (1) There is a problem. Thinking ordinarily begins when there is some obstacle or difficulty. It may begin when we are curious about something. (2) The available and relevant data are collected. For a simple problem this material may be readily available, but for others it may take months or years of careful investigation to collect it. (3) The data are organized, or analyzed, and classified. There is an attempt to note comparisons and contrasts, and to put the data in some meaningful order. Analysis and classification are basic in scientific method. (4) An hypothesis or hypotheses are formulated. Various tentative solutions may occur to the scientist in the process of analysis and classification. (5) Deductions are drawn from the hypotheses. In reasoning out the consequences of the various tentative solutions, we tend to reason hypothetically. That is, we say, "If such and such is true, then this would follow." This leads to the next step, the final one. (6) An attempt is made to test or to verify some suggested solution or hypothesis, to see if it is true. This may be done by observation, by experimentation, or by checking its consistency with related facts which are believed to be true. If an hypothesis is eliminated as false, we go back and select another hypothesis and proceed as before.

These six steps may be followed wherever reflective thinking is carried on. If scientific method is understood in these general terms, it may be applied to any and every area of human experience. Those who claim that scientific method is limited are usually thinking of the term as applying to a more restricted area, where the material is objective and the results may be stated in mathematical or in quantitative terms. For example, some men working in the natural sciences object to the use of the terms *science* and *scientific method* when applied to the "social studies."

From another point of view, scientific method can be divided into two parts. There is, first, a logical method. This is a method of

¹ In *How We Think*, John Dewey set forth five steps in reflection. These points have been restated many times by various writers. The five steps are included in the six set forth here.

reasoning or of drawing inferences. The logical processes are the same in all the sciences. They are the same in science, in philosophy, and in all clear and accurate thinking. They include such inductive principles of reasoning as the method of agreement, which asserts that "the sole invariable circumstance accompanying a phenomenon is causally connected with the phenomenon"; the method of difference, which varies only one circumstance at a time while keeping all other factors unchanged; and the method of concomitant variations, which deals with the relationship between two phenomena that vary as a result of some causal connection. The reader who is unacquainted with these methods is referred to books on logic and scientific method, where he will find the inductive and deductive methods of reasoning explained and illustrated.

Second, there are the *technical methods*, the methods of manipulating the phenomenon under investigation. This is what many people think of as "science." These methods are many and varied. They differ in the different special sciences. Here will be included the mass of apparatus and equipment, almost without end and constantly growing, which aids in observation and experimentation.

Men working in the natural sciences usually proceed on the basis of some or all of the following assumptions, postulates, or conditions: (1) The principle of *causality*. This is the belief that every event has a cause and that the same cause always produces the same effect. This principle of causality may be carried to a complete determinism or a complete mechanism. It is not necessary, however, to apply the principle in this extreme form. (2) The principle of *predictive uniformity*. This involves the assumption that a group of events will show the same degree of interconnection or relationship in the future as has been shown in the past or the present. (3) The principle of *objectivity*. The investigator must be objective with regard to the data before him. The facts must be such that they can be experienced in exactly the same way by all normal persons. The aim is to eliminate all subjective and personal elements. (4) The principle of *empiricism*. The investigator assumes that his sense impressions are correct and that the test of truth is an appeal to the "experienced facts." (5) The principle of *parsimony*. Other things being equal, always take the simpler explanation as the valid one. (6) The principle of *isolation, or segregation*. The phenomenon to be investigated must

be segregated so that it can be studied by itself. (7) The principle of *control*. Control is essential, at least for experimentation. Otherwise, many factors may vary at the same time, and the experiment cannot be repeated in the same way. If the conditions change while the experiment is being conducted, the results may be invalid. (8) The principle of *exact measurement*. The results must be such that they can be stated in quantitative or mathematical terms. This, at least, is the goal of the physical sciences.

To discuss each of the eight principles is impossible in the space at hand. The principles of objectivity and empiricism are discussed when the problem of knowledge is considered in later chapters. Professor E. G. Conklin raises the question as to whether there can be such a thing as a "purely objective science." He reminds us that there can be "no observation without an observer, no experiment without an experimenter, no classification without a classifier."¹ In the realm of the physical sciences, or of the inorganic, the postulates and conditions set forth above can be met fairly adequately. We can isolate and control and measure with a high degree of success. When we come to living creatures, however, and especially to man and to human society, new and difficult conditions are found. You cannot isolate and control life on its higher levels without altering the nature of that which is to be studied. Separate a person from society and you change the nature of his being.²

THINGS TO KEEP IN MIND REGARDING SCIENCE AND SCIENTIFIC METHOD

Today if we call anything "scientific," the battle is half won, at least in so far as the average man is concerned. Scientists, on the whole, have done their work so thoroughly and so accurately in the past that today there is a strong presumption in favor of any idea that is set forth in the name of science. The sciences have literally remade our world. They have reduced the barriers of time and of space and have made possible so many interesting and useful things that we have almost come to believe that "science" can explain everything and do almost anything.

¹ Edwin G. Conklin, *Man, Real and Ideal*, p. 5. Charles Scribner's Sons, New York, 1943.

² See Hugh Stevenson Tigner, *Our Prodigal Son Culture*, p. 106. Willett, Clark and Company, Chicago, 1940.

The very fact that scientific method is so valuable and has so much prestige is likely to blind us to certain possible errors into which both the scientist and the general public are inclined to fall. Men in all walks of life easily develop "blind spots." This is particularly true of the specialist in any field. Even an exceptionally careful investigator, after completing his research, will sometimes make claims which are unwarranted by the facts discovered.

In our discussion in this section we are thinking of *science* and *scientific method* in the more restricted sense, as the terms are used by most scientists in the natural sciences, where the methods are strictly empirical and objective¹ and the purpose is to interpret the world in quantitative or mathematical terms. We are assuming that scientists may investigate anything with which their methods are capable of dealing. There is no attempt to keep the sciences out of any particular areas of human experience. If there are any limitations, they exist in the nature of the methods and techniques which are used.

If one reads widely in the literature of many of the special sciences, many questions will arise in his mind. For example, why are there "the seven psychologies," each claiming to be the valid approach and to represent the truth? What are the dominant factors in human behavior and in social progress? Are they the geographical factors, or the blood and heredity, or one of various psychological drives, or cultural diffusion, or the economic factors, to mention just a few of the answers? The conflicting evidence and claims are very bewildering.

Are there any principles which, if generally recognized by investigators and by the general public, will help to eliminate some of the "blind spots" and the extreme claims which are often made? The following simple suggestions are presented, in the belief that they will help. Think of them as things to keep in mind when considering science and scientific method.

1. *In scientific research, you can find only that which your method and your instruments are capable of finding.* You can discover only that which is discoverable with the technique which you use. This seems so obvious that one wonders why it is so frequently overlooked. If you use an objective method, you find only that which can be stated objectively. If you proceed on the basis of the postulates of physics and chemistry, you find only that which can be

¹ For the meanings of *empirical* and *objective*, see pp. 94, 181ff., and 195ff.

stated in terms of physics and chemistry. If you get in touch with your friend by means of the telephone, you hear his voice; you do not get all that is there; you get what the instrument transmits, and nothing more. If you investigate an object with a pair of scales, you get its weight. There may be other interesting things about it, but you get only what your instrument and method are capable of giving you.

Sir Arthur S. Eddington's illustration of the elephant is well known.¹ If a student comes across the expression, "an elephant slides down a grassy hillside" in a paper in physics, he knows that he need not pay much attention to this form of expression. When he finds that the elephant weighs two tons, the idea of the elephant is lost sight of and a mass of two tons takes its place. When the slope of the hill is found to be 60° , the hillside is forgotten and in its place the student thinks of an angle of 60° . The idea of the turf is replaced by a coefficient of friction. Similarly for the other data of the problem. Thus the "poetry" is said to fade out of the picture, and we are left with pointer-readings and numbers. If, however, only pointer-readings or their equivalents enter into our scientific calculations, that is all that we can expect to find in the solution of the problem. Eddington emphasizes the view that the subject matter of science consists of pointer-readings and similar indications, and that when we state the properties of a body in terms of physical quantities, we are imparting knowledge as to the response of various measuring instruments to its presence, and nothing more.

In *Modern Science and Materialism*,² Hugh Elliot argues that since there is no place for "spirit" or "purpose" in the subject matter dealt with by astronomers or by physicists, therefore nothing of that nature exists. He says, "No sign of purpose can be detected in any part of the vast universe disclosed by our most powerful telescopes." He concludes that there is nothing but "the physical laws of matter." But should a person expect to find purpose by looking through a telescope?

2. *Scientific classification gives valuable information, but it does not include everything in the subject classified.* Classification³ is one of the

¹ *The Nature of the Physical World*, pp. 251ff. The Macmillan Company, New York, 1937.

² Longmans, Green and Company, New York, 1919.

³ See the excellent discussion of classification in relation to individuality in Burnett H. Streeter's *Reality*, pp. 82ff. (The Macmillan Company, New York, 1926).

fundamental bases of scientific knowledge. We do not know what a thing is until we can classify it or put it into a meaningful context. If a thing cannot be analyzed and classified, it eludes science. The classification, however, depends upon our purpose in making it. Things may be classified in many different ways. Buildings may be classified according to location, type, or valuation. Sick persons may be classified according to their diseases, according to the doctors attending them, according to their ages, races, economic statuses, and so on. It is especially evident in the case of sick persons that classification is a means of dealing with things by the simple device of disregarding their differences. For example, several persons with many different characteristics may all be classed as typhoid fever patients. Scientific classification frequently includes details of the differences by means of subdivisions or subclasses. However, the fact remains that the original classification was based on some one common characteristic. Therefore we are justified in asserting that simple classification treats a group of persons or a group of things that have certain qualities in common as if they possessed only those qualities. The scientist is entirely justified in neglecting the human equation and all non-formula data that do not fit in with his immediate purpose. He should not forget what he has done, however.

3. *There are qualities in wholes that are not discoverable in the parts.* When we analyze an object into its elements or into simple units, these units are not more real than the object or event with which we began. Scientific method is concerned with the analysis of objects into their constituent elements. Some persons are inclined to believe that these simple units have a reality not possessed by the complex object. This may be called the fallacy of reduction. The story is told of a conversation between two well-known Americans, Mutt and Jeff. Mutt asked Jeff if he had heard that water is composed of hydrogen and oxygen. Jeff said, "What! Is there no water in it?" This is an example of the ignoring of the principle of identity. Water is water, not something else.

Scientific analysis and scientific explanations do not alter the facts. They add something to our knowledge; they give us new facts or point out things which we would have overlooked otherwise; but they do not take anything away from the actual world. To explain is not to explain away. To explain the colors of the sunset as electromagnetic vibrations is not to explain away the

sunset, but merely to interpret it, to add to our knowledge of the nature of light and colors.¹

There are qualities in wholes, or totalities, or systems which are not discoverable in the parts. Science advances by a method of analysis. But there are qualities in whole situations which are not discovered by an analysis of any one part of the whole or even of all the parts examined separately. This principle may be more evident in the complex levels of life, but it has been illustrated on the physical level. Water is composed of hydrogen and oxygen, which are gases, with all the qualities and properties of gases. These gases will not quench thirst, nor revive drooping plants, nor freeze at zero centigrade — all of which are things that water will do. Moreover, water is a liquid with the characteristics of liquids.

When we come to the level of life, a new synthesis has taken place. We may call it creative synthesis or what we like. Life may be analyzed chemically, but living forms show new qualities, such as growth, reproduction, and adaptability. Later we find mind and consciousness.

Thus we see that when we analyze things into simple units, it is a mistake to believe that these units are more real than the whole of which they were parts. The real nature of things is found as much in wholes and in qualities as in the elements or parts. The world which any science gives us may be a real world, but it is not the whole world nor the only world. No one can adequately interpret any whole situation without considering it as a whole, as well as knowing its parts and the relations of those parts.

4. *There may be many interpretations of a thing, a person, or an event, each of which is true so far as it goes.* Each interpretation may be true from one point of view. The farmer who sees the boys stealing his apples gets greatly excited. The psychologist describes the state of the man by saying that a stimulus has called forth an emotion. The physiologist explains it as accelerated heart action and increased oxidation. The physicist may explain it by reference to the increased velocity of the molecules in the blood. A bystander may remark that the old boy is angry.² Each is explaining the event correctly, but each uses a different language and symbolism.

¹ In this and in the succeeding point the author has been influenced by the excellent discussion on "The Function of Exploration in Physics," Chapter VI of *An Introduction to Reflective Thinking* by Columbia Associates in Philosophy (Houghton Mifflin Company, Boston, 1923).

² See *An Introduction to Reflective Thinking*, p. 145.

The uncritical attempt to explain everything by one principle or type of interpretation is one of the more frequent fallacies of scientific method. It may be called the fallacy of oversimplification or of hasty monism. It occurs whenever the totality of all things is thought to be exhausted by some one category. Examples of hasty monism would include the monistic explanations of history or of human conduct. Some explain history solely on the basis of climatic changes; others explain history solely on the basis of economic forces; still others refer to biological factors — to mention just a few of the possible interpretations. Human conduct has been explained entirely by glandular conditions, by psychological urges, and by environmental pressures. While these factors are all important, we may well be suspicious of attempts to explain complex events by some one set of concepts.

There are multiple points of view and multiple approaches to our world. The principle of relativity implies the impossibility of discovering the whole truth about the universe or about man with the use of one set of concepts or measuring rods. Truth appears to be of many kinds, and there is more than one window to reality. As one scientist expresses it: "It requires a long-necked observer to see the whole firmament out of one window."¹

5. *When we consider anything that is in a process of development, we find the later stages as real as the earlier stages, and they probably tell us more about the nature of the process.* A prevalent fallacy is that of regarding the earlier in development as the more real. The genetic method "which traces things back to their beginnings" is very useful if it does not cause us to neglect the more advanced stages. Of course, the whole process must be taken into account. We cannot explain later stages adequately or fully in terms of the earlier stages. If we could see the earth as it was millions of years ago, we would be impressed by the fact that no life was present. Later we might see life but no evidence of man. We would say, first, that only mechanical forces were present. Later it would be observed that living organisms were present. Still later the process produced man, with self-consciousness and a degree of intelligence. Here, let us say, is a cell or a union of cells — just a bit of protoplasm with the characteristics of protoplasm. But out of this, under favorable circumstances, may develop a man!

Aristotle once asked how one should study an oak tree. Where

¹ J. Arthur Thomson, *Introduction to Science*, p. 121. Henry Holt and Company, New York, 1911.

shall one start to make the analysis? Shall he start with the acorn or the young sapling, with the tree in its maturity or in its period of decay? Clearly all the processes belong to the conception of the oak tree, and a mere description of its parts or a cross section of it at any one period misses the unity of the organism. For Aristotle, reality was a process of development from potentiality to actuality. The later stages of an evolutionary process indicate most clearly the nature of the force or forces that have been present throughout the process.

6. *The special sciences are dependent upon man's sense organs and upon his general mental equipment.* We may push out the range of man's senses in various directions, by the aid of instruments like the telescope and microscope, but we cannot provide him with new ones nor change their nature. When we observe, it is always with some interest. There is a tendency to see what we are trained to see or expect to see, and this involves our past. After the image or the sensation, we have to move on to inference or to generalization. This involves the logical operation of the human mind. You may say to a friend, "I see that someone is sick at your home." You may have seen the doctor going in and inferred the rest.

Observation and theories develop hand in hand. Different observations give us different theories, and, in turn, different theories lead us to make different observations. Science depends upon the human sense organs and the processes of human reason. The "standpoint of the observer" is increasingly coming to be recognized in all fields of knowledge. Since science is often said to be based on observation and experimentation, it is well to emphasize again that scientific knowledge depends also on assumptions and postulates, and that these in turn rest essentially upon faith.

Many sciences, perhaps all of them, ought to employ objective, quantitative, and mechanical methods because of the greater simplicity and accuracy of these methods. When these methods are used, however, it must be remembered that the sciences are not telling the whole story. Scientific method is one of man's most useful intellectual tools, but like other tools it can be misused. Abuses arise not only when this technique gets into the hands of evil men but also when a man comes to believe that the aspect of nature which he is studying is the only aspect. Remembering the six statements above would help to eliminate some of the more glaring abuses of scientific method.

PHILOSOPHY IN CONTRAST TO SCIENCE

To present a simple, clear-cut statement of the relation between philosophy and science, indicating the agreements and differences, is not an easy task. This is due in part to the fact that the differences are largely those of degree and emphasis rather than of complete separation. It is due also to the fact that there are different definitions and conceptions of science and different interpretations of the nature and task of philosophy. Scientists do not agree among themselves regarding the nature and limitations of the sciences. Philosophers do not agree regarding the methods and tasks of philosophy. For example, in a very broad sense, science may be interpreted as any classified and systematized body of facts in some particular area. From this point of view — more frequently found among writers in continental Europe than in the United States and among the British — even subjects like ethics and theology may be called sciences. Most persons working in the special sciences, however, define *science* as a method of objective thinking where the purpose is to describe and to interpret the world so that it may be stated in exact and quantitative terms. The term thus means knowledge that has been gained through observation, experimentation, classification, and analysis. Science aims to be objective and to eliminate the personal or human element, in so far as possible. We are using the term *science* in the more limited sense as it is used by most men working in the special sciences. The purpose of science is to obtain knowledge of the facts, the laws, and the processes of nature.

Philosophers, as we have said, differ among themselves regarding the meaning and task of philosophy. From a narrow point of view, philosophy is a special science dealing with logical method or with the logical analysis of language and meanings. Philosophy may be considered the “science of sciences,” whose main task is the critical analysis of the assumptions and concepts of the sciences and possibly the systematization or organization of knowledge. From a broader point of view, philosophy attempts to integrate man’s knowledge from the various areas of human experience and to set forth a comprehensive view of the universe and of life and its meaning. This interpretation of the field of philosophy neither excludes the function of critical analysis mentioned above nor limits philosophy to any one subject matter. We are using the term *philosophy* in this broader sense.

WHEREIN DO PHILOSOPHY AND SCIENCE AGREE?

There are various points of agreement between philosophy and science. During the last few centuries philosophy has developed in close association with the special sciences. Many of the outstanding philosophers have made important contributions in the sciences. For example, Leibnitz shared in the discovery of differential calculus. The contributions of A. N. Whitehead and Bertrand Russell to mathematical theory are well known. Both philosophy and science use the methods of reflective thinking in their attempt to face the facts of the world and of life. Both exhibit a critical, open-minded attitude and an impartial concern for the truth. They are interested in organized and systematized knowledge.

WHEREIN DO PHILOSOPHY AND SCIENCE DIFFER?

The contrasts between philosophy and science represent tendencies or points of emphasis, not absolute distinctions. Whereas the sciences deal with restricted or limited fields, philosophy attempts to deal with the whole of experience. Philosophy is thus inclusive rather than exclusive, and it attempts to include what is common to all fields and to human experience in general. Philosophy thus attempts to gain a more comprehensive view of things. Whereas science is more analytic and descriptive in its approach, philosophy is more synthetic or synoptic, dealing with the properties and qualities of nature and life as a whole. If it can be said that science attempts to analyze the whole into its constituent elements or the organism into organs, philosophy can be said to combine things in interpretative synthesis and to seek the total significance of things. Whereas science tends to eliminate the personal factor and to ignore values in its drive for objectivity, philosophy is interested in personality, in values, and in all realms of experience. If we say that science is interested in the nature of things as they are, philosophy may be said to be interested also in the ideal possibilities of things and in their worth and meaning. To observe nature, to construct means, and to control processes is the aim of science; to criticize, evaluate, and co-ordinate ends is part of the task of philosophy.

Both science and philosophy are interested in the explanation and meaning of things. In science, however, the emphasis is more upon a description of the laws of phenomena and upon causal re-

relationships and meanings. Philosophy is interested in "why" as well as "how," in questions of purpose, and in the relation between particular facts and the larger scheme of things. Science employs observation, experimentation, and a classification of the data of sense experience. Philosophy, because of the nature of its problems, relies largely upon reflective thinking or reasoning. Philosophy seeks to relate the findings of the sciences to the claims of religion, morals, and the arts.

The extreme rationalist, who stresses reason as the important or central factor in knowledge, will make a more complete separation between science and philosophy than we have made. He may wish to confine the term *science* to the description of the data of sense perception. Philosophy, on the other hand, by means of reason, he believes, is capable of discovering irrefutable knowledge apart from sense experience.¹

WHAT IS THE CONTRIBUTION OF SCIENCE TO PHILOSOPHY?

Science supplies philosophy with a large amount of factual and descriptive material which is essential in the building of a philosophy. The philosophy of any period tends to reflect the scientific outlook of that period. Because of this fact, we have examined the current scientific views of the universe and of life in the last four chapters. Science exerts a check upon philosophy by helping to eliminate such ideas as are incompatible with scientific knowledge.

WHAT IS THE CONTRIBUTION OF PHILOSOPHY TO SCIENCE?

Philosophy takes the piecemeal knowledge given to us by the various special sciences and organizes this material into a more complete and integrated view of life and the world. In this connection the very progress of the special sciences makes philosophy necessary, since the discovery of new facts and relationships forces men to revise their interpretations not only in the sciences, but also in most other fields. This has been illustrated in previous chapters. For instance, the acceptance of the concept of evolution forced men to revise their thinking in nearly all areas of knowledge.

A further contribution of philosophy to science is the criticism by philosophy of the assumptions and postulates of the sciences

¹ See Chapter XII, pp. 178ff.

as well as a critical analysis of many of the terms used. We have already examined briefly such concepts as matter, space, time, and evolution.

Let us emphasize again that the differences between science and philosophy are in considerable part differences of degrees and of emphasis. In all serious thinking, the processes of analysis and synthesis are combined. Many scientists are also philosophers. Philosophers are trained in the scientific method and often pursue special interests in some of the special sciences. Both philosophers and scientists gain perspective as they come to understand and to appreciate all of the main areas of human interest and aspiration.

There are two possible sources of misunderstanding that we need to consider. The first is that there is something very separate, definite, or distinct that is labeled "science." There is no *science* in general, except as the term is used collectively to denote the various natural sciences or the body of facts which they have accumulated. No investigator is a scientist in general; he is a specialist in one of many fields. There are a great many special sciences whose fields overlap. The special sciences are different paths through or different angles of vision of the same world of nature. These special sciences are to be distinguished not so much by separate areas or by separate subject matter as by the units, the classes, the categories, and the concepts under which they think of that subject matter. For example, many of the special sciences deal with matter, with animal life, and with man. Because each scientist is a "specialist," working in a special science, he frequently feels justified in neglecting to consider the relationship of his field to other fields, the conclusions arrived at in fields other than his own, and the nature of the total world in which he lives.

A second source of misunderstanding is that there are some secrets or methods of obtaining knowledge which are not open to people in general. Neither the scientist nor the philosopher has any such secrets or ways of obtaining knowledge. Science differs from ordinary common sense in that it is more critical, more penetrating, and more controlled and exact in its observations and analyses. We all use observation, but the scientist is trained to observe more carefully, at least in his particular field. We all use the trial-and-error method and we all experiment at times, but the scientist is more rigorous in the steps and methods he uses.

He takes special care to guard against errors. He is trained in the accurate use of instruments. He usually has a knowledge of the history of the field. He knows the progress and the mistakes which have already been made; thus he is able to avoid many blind alleys and the mistakes of the past.

THE TASK OF PHILOSOPHY

Apparently there are many approaches to an understanding of the world in which we live. There is the approach of the special sciences, which we have been considering. There is the approach of religion, which stresses love, righteousness, reverence for what is greater or better than one's self, and confidence in the friendliness of the universe. There is the insight of the artist, who enriches our lives through his disclosure of the nature of beauty and the aesthetic aspects of experience. There is the comprehensive view of life and of the world as set forth by the philosopher. Let us conclude this chapter with a summary of the aims and task of philosophy.

1. To Get a View of the Whole. — Philosophy attempts to combine the results of the various special sciences into some kind of consistent world view. The philosopher wishes to see life, not with the slant of the specialized scientist or the businessman or the artist alone, but with the panoramic view which recognizes the totality of things. In speaking of "speculative philosophy," which he distinguishes from "critical philosophy," C. D. Broad says, "Its object is to take over the results of the various sciences, to add to them the results of the religious and ethical experiences of mankind, and then to reflect upon the whole. The hope is that, by this means, we may be able to reach some general conclusions as to the nature of the universe, and as to our position and prospects in it."¹

2. To Discover the Meanings and Values of Things. — Philosophy is interested in the qualitative aspects of things, and especially in their meanings and values. It refuses to disregard any authentic aspect of human experience. Life forces us to make choices and to act on the basis of some scale of values. Philosophy seeks to formulate these meanings and values in the most reasonable way.

¹ Charlie D. Broad, *Scientific Thought*, p. 20. Harcourt, Brace and Company, New York, 1923. Used by permission of the publishers.

3. *To Analyze and Criticize the Assumptions and the Concepts of the Special Sciences and of Everyday Living.* — We have already listed some of the assumptions and postulates of the sciences, and have raised questions regarding the meaning of such terms as *matter*, *energy*, *space-time*, *life*, and *evolution*. What can we believe regarding man, mind, good, evil, happiness, truth, God, and other concepts used in the quest for the fulfillment of life?

»» QUESTIONS AND PROJECTS ««

1. One of his friends sent Luther Burbank some squash seeds and bean seeds and some kernels of corn that had been found in an Arizona cliff dwelling. There were two ways of examining them. One way was to analyze them. Another way was to plant them and see what they would become. Discuss possible ways of studying these seeds and the implications of the different methods. Mr. Burbank thought that any sane student of plant life would take the second course. A seed is not only what it is but what it may become.
2. In his *Introduction to Science*,¹ Chapter I, J. Arthur Thomson discusses the scientific mood and contrasts it with the practical mood and the emotional mood. In his *Introduction to Philosophy*,² Chapter I, E. S. Brightman discusses the philosophical spirit or mood. Contrast and discuss these different moods. Are there still other moods that you can distinguish?
3. What is meant by "common sense" ("The Philosophy of the Unphilosophical")? What is the relation between common sense and science? You may wish to consult G. Watts Cunningham, *Problems of Philosophy*, revised edition, pp. 6-32 (Henry Holt and Company, New York, 1935).
4. What distinguishes any hypothesis from a guess or a speculation? What are the characteristics of a good hypothesis? See Edwin A. Burt, *Principles and Problems of Right Thinking*, revised edition, pp. 81-91 (Harper and Brothers, New York, 1931); Harold A. Larrabee, *Reliable Knowledge*, pp. 197-211 (Houghton Mifflin Company, Boston, 1945).
5. Show by some examples how persons, in their daily experiences, occasionally use the six steps of reflective thinking that are set forth in this chapter.
6. What are some of the differences between a statutory law and a scientific law? Why do persons never revolt or stage an uprising against

¹ Henry Holt and Company, New York, 1911.

² Henry Holt and Company, New York, 1925.

scientific laws? An amusing instance of confusion in this field is the phrasing of a news item from Germany during World War II. According to reports, Hermann Göring had ordered hens to increase their egg production from 90 to 140 per annum. Those failing to comply were to be killed and eaten.

7. Discuss the following statements:

- (1) "Even the most 'unprejudiced' science is imbedded in philosophy — sometimes in a philosophy that is not very sound or consistent."
- (2) "If science could tell with certainty all that it is capable of telling, it would still leave our most pressing questions unanswered."
- (3) "The tools of science are observation and experiment; the tools of philosophy are discussion and contemplation."
- (4) "If a scientific age is to be a good civilization, it is essential that increase in knowledge be accompanied by increase in wisdom or in a sense of human values."

»» PART TWO ««

MAN AND HIS PLACE IN THE WORLD

What Is Man?

According to John Ruskin, every man must ask and attempt to answer three questions: "Whence did I come? What am I? Whither am I going?" A famous remark of Socrates is "Know thyself." Too frequently, perhaps, we have gone to the white rat or the guinea pig in our attempts to study behavior, forgetting that "the proper study of mankind is man." Studies of life on the subhuman levels have brought us valuable information, but they fail to recognize man's unique or distinctive nature. Man is a curious creature. He appears to be a part of nature and to partake of nature's ways. He also appears to transcend or to rise above nature and to exercise considerable control over it.

SCIENTIFIC INTERPRETATIONS OF MAN

The modern scientific interpretations of man are many and varied, depending upon the special science to which we turn. Certain facts are quite generally accepted in these sciences, however. First, man is a part of the physical order of nature, and he must obey physical and chemical laws, as do other organisms. Like other objects, he has size, weight, shape, and color. He occupies space and time, and the laws of nature, such as the law of gravitation, apply to him as to other physical objects. There is a continuous interchange between man's body and the environment. Certain specific conditions must be met for life to go on. Man absorbs foreign substances into his body and changes them into his own substance. Chemical changes take place during breathing and digesting, and in the processes of glandular action. When man is analyzed, the same chemical elements are found in him as are found in air, water, earth, and stars. Thus, for some of the sciences, man is a physical and a chemical being.

In the second place, from another point of view, man is said to be one of the animals. He is one of nearly a million species of animals that live on the surface of the earth. As in the plants and other animals, the unit of his body is the cell. He has many characteristics in common with other animals. He eats, grows, reproduces, is sensitive and adaptable, and moves about. He carries on most of the same functions, and he exhibits the characteristics of living creatures, as discussed in Chapter V. Bone for bone, fiber for fiber, organ for organ, his body bears a close resemblance to the higher animals, and he is part of the age-long process of evolution.

The 2,000,000,000 men and women now living on the earth are sufficiently alike to warrant their classification as a single species, *Homo sapiens*. Modern peoples are often divided into five racial groups: the white, or Caucasian; the yellow, or Mongolian; the black, or Negroid; the brown, or Malaysian; and the red, or Amerind. According to Professor Conklin,¹ there is widespread agreement among the students of racial groups that all the existing races of men have had a common origin at some distant time in the past, and that the different races have developed from a common source as the result of mutations and separation by geographical barriers. All living races are so much alike that they can and do intermarry and produce fertile offspring. There is no justification for the claim that all the individuals of some races are superior or inferior to all the individuals of another race. There are superior and inferior individuals among all racial groups.

Modern man, according to the scientific accounts, has been on the earth some 20,000 or 30,000 years, possibly much longer. Before that there were other species of men, or near-human ancestors, whose existence can be traced back for hundreds of thousands of years. This is a fascinating story, but one which we must omit here.

PHYSICAL CHARACTERISTICS THAT SET MAN APART

When it is asked how it is that man occupies such a unique place among living creatures, and how his special powers are to be explained, we are told that there are certain physical characteristics that set man apart from other higher animals. These in-

¹ Edwin G. Conklin, *Man, Real and Ideal*, p. 24. Charles Scribner's Sons, New York, 1943.

clude: (1) His erect posture. Man's upright posture frees the arms and hands for exploration and manipulation. Whereas other animals must scratch, smell, taste, or bite, man may handle objects. The sense of sight comes into greater prominence and use. The sense of smell tends to recede. (2) His free fingers and thumb, and the rotation of the arm. The free flexible fingers and thumb enable man to oppose the thumb to the other four fingers in grasping objects. The well-developed collarbone, which permits the rotation of the arm, gives greater freedom and enables the arm to cover much more territory than the forelimbs of many animals do. The forelimb of the dog is stiff and limited in range in comparison with the arm of man. Because of this flexibility, man is a manipulator, a tool maker, and an inventor. (3) His larger brain and head and more highly organized and intricate nervous system. Not only is man's average skull capacity about three times the average skull capacity of the largest anthropoid apes, but in man the greatest development is in the cerebrum, the seat of the "higher mental processes." This enables more varied and subtler behavior on his part.

SOCIAL CHARACTERISTICS THAT SET MAN APART

The social studies are interested in man neither as a physical and chemical process nor as a biological organism, but as a human being in his relations with other human beings. Man, his customs, his institutions, and his "problems" are the center of attention.

There are certain social and cultural characteristics that set man apart from other higher animals. These include: (1) Articulate speech, oral and written language, or the use of symbols. The spoken and the written word are the principal vehicles of culture. They keep the past alive and continuously feed memory and imagination. Language, in its various forms, is the instrument of both personal and social communication and is an essential basis of human society. (The invention of writing, according to some social psychologists, enabled man to pass from barbarism to civilization.) (2) Inventions and great cultural advances. These include the discovery and use of such things as fire, metals, tools and machines, and social organizations of numerous types. These physical and social inventions mean the possibility of a larger and fuller life in ways too varied to mention. (3) The growth of co-operation and fellowship in larger and larger units. Co-operation among

individuals and groups is essential for the development of the institutions of agriculture, industry, education, science, government, and religion. In this development specialization and integration, or organization, have gone hand in hand. Human progress appears to depend upon the ability of men to co-operate in larger and larger groups. Social co-operation is one condition for a good life in an interdependent society.

HOW ADEQUATE ARE THESE SCIENTIFIC INTERPRETATIONS OF MAN?

Man is being studied in a great many different ways and from many different points of view, and many different interpretations are the result. The special sciences study man as a physical object, as a complicated animal, as a stimulus-response mechanism, and as a social problem. They give us valuable and expert information regarding segments of man's life. Knowledge of our metabolism, our allergic sensitiveness, the Mendelian law of inheritance, defense mechanisms, and our intelligence quotients is important. The special sciences bring us a mass of technical knowledge which we could not gain by other methods. This information, as has been pointed out, is related to our everyday experiences somewhat as a road map is related to the country through which one travels. "Just as the road maps have to leave out colors and smells of the countryside, and pleasures and discomforts of the tourists, so the scientific diagrams of human nature and behavior leave out most of its color and smell, and all of its individuality."¹ In attempting to be objective, impersonal, and quantitative, the sciences emphasize parts of man and of his life and ignore other parts. There is no objection to this procedure if the investigator does not forget what he has done. The scientific elimination of what is personal means, not that the person does not exist and count, but that he is lost in the study or eliminated before the study gets under way.

To limit human experience to one or even a few of its segments is unphilosophical, since philosophy seeks completeness and a comprehensive answer to its questions. Interpretations of man in terms of "libido" or sex striving, as with Freud, as a "beast of prey" with Spengler, or in terms of economic processes, as with Marx, are not totally false but are extremely lopsided.

¹ Robert Lowry Calhoun, *What Is Man?* pp. 2-3. Association Press, New York, 1939.

MAN AS A PERSON

In addition to the natural sciences and the social studies, we need to take into account the testimony from other fields of knowledge. Human history past and present, philosophy, religion, and the humanities — including the arts and literature, biography, novels, and drama — disclose important aspects of man's nature. They enable men to know more about human existence and to gain an insight into the meaning of their own lives. Much insight can also be gained through intimate association and fellowship. Those who work and play with persons day after day come to know much regarding life and human nature. Feeling, striving, believing, and aspiring may be irrelevant to a strictly scientific approach, but they are central in the lives we live.

There are other factors in connection with "man as a person" that need to be considered:

1. Self-consciousness. — While animals are conscious, only man is self-conscious. This quality is the basis of personal and social responsibility. It makes possible memory, imagination, and the whole range of meaning. Man not only is conscious, but he is conscious of the fact that it is he who is conscious. Memory and imagination make possible foresight and creativeness. The philosopher Fichte is said to have given a party when his young son first used the pronoun *I*. It meant the dawn of selfhood with a wide range of powers.

2. Reflective Thinking, Abstract Thought, or the Power of Generalization. — While animals can form percepts, apparently man alone can form concepts, so that he can deal with the abstract and the ideal. Reflective thinking enables man to carry on the trial-and-error process internally, and to distinguish between the true and the false. It enables him to retain the past, to extend himself into the future, and to live in a new world of meanings. The following chapters consider man's mental powers in detail.

3. Ethical Discrimination and the Power of Choice. — Man is a person with considerable power of choice. In the light of "what is" he says "what ought to be." His conscience, his sense of "ought," his eternal restlessness are the hope of mankind. While he is partly determined, he is also partly free. Moral progress usually comes through the insights of conscientious and creative individuals.

4. *Aesthetic Appreciation.* — Man not only can appreciate beauty in the world about him but can also create beauty. In the field of art, the human spirit exhibits the range and depth of human appreciations and insight.

5. *A Unity and an Ability to Transcend or to Rise Above the Particular Conditions in the Midst of Which Life Is Lived.* — There is a center of unity, involving all the qualities or powers mentioned above, which persists through the various experiences of life, and which man designates as “I,” or “me,” or the “self,” or the self-conscious “person.” There are many more technical terms, like Kant’s “transcendental unity of apperception,” but we shall use those which are more familiar in everyday speech. Man is part of the flux of events in nature, but he is conscious of the fact that he is so involved. Consequently, he is not totally involved. He rises above the flow of events to some extent. He frames ideals and strives after them. He distinguishes between the real which now exists and the possible which he may bring into existence.

There are some things that can be counted, measured, and expressed in mathematical formulas. There are other things that are directly experienced and that do not lend themselves to quantitative measurements. The self, or the person, is of this latter type. Self-knowledge is probably the most direct and immediate knowledge we have.

MAN’S NATURE: UNITARY OR DIVIDED?

If in our study of man we do not limit our attention to some one segment of man’s life, we discover that man is a creature of apparent contrasts and contradictions. One writer speaks of “the paradoxical position of man, half-animal and half-angel.”¹ The great literature of the race represents man as struggling with a divided nature. In early Greek mythology we get pictures of creatures who are half men and half beasts. Centaurs had the heads of men but the bodies of beasts. A mermaid was pictured with the upper part a woman and the lower part a fish. Plato thought of man as an inhabitant of two worlds: one, the present but changing world of things; the other, an eternal world of ideas, ideals, and spirit.

The early Hebrew writers pictured the world and man’s life as

¹ Charlie D. Broad, *Five Types of Ethical Theory*, p. 284. Harcourt, Brace and Company, New York, 1930.

a battleground: "He that ruleth his spirit is better than he that taketh a city." Paul, writing in the New Testament, had many different terms for describing it, and we see him struggling with a divided personality. Augustine, one of the Church Fathers, wrote about the City of God in contrast to the earthly city. The two cities seemed to operate side by side, and life was a struggle between two sets of influences and forces.

Under the influence of the biological sciences, modern man is likely to explain the tension in man's life as due to the pull from his animal ancestry, in contrast to his higher aspirations, which come with the development of his higher powers. On the one hand, man is a child of nature and in continuous interaction with his environment, an animal living a precarious existence on a small planet. On the other hand, he is a self-conscious person, a spirit who stands outside nature. He is nature's rebel, who refuses to accept conditions as he finds them.

From one point of view, man is a creature of necessity, determined by the forces of nature and by his biological impulses. From another point of view, he transcends those natural processes and manipulates them according to his will. In referring to these elements in the nature of man, Reinhold Niebuhr says, "To the essential nature of man belong, on the one hand, all his natural endowments and determinations, his physical and social impulses, his sexual and racial differentiations, in short, his character as a creature embedded in the natural order. On the other hand, his essential nature also includes the freedom of his spirit, his transcendence over natural process, and finally his self-transcendence."¹

Man may live his life on the biological level, where he seeks to satisfy his animal appetites and desires, or he may live it on the distinctly human or personal level. Unless he consciously seeks to live on the higher level and maintains deep-rooted ideals of personal honor and responsibility, he is likely to revert to the animal level. "It is within our power to will and to attain complete selfhood; as it is also our privilege, if we so desire, to suppress the unifying and orienting impulses that reside in the forebrain and to sink back to the biologic level. In this case we become animals, veneered with conventional conduct-reactions that enable us to keep our place in respectable society, but animals none the less.

¹ Reinhold Niebuhr, *The Nature and Destiny of Man*, Vol. I: *Human Nature*, p. 270. Charles Scribner's Sons, New York, 1941. Used by permission of the publishers.

We then find the satisfactions of life in sensation. We engage in the scramble for wealth and social position and power for the 'kick' we get out of it and for the further pleasures their possession brings; we cease to be concerned with ideals and moralities, with the problems of personal growth and social progress."¹

THREE INTERPRETATIONS OF MAN

There are three rather distinct interpretations of man: the classical, or rationalistic, view of man, inherited largely from Greece and Rome; the Hebrew-Christian view of man, which comes largely from Palestinian sources; and the naturalistic, or biological, view of man, which is largely the product of the natural sciences as they have developed during recent centuries. There are various subdivisions, adaptations, and transformations of these views. They are often combined, as, for example, in the medieval synthesis of the Hebrew-Christian and the classical traditions. The thinking of the man of today may contain strains from all three attitudes. Some individuals and groups, however, adhere fairly closely to one or another of these interpretations.

THE CLASSICAL, RATIONALISTIC VIEW OF MAN

According to this view, inherited in the main from Greece and Rome and revived in a slightly different form during the Renaissance, man is a rational being. For Plato, reason is the highest part of the soul and is destined by a divine right to rule the body. It is independent and immortal in its essential nature. Only reason is able to penetrate to the very nature of things. For Aristotle, also, reason is the highest faculty of the soul. It is man's prize possession which sets him apart from the rest of nature. For the Stoics there is a cosmic reason, or *logos*, which pervades all things. The ideal person is the wise man who suppresses his emotions and governs the world by controlling himself. The reason must check the testimony of the senses, since the "assent of reason" is central in human knowledge.

According to this classical interpretation, man is to be understood primarily from the viewpoint of the nature and the uniqueness of his rational powers. Mind is the unifying and organizing principle which is to be distinguished from the body. Reason is

¹ Albert Edward Bailey, *Art and Character*, p. 67. The Abingdon-Cokesbury Press, Nashville, Tenn., 1938. Used by permission of the publishers.

the pride and glory of man. The intelligent man is the virtuous man. (To know the right is to do it, Vice is the result of ignorance. The goal of human effort and progress is the supremacy and the perfection of reason in man and in society.

While the classical view of man is optimistic, especially in its confidence in human reason and in its view that the intelligent man is virtuous, there is an undertone of melancholy in Graeco-Roman civilization. Many Greek thinkers were impressed by the brevity and mortality of man. They did not believe that large numbers of men could be among the wise. History had little meaning, since it was viewed as a series of cycles or endless recurrences. A few men like Democritus, Epicurus, and Lucretius interpreted man as wholly a part of nature, but they did not deny the importance of reason; they merely interpreted it in more naturalistic and mechanical terms.

THE HEBREW-CHRISTIAN VIEW OF MAN

According to the Hebrew-Christian interpretation, man is to be understood primarily from the standpoint of his divine origin. His uniqueness is not mainly in his reason nor in his relation to nature. Man is a being created by God and made in the image of God. He stands at the point where nature and spirit meet. The fact that man is a finite creature, bound to the earth, explains his weakness and his sinfulness. The fact that man is in part a spiritual being who transcends nature explains his uniqueness, worth, and almost unlimited possibilities.

This view of man is religious and theological in its general emphasis. It places man in a meaningful and purposeful universe. Man is an expression of the intelligence and moral purpose which is structurally present in the universe. While the orthodox may wish to interpret the expression "made in the image of God" in a literal sense, most persons will interpret it in a symbolical sense. Man transcends the natural conditions of life. He has fellowship with that in the universe which is "life-giving, truth-revealing, beauty-making, and personality-producing." Man does not become himself until he is devoted to the highest that he knows, or to God.

Man is a sinner who is capable of resisting the call to free obedience and to fellowship with God. At best, man lives in a state of restlessness and anxiety. At the worst, he gives way to sensuality, injustice, and egoism or pride. Sensuality is giving

way to one's desires and passions. Injustice is the gaining of some privilege or security at the expense of others. Pride is man's attempt to usurp the place of God; it is seen in man's desire for glory and power. Man's pride may be pride of his knowledge or power or even of his virtue. Man falls into these errors when he loses the center of his life in God.

The view that man is a creature of great value or worth is central in the Hebrew-Christian tradition. Persons are to be ends, never to be used as means. Right is that which develops life or personality. Right is based on the good, and the good is that which has value for persons. This makes the distinction between right and wrong a factual distinction, not a mere matter of opinion, tradition, or custom. The conviction that persons are of great worth is what makes a society possible. It is at the basis of our democratic faith. It is a basic conviction underlying Western civilization.

Man is a creature of almost unlimited possibilities for good or for evil. In his weakness he may fall to the level of the animals and live as one of them. In his strength he may rise to great heights. Man has both moral freedom and responsibility.

Christians stress love or selflessness, or social mindedness, as the supreme virtue or trait of character. They believe that in the life of Jesus of Nazareth men have an expression of the creative good will that is needed for personal and social reconstruction. In Judaism, justice and righteousness are stressed; religion and race are more closely associated than they are in Christianity. For the liberals in both groups, religion is a progressive, historical movement in which men seek to discover the intrinsic values of life. The chief end of man, in the Hebrew-Christian view, is devotion to God.

THE BIOLOGICAL VIEW OF MAN

According to this view, which is naturalistic and does not go beyond the objective "facts" as disclosed by the various sciences, man differs from the other animals only in his "advanced anatomical and physiological complexity." His present state is explained by his natural evolutionary origin. Since this point of view has already been explained, we shall not elaborate upon it in detail but merely point out some of the forms through which it may be expressed. It may take the form of mechanism, asserting that man and all of his activities are determined by the laws of

physics and chemistry. It may take the form of vitalism, attributing the same life principle or energy to all organic creatures, or as a romanticism, which rejects reason and seeks a mystical union with nature. The Marxian view of man, which is naturalistic and materialistic, viewing consciousness as the product of a material organ, the brain, should also be included here.

AN EVALUATION OF THE VIEWS

Modern culture is a synthesis of ideas, ideals, and ways of living which have come from the early Greeks, the Hebrew and Christian leaders and communities, and the scientific progress of recent centuries. The various sciences have furnished us with a mass of facts or descriptive material regarding man's life and relationships. We need more, rather than fewer, such facts in order to live well. The scientific view of man is one which can be accepted. Its deficiency is incompleteness and inadequacy rather than falsity. A merely biological view of man — a physico-chemical interpretation — is insufficient in itself. There is danger that we "reduce" the rich qualities of human personality to the functioning of the biological organism, and then attempt to interpret the organism in terms of physical and chemical action and reaction. The special sciences, with their emphasis upon postulates, such as objectivity, are likely to neglect what is distinctively human about man — his self-consciousness, his power of ethical discrimination, and his sense of freedom and responsibility.

The Greek view of man as a rational being is a sound statement of man's nature and possibilities in so far as it goes. The Greeks conceived of reason in man as a part of the rational structure of the universe. Reason gives man dignity and is the basis of his demand for freedom. To stress the power of creative intelligence or human mental faculties is not only to describe accurately a distinctive characteristic of man but is also sound social policy. Men tend to do those things or to cultivate those qualities which the group they respect expects them to do. Recently there has been a tendency to emphasize the irrational in man. Interests, desires, and irrational compulsions of various sorts have been discovered to play an important part in life. Because men are not always or even usually rational in their actions, there has been a "retreat from reason." The rise of fascism was only one of the more extreme forms and effects of the disparagement of reason

in man. While men are not merely rational beings, and while no man is completely and consistently rational, man is potentially a rational being. He ought to live more reasonably than he does. He should follow the Greeks in respecting reason and in cultivating it in human society.

The Christian emphasis upon man as a creature whose life has meaning in a meaningful universe, upon the worth and dignity of each person, and upon love and social-mindedness in human relations is sound and is very much needed in our society today. This is not to deny that many earlier theological conceptions of man are out of harmony with a modern world view and need to be revised or discarded. While reason must be stressed as over against every form of irrationalism, reason may be used to promote or to destroy life. Although man is a part of nature and partakes of its ways, he may transcend and control nature and his own life in the light of ideal ends. To say that "living mechanisms do it differently, . . . that is all" is to make a serious understatement. Christianity refuses to reduce personality to nature or to conceive of it as perfect. Man lives at the point where "nature" and "spirit" meet. He has great possibilities both for evil and for good.

We are suggesting, then, that these interpretations of man are not necessarily mutually exclusive. Each one has contributed important insights. They may be combined in a synthesis which avoids the extremes of any one of them. Our interpretation of man, however, is not at an end. In a sense, it is just beginning. The succeeding chapters in this book deal with man and his relationships — mind, freedom, knowledge, world views, values, and the social scene.

THE MEANING OF HUMAN EXISTENCE

While it may be impossible to prove that life is meaningful and significant, the numerous questions which men ask and their search for some meaning in life indicate that they wish life to have meaning. They want to gain order in their lives by gaining a sense of direction. The meaning we place upon human life will depend, in the last analysis, upon the place we assign to man in the universe as a whole, or upon our world view. One of the most searching and revealing questions one can ask of any philosophy is, "What is its interpretation of man?" When the

various types of philosophy are considered in a later section, this question is raised again.

Many writers have been calling our attention to the loss of a sense of meaning in life and to the resulting deterioration of modern society. "Modern civilization has been arrested in mid-flight: its technical advances in saving labor, perfecting automatism, mechanizing the daily processes of life, multiplying the acts of destruction, and dehumanizing the personality have been responsible for this arrest. The rise of the machine and the fall of man are two parts of the same process. . . . Modern man is the victim of the very instruments he values most. Every gain in power, every mastery of natural forces, every scientific addition to knowledge has proved potentially dangerous because it has not been accompanied by equal gains in self-understanding and self-discipline. We have sought to achieve perfection by eliminating the human element."¹

We have been living under the illusion that more automobiles, vacuum cleaners, and electric toasters would bring us happiness and usher in the good life. But without a sense of the meaning and values of life, the human spirit tends to decay. If everything is mechanism or flux or on the same level, nothing matters very much; one thing is as valuable as another. Life becomes valueless, and rights and duties tend to vanish. "The events of the last decade have made it unambiguously clear that human civilization is not identical with the material standard of living. Human civilization is founded on the spiritual and moral values that make man a human being, that lend human life its only dignity and all its savor. Human civilization stands and falls with the fostering of these values, and the material standard of living stands and falls with human civilization. . . . The welfare of man, then, is not identical with the material well-being of the individual nor with the material well-being of the masses. It comprises the *welfare of the idea of man*, of the human element in man."²

There is in man, it appears, a creative urge that is part of or is related to the creative forces of the universe. At times it expresses itself as desire, interest, or will or in some other form of the

¹ Lewis Mumford, *The Condition of Man*, pp. 391-393. Harcourt, Brace and Company, New York, 1944. Used by permission of the publishers.

² Erich Kahler, *Man the Measure*, pp. 621-622. Pantheon Books, Inc., New York, 1943. Used by permission of the publishers.

will to live; it manifests itself in thinking and in conscious processes. It expresses itself on a high plane in the creations and achievements of science, art, philosophy, and religion. If man can gain a sense of his strategic and directive relationship in the general scheme of things, he may gain a new sense of meaning and direction which will give poise and significance to his life.

A contemporary biologist says that "only along one single line is progress and its future possibility being continued — the line of man."¹ If this is true, it means a change in the direction of evolution; at least, it alters the level on which such progress takes place. "True human progress consists in increases of aesthetic, intellectual, and spiritual experience and satisfaction."² If man is not just one animal among many animals but is a self-conscious person who is gaining increasing control and independence, and if the future depends even to some extent upon him, then he may gain a new sense of importance and responsibility.

Human experience seems to indicate that the men and women who attach themselves to worthy tasks to which they can give themselves with loyalty and enthusiasm do find meaning in life. Devotion to something beyond oneself — to an ideal, to a person, to God — gives one a sense of mission. The meaning of life may be to grow, to extend the areas of our awareness, and to co-operate with other persons to help the ideal become actual in human affairs. In another sense, however, we cannot say we have spoken the last word about the meaning of life, because more meaning is created or discovered as we move forward.

»» QUESTIONS AND PROJECTS ««

1. Taking any suggestions you wish to take from the interpretations of man as set forth in this chapter, write an essay entitled "My Interpretation of Man."
2. What, in your opinion, is the most satisfactory interpretation of man's restlessness and his idealizing tendencies?
3. What does a "higher standard of living" mean for most persons today? What do you think it should mean?

¹ Julian S. Huxley, *Evolution, the Modern Synthesis*, p. 571. Harper and Brothers, New York, 1942.

² *Ibid.*, pp. 575-576.

4. Is man's nature being weakened, due to the fact that he has to a considerable extent eliminated "natural selection" and failed to replace it with intelligent or self-conscious selection?
5. Comment on the following statements:
 - (1) "Life can be understood only by living."
 - (2) "We must deal with man as he is with a view to what he may become."
 - (3) "This selfhood has been achieved only and necessarily in a social milieu."
 - (4) "Personality is still a growing factor in the Universe. . . . Its history is marked by the thousands of years, whereas that of organic nature is marked by millions."
 - (5) "There is no wealth but life, . . . no consummation of life except in the perpetual growth and renewal of the human person."
6. Review critically: (1) Robert Lowry Calhoun, *What Is Man?* (Association Press, New York, 1939); (2) Edwin G. Conklin, *Man, Real and Ideal* (Charles Scribner's Sons, New York, 1943); (3) William E. Hocking, *What Man Can Make of Man* (Harper and Brothers, New York, 1942). Report on: (4) Erich Kahler, *Man the Measure*, "The Kingdom of Man," pp. 603-640; and (5) Lewis Mumford, *The Condition of Man*, "The Basis of Renewal," pp. 391-423.

What Is the Mind?

An interpretation and understanding of the mind is one of the most important problems which philosophy has to consider, yet it is one of the most baffling issues. To a considerable extent, the question is under discussion throughout the book. In this and the following chapter, however, we have the subject of mind directly before us and attempt to clarify some of the problems involved, as well as to set forth a few of the main interpretations or theories.

WHY HAS THE STUDY OF MIND BEEN SO DELAYED AND SO CONFUSED?

In the first place, the study of mind, of man, and of social relations in general has received much less attention in the past than the study of the world beyond man. The social studies are comparatively recent, dating from the late nineteenth or early twentieth century. The early studies started with the distant and objective areas and worked toward the near and more intimate fields. Scientific method was applied first to the fields of mathematics and astronomy, then to physics and chemistry, later to physiology and biology, and more recently to the fields of sociology and psychology.

In the second place, the field of psychology has been divided into conflicting schools of thought. Psychology is the special science to which we would normally look for the descriptive material on the basis of which to formulate interpretations of mind; but there is no single psychology, only psychologies. There is no agreement regarding the method which should be used or the subject matter which should be studied. In studying

mind, any one of a number of methods may be used. To what extent can we depend upon: introspection or looking within; the study of objective behavior; the genetic approach through the development of the child or the race; animal behavior; abnormal behavior; physiological mechanisms and processes; psychological tests; and "extra-sensory perception"? Some psychological schools will use certain of these methods and will reject others as worthless. A combination of methods and a receptive attitude toward knowledge gained by any method and from any of these sources might be considered a reasonable approach.

In the third place, it is hard to be objective in this field of study. Furthermore, if we are objective, we may be leaving out the very thing we are trying to study. When we try to isolate mind, it is gone, and we are left with something else. In this respect mind is like the electron, which is disturbed when it is observed; the physicist cannot discover both its location and its velocity. Again, it is like life, which cannot be isolated and viewed as an object apart from the non-living.

There is, then, a real problem as to whether the mind can be an object unto itself. Can mind be both subject and object at one and the same time? The interpreter of the world is trying to interpret himself, and he finds it a difficult feat. The special sciences can ignore the problem by "eliminating the personal factor." A philosopher, attempting to gain an understanding of men and human knowledge, cannot disregard the human mind.

In the fourth place, it is hard to experiment with mind and with man. Try to segregate mind, and lo, it is gone. When man knows that he is the object of experimentation, he is a somewhat different creature. Furthermore, we cannot run risks of injuring or destroying human life. For this reason, much of the experimentation has been carried on with animals. Much valuable information has been gained regarding organic responses and life under certain conditions. But — the animals in the experiment were not human beings.

Valuable experiments have been carried on with human beings. We do not wish to minimize this fact nor to cast any reflections upon the knowledge which has been gained in this way. We do wish to emphasize, however, that there are special difficulties. We cannot always be sure what we have studied, how to interpret the results, or what bearing these results have on our theory of mind.

Finally, there is no agreement as to when or how mind originates in the long process of evolution. The answer to this question will depend largely on our definition of *mind* and upon our world view or interpretation of the universe. If we define *mind* as "adaptive behavior," the account may well begin with the amoeba or some early form of life. There is a gradual increase in delicacy and complexity of reactions as we deal with more complex organisms. But there is no complete break, although today there is a wide gap between man and the species nearest to him. If *mind* were interpreted as "abstract thought," then the account would have to be confined to man. In a discussion of "Mind in Evolution," Charles H. Judd says, "In every normal human being there is an inner world of ideas and of recognition of values, for which inner world of rational thought there is no counterpart in the world studied by the physicist or in life below the human level."¹ Although the study of the development of mind in the animal kingdom is an illuminating one, we shall confine our discussion to mind on the human level.

THEORIES OF THE MIND

In the history of thought, numerous theories of mind are found. Few outstanding thinkers have failed to give some attention to this important subject. To consider the theories in detail would involve a survey of a large part of the history of philosophy. A simple classification can be made under four captions: (1) mind as substance, (2) mind as organic or personal unity; (3) mind as an association of experiences, and (4) mind as a form of behavior.²

MIND AS SUBSTANCE

This interpretation of the mind (or the soul) is that it is a non-material entity which is indivisible and immortal. The source and chief representative of this view in ancient times is Plato: His major interest is man, especially the mind of man. He divides

¹ From *The Nature of the World and of Man*, edited by H. H. Newman, pp. 542-543. The University of Chicago Press, 1927. Used by permission of the publishers.

² This classification was suggested by G. Watts Cunningham in his *Problems of Philosophy*, pp. 262-263 (Henry Holt and Company, New York, 1935). In his *Six Theories of Mind* (The University of Chicago Press, 1932), Charles W. Morris has classified mind as substance, process, relation, intentional act, substantive, and function.

the life of man or the "soul" into three parts. There is, first, the rational part, which is located in the brain. It is a divine essence, or substance, not to be confused with the body which is its prison house. There is, second, the feeling part of man, located in the breast. This is the seat of man's sensations. There is, third, the desiring part, or the appetites, located in the abdomen. This part of man's life has no principle of order. It needs to be brought under the control of the reason.

Mind and body are in close and intimate relationship, but, according to Plato, there is a clear-cut distinction between them. The divine essence is marred to a considerable extent by this contact with matter. The indivisible soul originated in the supersensible world of ideas, beyond this fleeting world of sense experience. It will eventually leave the body and return to its eternal abode.

This interpretation of soul, mind, or reason, set forth by Plato, strongly influenced the thinking of Plotinus and Augustine and through them the Christian Church. The view was widely held during the Middle Ages. In its Platonic form or as restated by Descartes, it permeates much modern literature and thinking.

Descartes, one of the prominent philosophers of the seventeenth century, supported the theory of mind as substance. In serious doubt as to the validity of the knowledge of his day, he decided to cast everything aside and begin anew; to look within himself to see what he could find. The first clear-cut conviction with which he emerged was the existence of the self. His famous saying is *cogito ergo sum*, "I think, therefore I am." Human personality or individuality is a basic fact. We cannot follow Descartes through the various steps by which he came to affirm the existence of the self, of God, and of an external world of matter. The external world impressed itself upon him through his sense organs, and he could not believe that he was being deceived.

For Descartes there are two substances, mind and matter. He makes a clear distinction between them. Mind is immaterial; it is conscious, and its main characteristic is thinking. Since it is a substance, it cannot be destroyed except by God, who is the only self-existent substance. The characteristic of matter is extension. Man's body is a part of the world of matter and is subject to its mechanical laws.

Descartes' explanation of the mind as a separate substance was the beginning of a long development in modern philosophical

and scientific thinking, sometimes referred to as "the bifurcation of nature." The Cartesian dualism of mind and body (or matter) enabled men to interpret the external world in mechanical and quantitative terms and to put all the other aspects of existence in the realm of mind. The separation between mind and matter, soul and body, spirit and flesh has been found among groups at all periods of history.

MIND AS ORGANIC OR PERSONAL UNITY

While Aristotle, the famous pupil of Plato, retained many features of the theory of mind as substance, he moved in the direction of the view we are now to consider. For Plato, ideas are eternal forms whose real existence is in another realm. For Aristotle, forms exist in things or in the world. They are the shaping, organizing, dynamic principles which give order and direction to matter. From this point of view, soul is the life principle, the sum of the processes of life, the active principle of organization. Mind or reason is the highest capacity or function of the soul. In this attempt to integrate mind and body, Aristotle moves away from the position of Plato. He moves closer to the view of the mind as process and function.

Immanuel Kant in the late eighteenth century criticized the traditional view of the mind as substance, a view which assumes that the individual can make his "self" and his "mind" direct objects of knowledge. According to Kant, we know for certain only our experiences. The mind which does the knowing is always the subject and never the object of knowledge.

For Kant there is a unity wherever there is knowledge. Where there is memory, there must be an agent to do the remembering. The organization of experiences in various ways is made possible by a principle or agent of organization. He speaks of the "synthetic unity of apperception" or the "transcendental unity of apperception." There is an organic or personal unity which transcends or surpasses the separate experiences. This unity we call the self. The self, or the soul, is sometimes spoken of as the seat of the forms of knowing. Sometimes the self and the mind are treated as if they were identical.

The mind, for Kant, is active and forms into a system of knowledge all the materials presented by the various senses. According to him, time and space and other categories are forms of the mind which are thrust upon nature. Mind is not a separate men-

tal substance; it is the organization and unity of man's personal experiences.

MIND AS AN ASSOCIATION OF EXPERIENCES

Hume, in the eighteenth century, was a severe critic of the traditional view of the mind as a separate substance. Even before Kant, he attacked the dualism of Plato and Descartes. He did not maintain, however, as did Kant, that there was a personal unity or self. He carried the empirical tendencies to their logical conclusion and attacked both the idea of substance and also the rationalism of his time. All knowledge comes through experience, and the sole content of the human mind is impressions and ideas. Impressions are our simple and elemental experiences. They are lively and vivid, and are seldom mistaken. Ideas are only copies of impressions. When we look within, we find only these fleeting experiences, which are constantly changing. There is no evidence of any substance nor of any permanent self.

In his well-known section entitled "Of Personal Identity" in *The Treatise of Human Nature*, Hume says, "There are some philosophers who imagine we are every moment intimately conscious of what we call our SELF; that we feel its existence and its continuance in existence; and are certain, beyond the evidence of a demonstration, both of its perfect identity and simplicity. . . . 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 can catch *myself* at any time without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of *myself*, and may truly be said not to exist."¹

What, then, is the mind? For Hume the mind and the faculties of the mental life are nothing but an association of ideas. *Mind* is a term for the sum total of the experiences that occupy one's attention and life. It is a bundle of experiences, or a collection of sensations.

How is it that we gain the impression of unity? According to Hume, our sensations are tied together by the laws of association, which are three: the law of resemblance, the law of proximity

¹ From *Hume Selections*, edited by Charles W. Hendel, Jr., pp. 83 and 84. Charles Scribner's Sons, New York, 1927. Used by permission of the publishers.

in time and space, and the law of causation. These are based on observation, experience, habit, and custom.

Hume's attitude is one of skepticism. He hesitates to accept anything beyond the surface day-by-day experiences. Yet, as will be noticed in the passage quoted, he continuously uses such terms as "I" and "myself," which imply some personal center of unity that is fairly constant.

MIND AS A FORM OF BEHAVIOR

For some philosophers and psychologists, mind is simply one form of behavior. A few will deny that terms like *mind* and *consciousness* have any real content and value. They prefer to talk in terms of neuro-muscular activity. This group is represented by the more extreme behaviorists whom we consider in the next section. Others, like the instrumentalists, merely reject all dualisms and stress intelligent behavior. John Dewey is the chief representative of the instrumentalists. Since we consider his position in a later chapter, we make only a brief statement on his views at this point.

For John Dewey, *mind* ceases to be a noun and becomes an adjective which is descriptive of certain kinds of behavior. "There is no separate 'mind' gifted in and of itself with a faculty of thought; such a conception of thought ends in postulating a mystery of a power outside of nature and yet able to intervene within it."¹ Mind and thought become functional aspects of the interaction of natural events. Mind is intelligent behavior. Depending on the point of view or frame of reference from which we make our interpretation, mind may be considered an aspect of nature, of an object, or of an organism. Man and nature are continuous. Man is not part body and part mind. Dewey rejects all dualisms and the spectator view of mind. Nature in man is simply nature grown intelligent.

PSYCHOLOGICAL INTERPRETATIONS OF MIND

No attempt is made here to consider all the various "schools" of psychology. For a more complete survey the reader is referred to such books as Robert Sessions Woodworth's *Contemporary*

¹ John Dewey, *The Quest for Certainty*, p. 227. Minton, Balch and Company, New York, 1929.

*Schools of Psychology*¹ and Edna F. Heidbreder's *Seven Psychologies*.² Because of their vogue during the last few decades, we shall consider the views of the mind as found in the literature of psychoanalysis, behaviorism, and gestalt psychology.

Traditional psychology was concerned largely with "states of consciousness" and was almost wholly introspective and subjective. Early in this century traditional psychology of the structural type was attempting to describe consciousness and our various mental states. Functional psychology, on the other hand, was beginning to stress mental activity in the development and maintenance of life processes. The latter approach, which is more in harmony with a biological and an objective view of life, has given rise to various newer psychological schools.

PSYCHOANALYSIS

This is a psychological method and approach based on the work of Sigmund Freud, Alfred Adler, and C. G. Jung. Its early development took place within the medical profession rather than among professional psychologists. According to this view, the mind, or life energy, is divided into three realms. There is, first, the conscious level. This is the most superficial realm, and it is constantly changing. This level includes the psychical content when it is actually in consciousness. Second, there is the foreconscious level of the mind. This includes all the psychical elements which are available to consciousness but which at any particular time may be below the conscious level. In this way the psychoanalyst can tell us where the multiplication table is when we are not using it! In the third place, there is the unconscious, or subconscious, level. This is the great power house of our lives. It is the original form of the psychic life. It includes the mental elements of the great primitive drives or instincts, the memories of childhood and our first great experiences, and the memories of events which have affected us but of which we may not have been consciously aware. This is the permanent storehouse of all the psychic elements not now accessible to consciousness. It may, however, determine the impulses and the content of the foreconscious and conscious levels of the mind.

Into this unconscious realm, according to this approach, may be repressed all kinds and varieties of psychic impulses which

¹ Ronald Press Company, New York, 1931.

² D. Appleton-Century Company, New York, 1933.

have been thrust aside in the development of the individual. This mass of psychic material, which may include ways of thinking and feeling, has a profound effect on our actions. It may determine our disposition, our likes and dislikes, our joys and sorrows, and lead to obsessions, mental conflicts, fixations, fears, and many other types of mental disorders. Conflicts may arise between our conscious desires and some urge from the unconscious, or between the desires of the individual and the standards of the group, or even between two conflicting urges from the unconscious level. A complex may arise when some emotional drive becomes attached to some object or person and comes to dominate the personality. The complex may lead to abnormal behavior.

Freud and his followers have given considerable attention to fixations, dreams, errors of various kinds, and numerous "mechanisms" or "channels of expression" which our mental and emotional energy may assume when other outlets are blocked. From the psychoanalysts have come such terms as *mechanisms of rationalization, defense, escape, compensation, substitution, and projection.*

BEHAVIORISM

The behaviorists, of whom John B. Watson, A. P. Weiss, and K. S. Lashley are perhaps the best known, assert that the proper subject matter of human psychology is "the behavior or activities of the human being." The method, or technic, was worked out in the field of animal psychology and later was applied to the study of human behavior. Consequently, the behaviorists have rejected the introspective method as useless. They have abandoned such terms as *sensation, perception, purpose, consciousness, and thinking*, at least as these concepts were formerly used. They wish to study man and his activities with the same objectivity and exactness of control that exist in the physical sciences. The aim is the control and prediction of human activity in terms of stimulus and response. A stimulus may be any object in the environment or any physiological change within the organism. A response is the resulting activity or movement which takes place in a muscle or a gland.

While the behaviorist is interested in the whole body in action, he gives much attention to the structure of the human body so that he may know how it operates. He is especially concerned with the various sense organs, the reacting organs like the muscles

and glands, and the nervous system, which makes the connection between the sense organs and the reacting organs. When a stimulus affects a sense organ, a physical and chemical change sets off a neural impulse which travels by way of the central nervous system to the muscle or gland where the response takes place. This is the reflex arc.

A central concept in behaviorism is "conditioning," or the "conditioned reflex," or the "conditional response." There are a small number of natural or biologically adequate stimuli which will call forth a response without learning, or at birth, let us say. For example, loss of support or a sharp, loud noise will call forth the fear response. Through association, attachment, or training a substitute or "conditioned" stimulus may call forth this same fear response. Most readers are familiar with Pavlov's famous experiment with the dog. By associating the ringing of a bell with a piece of beefsteak, he was able finally to stimulate the flow of saliva in the dog's mouth simply by ringing the bell. The behaviorists claim that nearly everything that psychologists have been accustomed to call "instinct" can now be explained more adequately by conditioning. Such habit formation starts at birth, consequently no sharp distinction between inherited and learned behavior can be made.

GESTALT PSYCHOLOGY . . .

Under the leadership of Wertheimer, Koffka, and Köhler, a significant change in approach has been under way in psychology. The term *gestalt* has no exact synonym in English, but terms like *form*, *figure*, *pattern*, and *configuration* have all been used. Gestalt psychology is a reaction against the analytic and atomistic methods and conceptions of current psychology. It is also a rejection of dualism. The conflict between mechanism and vitalism is not a real issue because there is no conflict between the laws of nature and the purposive activities of conscious human beings.

According to gestalt psychology, the whole is not the mere sum of its parts. The way in which the parts are put together is the very essence of the totality. A student, let us say, is perplexed with a problem in geometry. It baffles him for some time; then suddenly, perhaps in a flash, it is clear. He has applied the right *gestalten*, or pattern. A melody, to take another example, is made up of many notes. The separate notes do not make the melody; their arrangement in a particular pattern does. You

may get a different tune from these same notes. You may also change to a different key, using different notes or parts, and still have the same melody. You recognize the melody as a whole.¹ Certain forms or patterns exist in the nature of things. We recognize these forms as wholes. The wholes produce the parts just as truly as the parts make up the wholes. Organization is a fundamental principle, not a problem to be solved by analysis. From a functional viewpoint, unity and wholeness are primary. The new descriptive unit is the "organic whole."

In our interpretation of mind, these same principles must be remembered. Separate and isolated things are fictions. Parts derive their properties from the whole, and "wholes evolve as wholes." Personality is an organized whole. The mind is an organic unity. Thinking depends upon the application of correct patterns to the data brought in by the senses. The reaction of the person is a "reaction of the organism-as-a-whole, and is a unified response to a total situation of some kind."² To gain the truth we must begin with the unanalyzed total experience.

The gestalt approach "is an abandonment of absolutism, a tearing down of intellectual and emotional fences between departments of science, between science and philosophy, between science and religion, between religions, between all of these things and life itself. Prejudices and suspicions have reigned between departments of science; the physicist has looked down upon the psychologist; the psychologist has feared the physicist; science and religion have acted like enemies in spite of assurances that they were friends; science has disdained philosophy, and philosophy has looked condescendingly upon science; religious groups have quarreled among themselves. Atomistic thinking has been responsible for it all; it has created an age of specialization, and specialization has nourished atomistic thinking. Now, in theory, we are transcending these dilemmas with a new tool of thought, the relative, organic unit, whose unity is functional and whose plurality is phenomenological."³ In many ways gestalt psychology is a counterpart of relativity in contemporary physics. The

¹ For additional examples, see "The Geometry of Mind," by Gardner Murphy, in *Harper's Magazine* for October, 1931, pp. 584ff.; Woodworth, *op. cit.*, Chap. 4; Heider, *op. cit.*, Chap. IX.

² Raymond Holder Wheeler, *The Laws of Human Nature*, p. 90. D. Appleton-Century Company, New York, 1932.

³ *Ibid.*, pp. 224-225. Used by permission of the publishers, D. Appleton-Century Company.

frame of reference or the point of view of the observer appears to be crucial.

CONCLUDING COMMENTS

The study of the mind is continued in the next chapter. We have already discovered, however, that there are many psychological and philosophical explanations of mind. We must not confuse mind with a description of the conditions under which it appears. The psychological interpretations which we have considered use different methods and symbols. They use a different set of terms — almost a different language — when they set forth their explanations. If we had taken space to consider additional schools of thought, we would have had more evidence of the same type.

In spite of the marked differences among the various psychological schools, the present tendencies are toward a convergence rather than a greater separation of the types. Some psychologists are eclectic in that they refuse to be put in any school. They are willing to use any methods and any facts which throw light on the problems under consideration. Even though a few persons assert that the subject matter of psychology is so complex and elusive as to make impossible any strictly scientific treatment, some progress is being made. There are some converging lines of evidence and some conclusions which are quite generally accepted. For example, most psychologists recognize that the traditional structural approach is inadequate, that function and human activity are especially important, that the traditional notion of man as a purely “rational animal” needs to be modified to the extent that we recognize the importance of impulse and emotion, as well as habit and custom, in the explanation of behavior. Each school is organized around some main emphasis and therefore tends to impose its order or system on that aspect of the complex human individual that attracts its attention.

Each one of the psychological interpretations has given us some valuable knowledge regarding mind and its powers and functions. Behaviorism has made a significant contribution in its concept of conditioning. Psychoanalysis has given us valuable information regarding mental conflicts and repressions. The gestalt psychology has called our attention to the quality of wholes

and to the dangers involved in dealing with parts separately. As total explanations, these interpretations are inadequate.

In the development of the race, it was a tremendous step forward when living creatures gained the ability to see distant objects. A similar advance was made when organisms were able to hear and to interpret sounds. These new powers saved time, energy, and life. When memory, imagination, and self-consciousness developed, even greater steps forward were taken. Men could see and hear what was not present. They could review the past and plan for the future. When they had acquired these powers and could make intelligent choices, mind was actually present. Whether we use the term *mutation* or *creative synthesis* or *creative act*, the new powers which are present are of the utmost importance. The actual steps by which they arrive and the symbolism used for their interpretation are not so crucial as a realization of the significance of mind and creative intelligence. From the creative processes of cosmic evolution, to the widespread will to live expressed through a great multitude of ascending forms of life, to the wide range of mental powers leading to self-consciousness and to human personality may be a continuous process. Mind, intelligence, and self-conscious persons may be goals of the creative process.

Mind and *consciousness* are not synonymous, although they are sometimes thought of in that way. We may or may not be conscious of our mental processes. When we witness intelligent or adaptive behavior in other persons, we speak of mental processes. When we view mental phenomena from the point of view of our own inner experience, that is, subjectively or introspectively, we speak of our consciousness. Consciousness is our human experience as it is lived through or experienced by the person who is thinking and feeling. It is an awareness of a relation between the perceiving individual, the subject or knower, and some object of attention. When we are conscious of the fact that it is we who are conscious, we speak of self-consciousness. We do not seem to be able to explain these experiences satisfactorily in terms of anything else. They are immediate data of experience.

Mind is an important factor in the universe. Some would say that it is *the* important factor. We cannot eliminate awareness, self-consciousness, and mind from our interpretations and from human affairs without denying human experience itself. Mind is that which we affirm in the very act of denial. To eliminate

mind is to eliminate knowledge and to deny science itself. The very mistakes of the scientist and the philosopher indicate that there is some freedom and some intelligence in the world. Logic is the mind inspecting its own methods. Mathematics is the mind examining relationships apart from things. Psychology is the mind describing sensations or behavior. Human history is in part an account of self-conscious, intelligent human beings groping their way along — observing, thinking, and carrying out a multitude of human purposes in the world. The thinker is greater than the material which he analyzes and describes.

The uncompromising dualism of Plato seems to make a too rigid separation between mind as a substance and the world in which it functions. On the other hand, the extreme sensationalism of Hume and the interpretation of mind in terms of neuro-muscular activity are inadequate. In the opinion of the author, we must hold to a personal unity or identity which persists through the various experiences of life and which transcends those separate experiences. The consideration of this problem is continued in the next chapter.

»» QUESTIONS AND PROJECTS ««

1. Suppose a man's skull could be opened, using a local anesthetic, so that he remains conscious. The tiers and layers of cells constituting the whitish grey matter (the cortex or brain) are exposed to view. The movements or changes which take place in the brain are shown in magnifying mirrors, so that the man is enabled to watch the changes which take place in his brain while he observes and thinks. Who or what is doing the watching?
2. Do you think it is possible for man to observe and interpret mind? If so, what interpretation is most satisfactory to you?
3. Is there any truth in or justification for the statement that the mind and the self are found, not in physiological and psychological measurements, but in the great literature, and in the art, religion, and outstanding achievements of man?
4. There are "two distinct orders of events." There is the visible and external order and "those happening in the minds of men." Do you agree with the assertion that the latter events explain the former and that ideas are the foundation of action?

5. Comment on the following statements:

(1) "Men are tormented by the opinions they have of things, rather than by the things themselves."

(2) "Knowledge has altered the world. We must rely on knowledge to accommodate ourselves to new surroundings."

(3) "When a person depends for his happiness upon the interests and activities of his own mind, he has become to a considerable extent independent of his material surroundings."

(4) "The scientist, the thinker, is being forgotten. . . . Even in science the machine is being worshipped, while the inventor — the scientist who thought it out — is set aside."

The Mind-Body Relationship

The mind-body problem is one of the persistent problems with which men have struggled for centuries. From the time of Descartes in the seventeenth century it has been an issue of first importance. This is due in part to the growing influence of objective science, with its desire to describe the world in quantitative and mathematical terms. It is also explained in part by the trend of thought, started by Descartes, which has made a clear-cut distinction between mind and matter. If mind and body are different in nature, what can be the relationship between them?

Interpretations of the mind-body problem are many and varied. They range all the way from a rather complete denial of mind and a thoroughgoing materialism to the assertion that mind is the only fundamental reality and that what we have called *matter* is an illusion or at the most a by-product of mind or consciousness. Most explanations, however, have avoided these extremes. There is a widespread belief that mind and body are essentially different. "It would seem that from a very remote period men of almost all races have entertained the belief that the living man differs from the corpse in that his body contains some more subtle thing or principle which determines its purposive movements, its growth and self-repair, and to which is due his capacity for sensation, thought, and feeling. For the belief in some such animating principle, or soul, is held by almost every existing race of men, no matter how lowly their grade of culture nor how limited their mental powers; and we find evidences of a similar belief among the earliest human records."¹

¹ From William McDougall, *Body and Mind*, p. 1. By permission of The Macmillan Company, publishers, New York, 1920.

THE SEARCH FOR AN ADEQUATE EXPLANATION

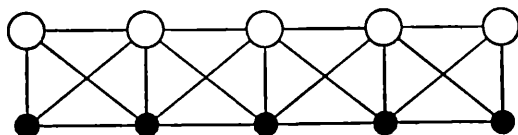
In this chapter the presentation is simplified by giving the main answers found in the literature of the past and the present. No attempt is made either to give all the shades of opinion or to list all the men who have supported the various theories.

In the diagrams, the white circles represent the mental, or mind; the solid black circles indicate the physical, or body; X represents the unknown; and the lines portray the causal connections.¹

INTERACTIONISM

Let us begin with what might be called the common-sense view, which has been widely accepted. Since the time of Descartes it has been prominent in philosophical discussions. In presenting the view of "mind as substance" in the preceding chapter, it was pointed out how Descartes had made a clear-cut separation between mind and matter. Mind is an immaterial or spiritual substance which thinks; matter is a substance whose chief characteristic is extension. This presentation of Descartes is a classic expression of the point of view. One does not have to accept Descartes' philosophy nor his formulation of the position in order to accept interactionism.

According to interactionism, not only is there a physical causal sequence and a psychical causal sequence, but the mind may cause bodily changes, and bodily changes may produce mental effects. The following diagram illustrates these connections.



Many persons have been impressed with what they believe is a causal relationship or an interaction between mind, on the one hand, and bodily processes, on the other hand. For example, our physical condition affects our disposition. Bodily changes register themselves in our mental outlook. Diseases of the brain affect our mental life and thinking. A blow on the head or fumes

¹ A number of books use diagrams similar to these. It is uncertain to whom credit should go. See McDougall, *op. cit.*, pp. 128-140.

of chloroform may cause us to lose consciousness. The effects of drugs, alcohol, and coffee are almost universally recognized. If one's digestion or bodily secretions get off balance, he may become depressed or be otherwise affected. We cannot think clearly and concentrate unless our bodily processes are functioning fairly smoothly. Furthermore, as the brain and the nervous system develop, the powers of the mind also increase.

Mental experiences likewise affect bodily processes. An idea "strikes us," and we become animated and may proceed to strenuous activity. Worry may cause ill health. Fear leads to quickened heart action and other bodily symptoms. Anger or even ordinary mental effort may lead to an increase in blood pressure. The conviction has been growing, especially among medical men, that mental states may lead to disease — organic as well as functional — and that resistance to disease is affected by the mental outlook of the patient. Teeth are said to decay more quickly when the person is under mental strain. Hypnotism has been used to produce anesthesia, to cure alcoholism, and to control other processes and actions. In one case a blister was raised on a hypnotized patient by telling him that he was being burned, although the metal which touched his skin was cold, not hot.¹

In spite of the array of evidence and the widespread support for it, interactionism has been severely criticized. Men have asked how two substances or entities so different in nature could possibly interact. A causal relation between a change in the brain or nervous system and a muscle can be understood. A causal relation between an idea and a physical motion is difficult to comprehend. The two areas seem independent and self-sufficient.

A second objection has as its basis the law of the conservation of energy. The physical sciences have assumed that the amount of energy in the universe is constant, or fixed. While energy may change its form, it is neither created nor destroyed. But the theory of interaction implies that ideas or mental energy may affect or enter the physical field, and that physical energy may "run off" or be lost in mental activity.

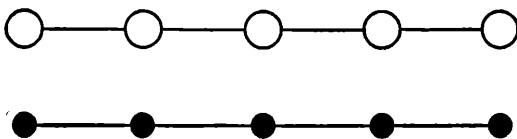
The reply of the interactionist is that the fact of interaction is undeniable, and that any theories which do not harmonize with this fact stand in need of revision or limitation. The theory of the

¹ See Aldous Huxley, *Ends and Means*, p. 299. Harper and Brothers, New York, 1937.

conservation of energy may need to be revised or limited in its field of application.

PARALLELISM

The attempt to meet the objections to interactionism, while recognizing differences between mind and matter, led to parallelism. According to this interpretation, there is no interaction or causal connection between the two areas. Mental processes and physical processes are equally real; they merely accompany each other in time, thus:



The law of causation holds good in the mental series, since one mental event may cause another mental event. It also operates in the physical realm. There is thus no interference with the law of the conservation of energy. The illustration has been used of "two railway trains running side by side on a double track."¹ Although the trains are parallel and are moving together, they are operating on different systems and are not causally connected.

The classical example of this point of view is that of the philosopher Leibnitz, 1646-1716. For him there is a pre-established harmony summed up in the mind and creativity of God. Two clocks may run together and keep perfect time. They may run in unison because they are mechanically connected or because they have been made with such skill that they will always operate in harmony. The latter view was that held by Leibnitz regarding the universe. The course of the universe was originally determined by the way its elements were endowed at the start.

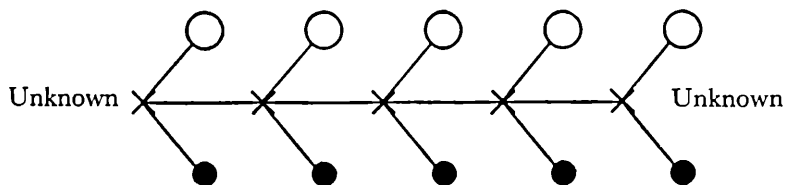
Parallelism has never had the widespread support given to interactionism and some other theories. It seems to cut the universe in two and to deny rather than explain the problem. Sudden experiences or interruptions are exceedingly difficult to explain on the basis of parallelism. How is it, when the doorbell rings, that we get the idea that someone is at the door? When we are in the midst of a train of thought, we are annoyed if unwelcome interruptions occur. Furthermore, this interpretation ap-

¹ William McDougall, *op. cit.*, p. 313.

pears to make mind useless in the evolution and the struggles of men. Most of us have believed that reflective thinking saves time and energy and that thinking makes a real difference in the world of affairs. Thus some men have been forced, in seeking for an explanation of an apparent relationship, to adopt the doctrine of the identity of mind and body.

THE DOUBLE-ASPECT OR IDENTITY THEORY

According to the double-aspect theory, neither mind nor body is a completely separate and independent entity. Both mind and matter are expressions of some underlying reality which appears as "mind" when we experience it from the inside, or subjectively. When we view it from the outside, or objectively, it appears as "body," or matter. Mind and body are thus in a sense identical; they are two different aspects of the same thing (an unknown, X). As persons, we know our inner life intimately, or at first hand; we speak of it as mental. The rest of the world we know only at second hand, or through its impression upon our sense organs; we speak of this part of our world as physical. Mind is this one world approached from the viewpoint of introspection.



Both Spinoza and Kant regarded mind and body as two aspects of one reality. For Spinoza, a pantheist, the one reality was God. For Kant, reality was the unknown thing-in-itself. The two series, the psychical and the physical, thus seem to be causally connected. Durant Drake is a more recent supporter of this general view.¹ Members of the movement known as New Realism hold a position which is sometimes called neutral realism or neutral monism. Neither consciousness nor physical things are ultimate; both may be analyzed into neutral entities.

Supporters of this view claim that it meets the objections directed against the two preceding theories. There is one inte-

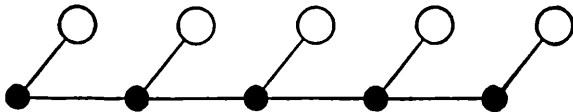
¹ Durant Drake, *Mind and Its Place in Nature*. The Macmillan Company, New York, 1925. See also *The New Realism* by Edwin B. Holt and Others. The Macmillan Company, New York, 1912.

grated spatio-temporal world without any breaks in continuity. The theory preserves the law of the conservation of energy. There is no mystery as to how two separate, parallel series of events can operate side by side.

Those who criticize the view point out that mental processes and physical processes show too many differences to be explained in this way. Mind is not in space, and it acts teleologically in terms of future events. Physical processes are extended in space and are mechanically directed. The approach uses an unknown, X, to explain a difficult problem. It leaves the seeming dualism unsolved.

EPIPHENOMENALISM AND THE DENIAL OF MIND

A view of mind that has had some popularity among men of science is known as epiphenomenalism. According to this interpretation, consciousness, or mind, is an attendant or secondary phenomenon accompanying some bodily processes. Mental processes causally influence neither the physical processes nor even other mental phenomena. Matter is primary, the one real substance. The stream of consciousness is a phenomenon accompanying certain neurological changes. What we have called *mind* is a glow or shadow which appears under some conditions.



Certain processes taking place in the brain and nervous system produce the sensations, feelings, emotion, imagery, thought, or other types of consciousness that we experience. The laws of physics and chemistry are universal.

The term *epiphenomenalism* was first used and defended by Thomas Huxley. This position has been held by various materialistic schools of thought.

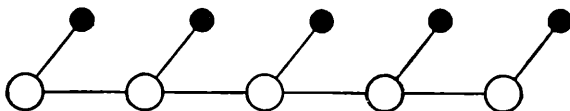
One way to meet a problem is to deny its existence or to get rid of one of the offending aspects or parties. In a previous chapter we saw that certain writers, like Hobbes and La Mettrie, explain consciousness and thinking as movements in the brain muscles, or movements of matter. In contemporary psychology some schools of thought tend to deny the existence of mind. In a chapter entitled "The Demise of Mind," a recent writer says:

“Within a strict scientific universe of discourse . . . there is no such thing as mind — at least, not with a capital ‘m.’ In everyday conversation the word is useful enough, in spite of its gaudy ambiguity of meaning; but in scientific language, except as a short-cut expression, it has no defensible place. Its career would almost be enough to rule it out.”¹

Epiphenomenalism will stand or fall with the materialistic and mechanistic assumptions upon which it is based. Materialism and mechanism are considered in a later chapter.

PSYCHICAL MONISM AND THE DENIAL OF MATTER

We have seen that epiphenomenalism and the various materialistic types of explanation get rid of mind as a fundamental entity. In a similar way, various forms of mentalism, or spiritualism, eliminate matter and assert that mind is primary. Psychical monism is the view that the causal series is confined to the mental and that what we call *matter* is a shadow cast by thought. Matter is essentially an appearance. The body is an externalization or phenomenon of mind.



While some idealists² accept psychical monism, not all idealists are to be classified here. All idealists insist upon the permanent significance and reality of mind. They believe that the world is a purposive, intelligible order. They do not all claim that the body or the physical is mere appearance. But psychical monism in some form is supported by Lotze, Fechner, Eduard von Hartmann, W. K. Clifford, Friedrich Paulsen, and C. A. Strong.

This view is likely to offend all but the mystics and a certain group of idealists. If mind is everything, then mind includes all the qualities which we have experienced and included in the term *matter*. On the other hand, if matter is all that exists, then we shall have to endow matter with a new set of qualities not ordinarily attached to our concept of matter. One gets rid of the

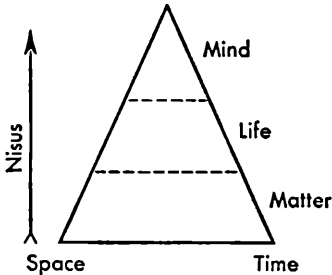
¹ From Carroll C. Pratt, *The Logic of Modern Psychology*, p. 26. By permission of The Macmillan Company, publishers, New York, 1939.

² For definitions of *idealism*, see pp. 236-237.

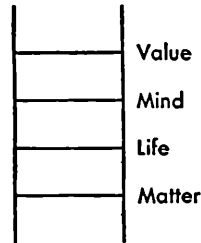
problem by denying the conflict. These more extreme “solutions” — the denial of mind and the denial of matter — tend to give *mind* and *matter* the same meaning, and they fail to explain apparent distinctions.

MIND IN TERMS OF EMERGENT EVOLUTION

An interpretation of mind that is fairly popular is set forth in terms of emergent evolution. We have already considered this approach as a possible escape from the conflict between mechanists and vitalists. This position is said to leave behind the former “solutions” of the mind-body problem. There is no dualism, no interaction, no extreme denials. Matter is real; life is real; and mind is real. Mind is another level of reality, and is as real as any other level. Mind, however, has new qualities or characteristics of its own which cannot be interpreted adequately in terms of the previous levels. In *Emergent Evolution*, C. Lloyd Morgan uses the pyramid to give diagrammatic expression to this point of view. The ladder also has been suggested.



Nisus, or Creative Synthesis¹



The Ladder

In a little book *What Is the Mind?* George T. W. Patrick gives a functional interpretation of mind in terms of emergence and the theory of levels. He believes that his approach solves many of the problems that have baffled students in the past. As a first step in understanding mind, we must unlearn some of the lessons we were taught in the nineteenth century. One of the false ideas is that the real things of the world are in elements. The twentieth century is discovering that reality is in events, happenings, qualities, and wholes. We must interpret mind in terms of organiza-

¹ Adapted from p. 11 of C. Lloyd Morgan's *Emergent Evolution* by permission of the publishers, Henry Holt and Company, New York, 1923.

tion and activity. Just as the physicist uses the term *physical* to denote the processes described in his science, and the biologist uses the term *vital* to refer to living things, we may use the term *mental* to denote the qualities and activities which we discover and experience on the personal level.

Philosophically, the explanation of mind is in terms of creative synthesis. Life is insurgent and creative. After pointing out how protons and electrons are organized in the form of atoms, atoms into molecules, and these into living cells, Patrick points out that at each level a creative synthesis takes place, resulting in a series of marvelous new powers. Finally, the level of consciousness and intelligent action is reached. He says, "When man arrives, a new reality is born, namely, thought, and because of thought, memory, reasoning, and imagination, the world immediately becomes different. They are not by-products of processes essentially material; they are the realities of the world, and they themselves determine the course of the future development of the world."¹

Through mind, science, art, philosophy, religion, social organization, and moral progress have been realized. Patrick tells us that "the body is real, the mind is real, society is real, moral distinctions are real."² The self is the being who does or who experiences these things. The self is the living individual with his needs and interests and his capacities for feeling and thinking and for creative imagination. The self is not the mind. The self is the living being who carries on these mental processes.

A NOTE ON SOME ADDITIONAL RESEARCH

The quest for a more adequate interpretation and understanding of the mind and mental processes continues. This is especially true in the fields of psychology and philosophy, although it is not confined to those fields by any means. Hardly a year passes but what some new explanation is given to the reading public. In this section we deal with one line of investigation that has often been ignored by students of psychology and philosophy — what is called *psychical research*.

In 1883 the English Society for Psychical Research was founded. Later the American Society for Psychical Research was organized. While the investigations have uncovered instances of

¹ From George T. W. Patrick, *What Is the Mind?* pp. 106-107. By permission of The Macmillan Company, publishers, New York, 1929.

² *Ibid.*, pp. 121-122.

self-deception and cases of conscious and unconscious fraud, there remains a considerable body of challenging phenomena in need of further study.

In 1930 experiments were started at Duke University to test the assumption, common among psychologists and accepted by a considerable number of philosophers, that nothing enters the human mind except by the avenue of the sense organs. In *New Frontiers of the Mind*,¹ Joseph B. Rhine gives an account of the purpose of the research and the early results. The investigators believe that they have found evidence that "the mind of man does indeed have an extra-sensory way of perceiving," and that the senses are not the only channels of cognition. The tests have to do with thought transference, or telepathy; with clairvoyance, or the ability to see objects not normally perceptible; and with other extra-sensory powers. Some persons were found to test unusually high. The results for some persons run so consistently high that the element of chance is ruled out.

If powers of this kind could be established, even among a small percentage of persons, the results would be far-reaching. They might lead to significant changes in the interpretation of mind and in the field of psychology. These changes might even be similar to the intellectual revolutions brought on by the concepts of evolution and relativity.

CONCLUDING COMMENTS

In the preceding chapter we found that there are many psychological and philosophical explanations of mind, or mental processes. In this chapter we have outlined many interpretations of the mind-body problem. Is it possible that mind is something like life itself? We have to recognize and take account of life, yet we cannot describe and define it adequately. Life is not something that can be put under a microscope, enlarged, and directly observed. When we attempt to dissect and to analyze life, it seems to disappear. Life is a principle of unity or organization. We can say that a man is alive, yet we seem to know life only as we apprehend it within ourselves. Mind is of a similar nature. Thinking, feeling, appreciation, and a sense of values are central in individuality, or personality. They are the very things that give sense and meaning to the human venture and the universe itself; yet they

¹ Farrar and Rinehart, New York, 1937.

are not things that can be counted, measured, touched, and seen. The very existence of science and philosophy depend upon the assumption that the mind can distinguish between true and false judgments. The existence of art and religion depend upon the ability of persons to appreciate values and to distinguish between them.

There is evidence of an inner life of some sort, call it what you will — mind, ego, agent, knower, soul, self, spirit, or person. Notions such as “I,” “me,” “immediate experience,” and “content of consciousness” imply an agent of some kind that has the experiences. There is a center of unity. We say “I” or “me” for experiences that happened ten years ago, five years ago, yesterday, and in the present moment. “I am a unit, a personality, with characteristics different from those of all the parts of which I am composed.”¹ The individual is an “I,” a subject of experience, “who can never be reduced to the particular and changing contents of his experience.”² If the terms *mind* and *self* are not to be identified as the same thing, then the self, or person, is that which has these experiences we call mental.

In a discussion of the nature of the self, William P. Montague calls our attention to a number of “curious properties possessed by mental states and processes” which are quite different from the properties of non-mental processes. There are “four kinds of self-transcending reference” that seem to accompany mental life.³ There is, first, prospective reference, or the ability to deal with the future. What is not yet in existence may act as a causal determiner of a sequence of events that leads up to it. Man may project plans and ideals and then work toward them. There is a pull from ahead, or from the future, which is purposive, or teleological. Second, there is the ability to deal with the past, which is not lost but kept alive. In a sense, the past may coexist with the present. Memory is an important part of our mental processes. Third, there is a space-transcending reference. A man’s imagination and thoughts are not limited to the here and now. A man may take a “Scotch tour,” staying home and letting his mind wander! Finally, in abstract thought man lives in a world of

¹ Edward G. Spaulding, *What Am I?* pp. 30–31. Charles Scribner’s Sons, New York, 1928.

² Joseph A. Leighton, *Man and the Cosmos*, p. 323. D. Appleton-Century Company, New York, 1922.

³ William Pepperell Montague, *The Chances of Surviving Death*, pp. 32ff. Harvard University Press, Cambridge, Mass., 1934.

meaning. He can set up symbols for this world of meanings. He can be conscious of such symbols, and also be conscious of the fact that it is he who is conscious of them.

If two things are the same, you can substitute one for the other without loss. In the case of mind and body this substitution, it would seem, cannot be made. Whether we think of mind in terms of substance or of principle of organization and personal unity or mainly in terms of behavior, there appears to be a fundamental difference between mind and body. The two function on different levels. Mind includes foresight and memory. It looks before and after. Brain and body are in the present and in space. Mind is not confined to the present and is not in space. What is connection or motion for the brain is meaning for the mind. There is a privacy about mind that is not characteristic of the body. Mind is occupied with judgments and values; it is not merely a system of facts. "Instead of mind as organ of the body, body becomes an organ of the mind, and the whole material set-up is, or may be, treated as the means and the occasion for personal and cultural ends."¹

»» QUESTIONS AND PROJECTS ««

1. Which interpretation of the mind-body problem appeals most to you? Be ready to state clearly and to defend the position which you think is most reasonable.
2. How important, in your opinion, are the "four kinds of self-transcending reference" discussed in the last pages of the chapter?
3. Do you think that the theory of the conservation of energy should play the part in the discussions of this topic which it seems to have played in the past? See "Is the Conservation of Energy Proved of the Human Body?" by W. H. Sheldon in *The Journal of Philosophy*, Vol. XVIII, pp. 589-600.
4. Does the world seem to you to be one (monism) or dual (dualism) or many (pluralism) in its fundamental nature? If it is single, we shall need to reduce everything to one substance (mind, matter, or a neutral substance). If it is dual, then probably mind and matter are the two substances. If it is plural, mind and matter may still be two of the many. Today the concept "substance" is not popular, and many persons prefer to use the term *energy* for the physical world and *process*

¹ William Pepperell Montague, *op. cit.*, p. 88.

for the mental world. The term *behavior* may be used for all processes in the world. This is the problem of the "One and the Many."

5. Critically review the following books: William E. Hocking's *The Self, Its Body and Freedom* (Yale University Press, Cambridge, Mass., 1928); James H. Robinson's *The Mind in the Making* (Harper and Brothers, New York, 1921); George B. Cutten's *Mind, Its Origin and Goal* (Yale University Press, 1925).

How Free Is Man?

Is man free in the sense that he has some power to choose between alternatives and to initiate action? Or is he merely the plaything of nature, determined in his every act? Probably no other issue in philosophy is more alive today or has more far-reaching consequences. This issue is “charged with dynamite.” If all events in the world, including man’s thoughts and actions, are rigidly determined, then a man can neither act differently than he does nor guide the course of events even in his own life. If he cannot act differently than he does, then he should not be held responsible for his conduct. Upon the solution of this question of man’s freedom depend the answers to a great many other questions. These include the nature of the person, man’s power of self-discipline, the status of morals, and social policy and programs.

THE PARADOX OF FREEDOM AND NECESSITY

Frequently there is a glaring contradiction between the way we think and the lives we live. In certain segments of our lives we take freedom of choice for granted; in other segments we appear to frown upon it as impossible. In our intimate relationships with other men and women we assume that we are free to decide many issues. All such contacts are permeated with ideas of purpose and freedom. Spontaneity is taken for granted and is the very essence of life. We get together to decide questions. We persuade others to accept our plans.

We have fought two wars, as we have claimed, to defend our freedom. Sometimes we have meant “freedom from external restraint” — we do not want to be slaves or to have our move-

ments hindered. Sometimes we have meant our "civil and political liberties" — we want to defend our freedom of thought, speech, assembly, the press, and religion. These freedoms are important, but they are not the issues immediately under discussion. In our fight for freedom we have also meant that we want to defend our power of choice — our right to live as free men in the sense that we can decide issues for ourselves. We want to govern our own lives rather than have circumstances govern them from the outside. We have asked some men to die, if need be, to defend the freedom which we cherish. Have we been asking them to sacrifice their lives to defend something which doesn't exist or is only an illusion?

When we turn to the fields of the special sciences, we enter a world with quite different assumptions. Here it is assumed that everything is determined by natural laws. Determinism and mechanism are taken for granted. The universe, including its parts, is an orderly causal sequence. Effects follow causes in rigid regularity. This approach is held not only in the physical sciences but in the biological and psychological fields as well. All these sciences have made considerable progress operating on the basis of a strict determinism.

Here, then, is the paradox we face: in our intimate personal relations we take freedom for granted, whereas in the sciences we assume that necessity and determinism must be accepted. Our aim in this chapter is to clarify the issue and, if possible, to find an answer. We are considering the problem of the "freedom of the will." The term *will* in modern thought refers to a person's ability to perform voluntary acts. Today we are more likely to use such expressions as "freedom of choice," "the power of alternative choice," and "moral freedom." Is man a "self-conscious center of free activity"? Is he capable of initiating action in accordance with ends which he foresees and selects?

THE DENIAL OF FREEDOM

The denial of freedom may express itself in a number of forms. These forms are all found in ancient and in modern times. We shall not attempt to give a detailed historical exposition of them. Today the main denial of freedom comes as a result of the postulate of determinism as accepted by the special sciences and by some philosophers.

FATALISM

Fatalism is the belief that all events are irrevocably fixed so that human effort cannot alter them. It is the doctrine that all the happenings in the world of nature and all events in man's life are predetermined from the beginning of time, so that the human will has no part in shaping the course of things. Fatalism is the view that "what is to be will be." It holds to the inevitable appearance of an event at a specific time. Fatalism may set forth a definite theory of causation, but it is more likely to leave the question of causes an inscrutable mystery.

In Greek and Roman thought the concept of Fate is prominent. It is a determining power sometimes identified with the will of Zeus, or Jupiter. Fate is often thought of as superior to the gods as well as to mortal men. It is prominent in the Greek plays, especially the tragedies. The Stoics identified Fate with the course of Nature and with Providence. The Romans were influenced by the Greek beliefs regarding the Fates, and they reproduced much of the Greek mythology. In place of Fate the Romans sometimes used the similar concept of Fortune. The "Heaven" of Taoism, among the Chinese, is a closely related concept. It is the cosmic order, which is praised and trusted.

The view that as individuals we are incapable of changing the course of events seems to have its origin or basis in human helplessness in the presence of certain inescapable evils and especially of death. It is an emotional reaction which grows out of the fact that man lives in a universe which far exceeds his powers to understand and to control. Fatalism is most prevalent in areas where hopeless misery exists without any effort to relieve it and in areas without advanced means of scientific and social control.

Under conditions of war, fatalism often undergoes a noticeable revival. It is likely to be prevalent among soldiers under fire. The first reaction to danger may be panic or fear or worry, but soon the attitude of fatalism may emerge as an adjustment or defense or escape reaction. The individual may say to himself, "If there is a bullet with my name on it, I'll get it anyway. If there isn't, I'll come through unscratched, so why worry?" From then on he may settle down and take events as they come. The fact that he is "under orders" and does not make the decisions for himself is an additional factor in the development of a fatalistic attitude.

A fatalistic outlook may be somewhat comforting under any conditions. It may appeal to certain irresponsible types of persons. If the individual cannot influence the course of events, he is not responsible for what happens. Furthermore, he does not have to exert himself strenuously; he takes what comes along, and accepts it. An "emotional fatalism is a convenient alibi" for persons who are inclined to shift responsibility and to blame outside forces for the course of events.

In Western civilization, with its concepts of democracy, progress, and human control, fatalism has never been a dominant or a prominent attitude. In normal times it is more frequently found among the uneducated who support astrology, palmistry, and other forms of divination. However, it is not confined to such persons.

Fatalism seems to run counter to a large part of normal human experience and to cut the ground from under vigorous human effort to improve conditions. In the opinion of the author, it does not have adequate support. The relationships among human beings are seldom, if ever, so completely fixed that nothing can be done to change them.

PREDESTINATION

Predestination is the doctrine that God has decreed every event that is to take place. This means that events in nature and human conduct, including man's will, are predetermined by the sovereign will of God. The view is thus theological and supernatural in its outlook and emphasis. The doctrine ranges from an extreme form, in which every event and each man's destiny are fixed, to interpretations which call for some initiative or choice on the part of the individual.

The doctrine is found in Hebrew, Christian, and Mohammedan, or Islamic, religious thought. Judaism and Christianity have placed emphasis mainly on man's responsibility to God. There is, however, a development of the notion of predestination from passages in the writings of Paul through Augustine to John Calvin. Augustine elaborates the doctrine and gives it a prominent place in his thinking. In Calvinism the doctrine receives its most complete expression in Christian thought. In extreme Calvinism salvation is unconditional in the sense that it is not dependent upon anything that man can do. In traditional

Mohammedanism the sovereign power of God is complete, and whatever happens is according to the will of Allah.

Because of its extreme and harsh nature, the doctrine of predestination has always aroused protests and opposition. It seems to make God responsible for evil as well as for good. If God decrees what is to happen, then it would appear that God rather than man is responsible for events. The idea of predestination is not in harmony with modern interpretations either of God or of the world. Modern conceptions of God do not assign responsibility for evil to God. Evil is likely to be interpreted in terms of human freedom or God may be interpreted as a finite being who is fighting evil. Consequently, the view is not widely held today.

A CLASSIC EXAMPLE OF THOROUGHGOING DETERMINISM

A classic example from among the great masters is the determinism of Benedict Spinoza (1632-1677). Spinoza's philosophy is a modification of Descartes' position. For Spinoza, God, or Nature, is the only self-existent substance. Mind and matter are attributes or qualities of this one substance. Nature extended is matter; nature thinking is mind. The one substance — God, or the Universe — is not personal, and it does not have a purpose, as personality and purpose are limiting concepts. Spinoza has been called an atheist and an agnostic monist, as well as a pantheist and a "God-intoxicated man." The point which concerns us here is that his position is clearly a monistic determinism. There is one infinite cosmic order which excludes chance and spontaneity from nature. Reality is rational through and through, and there is unity, order, and necessity everywhere.

How is it, then, that men frequently consider themselves to be free agents who may do this or that according to choice? According to Spinoza, men think that they are free merely because they are conscious of many of their acts; at the same time, they are ignorant of the causes of these actions. Freedom in the sense of indeterminism, the view that there are some events in the mental and moral life of man which cannot be explained in terms of direct cause and effect, is meaningless nonsense. Terms like *should* and *ought* and expressions of praise and blame have no real place in the world. Things, in the entire realm of nature, are simply what they are. "Nothing happens in nature which can be attributed to any vice of nature, for she is always the same and

everywhere one. Her virtue is the same, and her power of acting; that is to say, her laws and rules, according to which all things are and are changed from form to form, are everywhere and always the same; so that there must also be one and the same method of understanding the nature of all things whatsoever, that is to say, by the universal laws and rules of nature."¹ Continuing, Spinoza tells us that he is going to consider "human actions and appetites" just as if he were "considering lines, planes, or bodies." "Thus the madman, the chatterer, the boy, and others of the same kind all believe that they speak by a free command of the mind, whilst, in truth, they have no power to restrain the impulse which they have to speak, so that experience itself, no less than reason, clearly teaches that men believe themselves to be free simply because they are conscious of their own actions, knowing nothing of the causes by which they are determined: it teaches, too, that the decrees of the mind are nothing but the appetites themselves, which differ, therefore, according to the different temper of the body. . . . All this plainly shows that the decree of the mind, the appetite, and determination of the body are coincident in nature, or rather that they are one and the same thing, which, when it is considered under the attribute of thought and manifested by that, is called a decree, and when it is considered under the attribute of extension and is deduced from the laws of motion and rest, is called a determination."²

The will, according to Spinoza, is a mode of thought. Thus there can be no separation in man between thought and will. No volition can exist unless it is determined by another cause, this by another, and so on. An action is free only in so far as the cause of the action is "wholly contained in the nature and past history of the agent." Thus only the Universe, or the collective whole, can be free.

Spinoza rejects the view, frequently held by determinists, that men consider various possible alternatives and then select one because of certain attractive features which it possesses for them, thus determining the choice. Spinoza contends that the presence or absence of consciousness is not a deciding factor. The decision and the action are determined by the impulses, whether or not we are aware of them at the time.

¹ From "Ethics," Part III of *Spinoza Selections*, edited by John Wild, pp. 205-206. Charles Scribner's Sons, New York, 1930. Used by permission of the publishers.

² *Ibid.*, pp. 212-213. Used by permission of the publishers.

DETERMINISM: A SCIENTIFIC POSTULATE

Determinism as a scientific doctrine is the view that the entire realm of nature, including man, is an unbroken chain of cause and effect. All events in the world, including man's will, are to be explained by preceding events. The determinist is impressed by the orderliness of the universe, the universal sway of natural laws, and by the progress of the sciences in explaining events in terms of causal sequences. He believes that all human behavior, like happenings in the world about him, is dependent upon natural law and is conditioned by antecedent events.

The doctrine of determinism is not to be confused with fatalism or with predestination. It does not maintain that events have been predetermined from the beginning. It does insist that every event in the universe is guided by inescapable laws. Physical determinism accepts a thoroughgoing mechanistic interpretation of the universe in terms of physical laws. Psychical, or character, determinism makes more room for life and mind. It stresses such things as desires and motives in the determination of conduct.

Wherever nature has been studied, men have found causal sequences. Since much of the evidence was presented in Chapters III-VI, no attempt is made to repeat it here. From the orbits of the distant stars to the falling snowflake, natural law reigns supreme. From such sciences as physics, chemistry, biology, psychology, and sociology we discover that man is no exception to the reign of cause and effect. His life is related to the processes of the universe and is interwoven with the entire web of life. The glands, complexes, unconscious drives, conditioning, folkways, and conventions all influence his life. The whole range of hereditary and environmental pressures are ever present and are powerful determining factors. These facts are not to be denied.

Determinism is a necessary scientific assumption. The idea of a dependable order of nature is the guiding principle of scientific thinking. On the basis of this assumption the sciences have made outstanding progress. Even the actions of human beings, it is claimed, arise out of a given set of conditions and have little meaning apart from those conditions. The case studies of the behavior of delinquents, as well as the life histories of persons in general, indicate that conduct is determined by specific causative factors. Determinism is said to be a presupposition of all intelligent explanations.

THE CASE FOR FREEDOM

Let us consider next the case for human freedom. The supporters of freedom do not deny the evidence that has been presented by the various sciences in support of causal relationships. They do not claim that man is completely free. They do claim, however, that he has considerable power of alternative choice. We shall consider the views of William James, point out certain facts that need to be kept in mind regarding scientific determinism, and then present some additional evidence for a degree of freedom of choice.

WILLIAM JAMES AND INDETERMINISM

An outstanding exponent of freedom of the will, or "indeterminism," as he calls it, is William James, 1842-1910. The "monistic superstition" leads men to deny freedom. Once that false outlook is cast aside, the way is open for a belief in freedom, novelty, pluralism, and a world in the making. The question of free will cannot be solved on strictly psychological grounds or even from a purely theoretical point of view.¹ It is essentially a moral postulate about the universe. Our sense of freedom and the existence of effort on the part of human beings point to the fact that some things are decided by human choice. Freedom is thus a necessary basis for action.

Determinism, according to James, holds the view that the parts of the universe laid down in the past decree what the future shall be. Consequently, the future has no ambiguous possibilities hidden within it. Indeterminism, on the contrary, contends that the parts of the universe have a considerable amount of loose play. There are genuine possibilities existing in the future. The possibilities exceed the actualities of many situations. William James says that "our first act of freedom, if we are free, ought in all inward propriety be to affirm that we are free."² While freedom is a postulate, so also are causality and uniformity. James is not afraid of the term *chance*. If we accept chance, novelty, and spontaneity in our world, the world is just as continuous with itself as is the world of the strict determinist. For example, before

¹ William James, *The Principles of Psychology*, Vol. II, pp. 572ff. Henry Holt and Company, New York, 1896.

² William James, *The Will to Believe and Other Essays in Popular Philosophy*, p. 146. Longmans, Green and Company, New York, 1912.

the action, we often cannot predict which of two possible ways a man will walk to his home. After the action, however, one way appears as rational as the other. The indeterminists do not assert that any imaginable action is possible for any person; they claim merely that among two or more possible choices, more than one is possible. Freedom is limited to the field of voluntary action and conscious selection.

In his essay "The Dilemma of Determinism,"¹ James shows how judgments of regret and tragedies, such as murders, present a real dilemma for the determinist. If the murder was determined by the rest of the universe, a judgment of regret seems inappropriate or foolish. "Calling a thing bad means, if it means anything at all, that the thing ought not to be, that something else ought to be in its stead. Determinism, in denying that anything else can be in its stead, virtually defines the universe as a place in which what ought to be is impossible — in other words, as an organism whose constitution is afflicted with an incurable taint, an irremediable flaw."² Regret for the murder leads to a larger regret and hence to a pessimism. "When murders and treacheries cease to be sins, regrets are theoretic absurdities and errors. The theoretic and the active life thus play a kind of seesaw with each other on the ground of evil. The rise of either sends the other down. Murder and treachery cannot be good without regret being bad: regret cannot be good without treachery and murder being bad. Both, however, are supposed to have been foredoomed; so something must be fatally unreasonable, absurd, and wrong in the world."³

The only deterministic escape is in the direction of a subjectivism which assumes that a certain amount of evil is good, being means by which some higher good may eventually arise. Such a deterministic optimism is gained only at the price of suppressing our judgments of regret. In so far as the determinist attempts to think things through, without denying evident facts of experience, he is led in the direction of a pessimism or toward a subjectivism which may lead to the pathetic hope that everything really is good. This type of optimism results in an ethical indifference which is likely to bring trouble in its train. "The only consistent

¹ The student is urged to read this essay.

² William James, *The Will to Believe and Other Essays in Popular Philosophy*, pp. 161–162. Longmans, Green and Company, New York, 1912.

³ *Ibid.*, pp. 163–164.

way of representing a pluralism and a world whose parts may affect one another through their conduct being either good or bad is the indeterministic way. What interest, zest, or excitement can there be in achieving the right way, unless we are enabled to feel that the wrong way is also a possible and a natural way — nay, more, a menacing and an imminent way? And what sense can there be in condemning ourselves for taking the wrong way, unless we need have done nothing of the sort, unless the right way was open to us as well? I cannot understand the willingness to act, no matter how we feel, without the belief that acts are really good and bad. I cannot understand the belief that an act is bad, without regret at its happening. I cannot understand regret without the admission of real, genuine possibilities in the world.”¹

POINTS TO KEEP IN MIND REGARDING SCIENTIFIC DETERMINISM

Since the case for a thoroughgoing determinism has been based mainly on the postulates and work of the sciences, it is well for us to keep certain things clearly in mind.

In the first place, there are many different kinds of determinism. In the realm of the physical, there are determinisms of the collision type where there is direct contact. There are also gravitational, electromagnetic, and chemical attractions. In the realm of life, vital processes are directed toward the maintenance of the organism as a whole. In the realm of human behavior, there are geographic, biological, psychological, social, and cultural determinisms. The same phenomena may be explained differently in terms of these various determinisms. If we accept the theory of levels, we cannot adequately interpret any level in the terms of the level below it or in terms of any one set of elements.

In the second place, the arguments of the determinists against freedom are valid only if we attempt to eliminate all determining causes. Indeterminism, in its extreme form, is the theory that man has the power to act at times without any motivation at all. It is the view that some decisions may be independent of any antecedent causative factors. Indeterminism is the extreme position on the side of freedom — a position which we are making no attempt to defend. We claim merely that men have some freedom of alternative choice or some power of self-determination.

¹ *Ibid.*, p. 175. These quotations are used by permission of the publishers, Longmans, Green and Company, Inc.

In the third place, it is well to remember that present trends in the sciences are against the acceptance of any complete mechanistic or physical determinism. The work of Heisenberg, Schrödinger, and others seems to indicate that there is an uncertainty in nature.¹ Dr. Arthur H. Compton, an outstanding physicist, says that it is "no longer justifiable to use physical law as evidence against human freedom."² In his *History of Science*, Sir William Dampier, discussing Whitehead's concept of organism, says: "The doctrine of deterministic mechanism only applies to very abstract entities, the product of logical analysis. The concrete enduring entities of the world are complete organisms, so that the structure of the whole influences the character of the parts. An atom may behave differently when it forms part of a man; its conditions are determined by the nature of the man as an organism. Mental states enter into the structure of the total organism, and thus modify the plans of the subordinate parts right down to the electrons."³

When we think of the laws of nature, we should not forget that it is man, or the thinking, self-conscious person, that has formulated these laws. If man were merely one link in the chain of events, he would not even know that he is such a link. The scientist must transcend his science. The man who describes and establishes these laws must be superior to them, in some sense. When we speak of the "reign of law" we need to remember that natural laws are the formulations by man of his experiences with the uniformities in nature.

We are accustomed to speak of heredity and environment as determining the affairs of man's life. No serious student of human life can doubt their influence and power. In all fairness, however, it should be pointed out that we do not know exactly what is inherited in rats and guinea pigs, and the problem is even more difficult in the case of man. Furthermore, when we become aware that some hereditary or environmental factor is influencing us, it ceases to be the same determiner. We may accept it and yield

¹ See Erwin Schrödinger, *Science and the Human Temperament*, translated by James Murphy and W. H. Johnston (W. W. Norton and Company, New York, 1935); Werner Heisenberg, *The Physical Principles of the Quantum Theory*, translated by Carl Eckart and Frank C. Hoyt (The University of Chicago Press, 1930).

² Arthur H. Compton, *The Freedom of Man*, p. 29. Yale University Press, New Haven, Conn., 1935. See also p. 39.

³ From Sir William C. Dampier, *A History of Science and Its Relations with Philosophy and Religion*, p. 478. By permission of The Macmillan Company, publishers, New York, 1942.

to its influence; we may modify it; or we may develop a negative attitude and reject or counteract it. If a man lives on the level of human selfhood, he has considerable freedom. When we are talking about subhuman species, the terms *heredity* and *environment* seem sufficient. When we are talking about mature human beings, we need to consider three factors in the life of man — heredity, environment, and “personal response.”

We seem to live in a world in which there is mechanical causation and also free personal causation. The two are not necessarily antagonistic. In fact, they may function in harmonious interaction. The work of the scientist is a continuous interplay of purpose and mechanism. Without reliable causal sequences, man would be frustrated in carrying out his purposes in the world. We need a dependable world and one in which we can grow.

In the fourth place, if the things we have said about man and his powers and capabilities are correct, then persons are real causes. If the self is a determining agent, then a degree of freedom and some kinds of determinism may be combined. Self-conscious persons, at least at times, are capable of initiating events which lead in the direction of goals that are self-chosen. The same thing may be stated in a number of different ways. Persons may select among possible causal sequences; they may add new determinants; and by means of causal laws they may gain results which otherwise would not come into existence. Human freedom is neither freedom from causes nor freedom from laws. It is the ability to act from self-chosen ends. It is the power to direct mechanisms in line with our purposes. Without reliable cause-and-effect relationships, our human purposes would meet frustration at every turn.

ADDITIONAL EVIDENCE FOR FREEDOM

We are claiming that man as a self-conscious person has a center of personal initiative and response, that he is a center of reactivity, and that within limits he is able to reshape himself, to influence the behavior of his fellows, and to redirect the processes of the outer world. What is the evidence for a degree of freedom of choice?

1. The Immediate Consciousness of Freedom. — Practically all men have a direct and distinct consciousness of freedom. They believe that they are able to choose between alternative courses of action. After they have acted, they usually feel that they could have

chosen otherwise than they did. This is an experiential fact that must be recognized. If we actually have some freedom, then it is easy to understand how this consciousness of freedom arises. If we are not free in any sense, then it is exceedingly difficult to understand how or why this consciousness of freedom could come into existence. Dr. Arthur H. Compton says that "one's ability to move his hand at will is much more directly and certainly known than are even the well-tested laws of Newton."

To claim that we think we are free merely because we are ignorant of the causes of our action is not an adequate refutation. In many situations we know just why we are acting and still we feel free. If the organism or the self is a center of activity, it may choose that stimulus to which it desires to respond from among a number of possible stimuli. The increase of self-consciousness, knowledge, and intelligence does not make us less free. We have more alternatives before us, and we have a greater sense of personal choice.

To claim that we are not free because we always act on the basis of the strongest motive is likewise an inadequate refutation of freedom. The argument is circular in that whatever motive wins is called the "strongest"; and it is called the strongest merely because it "wins."¹ We may also say that it "wins" and is the "strongest" because it is chosen by the self. We may admit at once that choice or selection does involve determination by motives. This point is considered later when we consider the part played by reflection.

2. *The Sense of Personal Responsibility.* — The sense of personal responsibility which expresses itself most clearly in our feeling of obligation, or the sense of "ought," is quite meaningless apart from the power of choice. After some actions we say, "I could not have done otherwise"; but after some other actions we say, "I ought to have done the other thing" or "I ought to have chosen differently." In some situations we have a keen feeling of blame or even of guilt and remorse.

In some situations where we feel we have made the wrong choice, self-interest tends to lead us to shift the blame by means of rationalization and projection. Yet in spite of these pressures, we often acknowledge ourselves as the causal agent and accept the responsibility and sometimes the penalty.

¹ See William H. Werkmeister, *A Philosophy of Science*, pp. 432-433. Harper and Brothers, New York, 1940.

The sense of obligation, like the feeling of freedom, has arisen in human experience. We need to explain it, since it cannot rightly be denied. If freedom is a reality and the person has some power of alternative choice, the sense of "ought" is meaningful and important. In this connection we might well recall the famous saying of Kant: "I ought, therefore I can."

③. *Moral Judgments upon Human Conduct and Character.* — We not only hold ourselves personally responsible for our own choices but hold others responsible for their actions. Praise and blame, approval and disapproval, rewards and punishments, and the norms and standards we set up in society assume human freedom. They assume that the chain of causal sequences is not fixed and that new determinants can be added at will.

All judgments upon conduct and character assume that men are free moral agents. Children are held responsible only in proportion to their age, experience, and degree of maturity. Why should we speak of an "age of accountability" if all actions of both children and adults are equally determined or if the adult has no more power of selection than the child has? In the courts of the land we do not hold persons responsible or guilty unless we believe that they could have done otherwise or that they are free moral agents. In some cases there is no question regarding what actually happened, but there may be a long trial for the purpose of discovering the degree of guilt.

In a discussion of "Free Will and the Laws of Nature," a recent writer says: "It is generally conceded that our ethical notions are meaningful and significant only if they pertain to free agents. In a world in which there is no freedom, *loyalty*, for example, is a meaningless word; for what sense is there in saying that a person is loyal — or truthful or honest or just — if factors and forces beyond his control determine his every word and deed, and if he cannot help doing what he does? Do we call a particle of dust loyal because gravitation and adhesion keep it securely in its place? Or do we regard it as disloyal or faithless if a gust of wind blows it away? One need only ask these questions in order to see the absurdity of the very idea of moral significance in a world in which no freedom exists. Even truth and falsity lose their meaning in such a world."¹

4. *The Fact of Deliberation.* — Reflective thinking is another

¹ William H. Werkmeister, *A Philosophy of Science*, p. 436. Harper and Brothers, New York, 1940. Used by permission of the publishers.

fact of human experience which indicates that man is not a mere plaything of the external world. Not always, but sometimes, a man stops and deliberates before he acts. As a result of this deliberation he may select a course of action which would not have been selected apart from the thinking. By means of reflective thinking a man can place before himself a number of alternative lines of action. He may consider the consequences of first this and then that line of action and weigh all the possibilities carefully. Reflective thinking has been called "trial and error by ideas." A man may carry out a number of lines of action in imagination and then select one of them for the actual course of action. In this way ideas, ideals, and goals may determine his conduct. Conduct may be guided by anticipated consequences in the future, as well as by the pressure of events from the past or in the present.

Why should a man stop and deliberate if the choice is not influenced by the deliberation? Why do we say so frequently to ourselves and to others, "Why don't you stop and think?" When hit by the racket, a tennis ball does not stop to deliberate. It goes at once, and it goes in a direction that is determined by mechanical forces. Sometimes, when a man is stimulated, he does not act at once and upon impulse; he stops to think. He may consider many lines of action before he identifies himself with any one of them. His action may be determined by what he considers his interests. He may decide upon a course of action which runs counter to that which appeals strongly to his emotions. He may even resolve to modify some well-established habit. This is what is called self-control or self-discipline.

Human thinking is meaningless apart from sufficient spontaneity to enable a man to choose between two or more alternatives. The difference between mere impulse and prejudice, on the one hand, and reason and knowledge, on the other hand, consists in a capacity to transcend unconscious and semiconscious organic and social pressures.

FREEDOM AS AN ACHIEVEMENT

Some men appear to have little freedom. Conditions and events seem to hold them as in a vise. They do not initiate action. They make no important decisions. For all practical purposes their lives are governed by the external conditions in the midst of which they live. Some other men, however, appear to control

events and to bend conditions to their wills. They are centers of energy, and they drive through to self-chosen ends.

No man is entirely free, yet all normal human beings have some freedom of choice. A large part of the activity of many persons is determined by the immediate and pressing needs for food, clothing, and shelter. They have little opportunity for choice or even for reflection upon the goals of life. Habits and social pressures hold many persons to stereotyped lines of action. For most of us, the times when we consciously choose and guide the course of our lives are few and fleeting. Freedom, we are suggesting, is a matter of growth or achievement. We gain freedom as we grow in self-consciousness and intelligence and as we extend and expand our store of knowledge. The fundamental question is not "Is man free?" but "How free is man?"

Self-consciousness, as we have seen, is one of the distinctive traits of human beings. Whereas animals are conscious, only man is self-conscious. Whereas consciousness is awareness of the environment, self-consciousness includes the additional awareness of the contents and activity of one's own mind or self. Self-consciousness makes possible the whole world of meanings, including reflective thinking and the sense of right and wrong. It enables a person to consider himself as a subject and as an object of action. It is a prerequisite of freedom of choice.

Man increases his freedom with the growth of intelligence and knowledge. If a man is facing a difficulty and knows of only one thing that can be done, he does not have much freedom. If he knows of many things that can be done, he has the possibility of greater freedom. With additional information about life and the world, and with an increase in the power of reflective thinking, come additional potential choices.

In addition to self-consciousness, intelligence, and knowledge, there are other conditions which are important for our freedom. These include physical and mental health and energy, a fertile imagination, a wide range of interests, and a society sufficiently advanced in civilization so that the elemental burdens of existence are not too pressing. A man may live merely in the present, tangible, physical world of sense perception. He need not be confined or limited to this world, however. He may also live in an emerging world of ideas, ideals, and values. Man seeks for something higher and better. He is an idealizing creature by his very nature.

»»» QUESTIONS AND PROJECTS «««

1. What is the difference between a brick, a dog, and a man, in so far as self-determination and freedom are concerned? There is a fundamental difference, is there not? See William H. Kilpatrick, *Selfhood and Civilization*, pp. 164ff. (The Macmillan Company, New York, 1941).
2. The frog, it is said, is so easily adapted to its surroundings and so unaware of slight changes that if it is put in a dish of water and the water is slowly heated, the frog will stay there until it is killed by the hot or boiling water, although it could have jumped out at any of the early stages in the heating process. Do some persons behave much like frogs, in that changes in conditions and ideas are imperceptible to them? Some persons grow and are alert to new conditions; hence they are able to control those conditions, rather than be controlled by them. Explain these two attitudes, and give examples of each.
3. Socrates, when unjustly sentenced to death, had ample opportunity to escape, and his friends urged him to do so. Reflecting on the entire situation, he decided to stay in prison and drink the poisonous hemlock because he considered it more just and honorable to obey the laws of the city than to break them. He was a man following an ideal, even though it meant death. In which way can you explain this situation more adequately — in terms of human freedom or in terms of determinism?
4. Comment upon the following statements:
 - (1) "No philosophy that denies some freedom to man can be lived."
 - (2) "From early times man has refused to accept the world in which he lived."
 - (3) "The impulse to frame unto himself ideas or values and to strive toward their realization is one of man's peculiar endowments."
 - (4) "The most permanent thing in creation is the demand of the human soul for freedom, the thirst after fullness of life and opportunity. These demands are written into nature itself."

The Sources of Knowledge

Is man capable of grasping and of solving the difficult problems of philosophy? We need to make inquiry as to what the human mind is capable of knowing. Do we have any genuine knowledge upon which we can depend or must we be satisfied with mere opinions and guesses? Are we limited to the bare facts of experience or are we able to go beyond what the senses immediately reveal?

In his well-known *Essay Concerning Human Understanding*, John Locke points out how this problem of knowledge is the first and fundamental question to be settled. He says: "Were it fit to trouble thee with the history of this Essay, I should tell thee, that five or six friends meeting at my chamber, and discoursing on a subject very remote from this, found themselves quickly at a stand, by the difficulties that rose on every side. After we had a while puzzled ourselves, without coming any nearer a resolution of those doubts which perplexed us, it came into my thoughts, that we took a wrong course; and that before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what objects our understandings were, or were not, fitted to deal with. This I proposed to the company, who all readily assented; and thereupon it was agreed, that this should be our first inquiry."¹ Immanuel Kant also placed this issue first among the central questions of life. For him the problem of knowledge, *What can one know?* came before the problem of ethics, *What ought one to do?* and the problem of religion, *For what may one hope?* Since the time of Locke and of Kant, the problem

¹ From *Locke Selections*, edited by Sterling P. Lamprecht, pp. 84-85. Charles Scribner's Sons, New York, 1928. Used by permission of the publishers.

of knowledge has occupied a prominent place in philosophical discussions.

The technical term for the theory of knowledge is *epistemology*, which comes from the Greek word *episteme*, meaning "knowledge." There are three central questions or problems in this field: (1) What are the *sources* of knowledge? Where does genuine knowledge come from, or how do we know? This is the question of origins. (2) What is the *nature* of knowledge? Is there a real world outside the mind, and, if so, what is its nature? This is the question of appearance versus reality. (3) What is the *validity* of knowledge? How do we distinguish truth from error? This is the question of the tests of truth. These questions are considered in order in this and the following two chapters.

THE SOURCES CONSIDERED

In the past, many beliefs once thought to be genuine knowledge have later turned out to be false. Men once firmly believed that the earth was flat, that disease demons could be driven out of men by means of loud noises, and that in dreams our souls actually visited distant spots. These beliefs, once so securely held, have now been almost universally discarded. May the same thing be true of much of our present-day knowledge? Possibly it is true today, as in the past, that "some people know a lot of things that aren't so."

Where did we get the beliefs we now hold? Is there some one source of knowledge or are there many sources of knowledge? If there are many sources, are some more important than others? The sources of knowledge recognized in modern discussions are usually four in number. Let us consider these sources in order.

THE TESTIMONY OF OTHERS: AUTHORITARIANISM

How do we know that Socrates and Julius Caesar ever lived? Are they perhaps fictitious characters, like many others about whom we read in ancient mythology and in modern novels? We know that Socrates and Julius Caesar lived because of the testimony of their contemporaries and of the historians. In fact, the commonest way of gaining knowledge about the past is to rely upon the testimony of others, that is, upon authority. Much of the knowledge we use in everyday living has been gained in that way. It is the way in which most of us have gained what knowl-

edge we have of the thoughts of other men, and what knowledge we have of the facts in the special fields of the various sciences. We have gained this knowledge neither by intuition, nor by thinking it out for ourselves, nor by personal experience.

Authority as a source of knowledge has its values as well as its dangers. Testimony or authority that is open to free and honest inquiry as to its validity is a legitimate source of knowledge. We need to accept such testimony in areas which we cannot investigate adequately for ourselves. We also need, however, to be reasonably certain that the persons we accept as authority are persons of integrity who have had more opportunity than we have had to gain the information desired. We need to know that these persons have used the best methods available at the time. We must leave the solution of some questions to experts in whose knowledge and skill we have reasonable confidence. The testimony of others may be valuable in bringing us a summary of the conclusions to which they have been led by their experiences. Such testimony may suggest to us where and how to look for evidence and so direct our attention to what might otherwise be overlooked.

The term authoritarianism means something different from the mere acceptance of an authority on certain occasions. It is the belief that knowledge is guaranteed or validated by the authority. When a person accepts authority uncritically, he ceases his independent efforts to find out what is true or false. The authority may be custom, tradition, the family, some legal code, some institution like the church or the state, or the printed page. Regardless of its form, testimony that is accepted with one's eyes shut, or on blind faith, and in disregard of the extent to which it does or does not harmonize with experience and reason, is a dangerous thing.

The weaknesses and dangers of authoritarianism are, first, that as a dominant attitude, (which uses no tests for knowledge except authority,) it tends to block progress and to be a substitute for thinking and further investigation. We live in a rapidly changing social order in which the beliefs and practices of one age may be quite inadequate for the people of a later period. Second, when authorities disagree or conflict, as they frequently do, we are left in confusion unless we have other sources to which to turn. Third, we are likely to be led astray by the prestige of our authority and fail to realize when he speaks outside the range of his competence.

A person who may be competent in one field is quite likely to be believed when he speaks in some other field in which he may have no special knowledge. Fourth, we may be led astray by the fact that a belief has been persistent and widespread in time and space. Such widespread acceptance may add to its prestige and appeal and make it difficult for us to discover ancient errors. Many such beliefs have been disproved in the past, and it is well to remember that many of these beliefs may be wrong.

As a classic illustration of authoritarianism we might cite the scholastic thinkers of the Middle Ages, who dared not deviate from the teachings of the Church and the writings of Aristotle. Space does not permit a discussion of the groups and institutions which are their modern counterparts, but the reader might well make his own list.

Many persons welcome authority because they have little confidence in themselves and because they are intellectually lazy. To accept the word of someone else is to take the easy way and to gain comfort and assurance, provided that one believes the authority can be relied upon absolutely. Persons in general tend to be imitative, credulous, and suggestible. To hear or to read is to believe, so they accept the idea or "get on the band wagon" or "toe the party line." To follow the crowd and to fall in line with public opinion is the refuge of confused and weary minds. Such tendencies in human beings create fertile soil for modern high-pressure advertising and propaganda.

Testimony or authority, it must be kept clearly in mind, is not an original source of knowledge. It is a secondary, not a primary, source. When we ask, "From what source did our authority gain his knowledge?" we are not satisfied to be given merely additional authorities. We want to know whether he gained his information by experience or reason or in some other way, and whether we can examine the steps by which the conclusions have been reached.

INTUITION, OR THE WAY OF MYSTIC INSIGHT: INTUITIONISM

How do we know, as we occasionally seem to know when we meet someone for the first time, that here is a person that can be trusted? Some persons do feel that they know such things. Some persons have fallen in love with other persons almost at first sight. Do we have some sense or intuition that gives us immediate insight into some situations?

A possible source of knowledge is through intuition, or the direct apprehension of knowledge which is not the result of conscious reasoning or of immediate sense perception. In the literature dealing with intuition, one comes across such expressions as "immediate feeling of certainty," "imagination touched with conviction," a "total response" to some "total situation," and a "direct insight into the truth." A few persons would deny that intuition has any value as a source of knowledge. Apart from these few, we may note the following positions which men hold regarding intuition.

1. There is an element of intuition present in all knowledge. George Santayana uses the term to mean our awareness of the immediate data of consciousness. W. E. Hocking speaks of self-knowledge as the "best case for intuition." Knowledge of oneself appears to be present as an element in all knowledge of other objects.¹ When I hear a whistle, in addition to hearing it I am aware of my hearing and also aware of myself as the one who does the hearing. Intuition is present in the knowledge of oneself and one's own life, and in the axioms of mathematics. It is also present in our understanding of the connections between the propositions which constitute the various steps of an argument. Reasoning itself depends on some connection that we grasp or fail to grasp.² An intuitive element is the foundation, or basis, of our recognition of the beautiful, of the moral standards which men accept, and of religious values.

2. Intuition is the funding of one's past experience and thinking. Valid intuitions are short cuts to the knowledge which the senses and reflective thinking would reveal. They are the outcome of subconscious induction or deduction. Those who have had considerable experience in thinking and working in some field are more likely to have good intuitions in that area of human experience. For example, scientific insight comes to those who have labored persistently over scientific problems; poetic inspirations come to those who love and read poetry; musical inspirations are present to those who know music; philosophical and religious intuitions appear to those who devote time and attention to these fields. Possibly this would explain the considerable body of testimony from inventors and students of science, as well as from

¹ William E. Hocking, *Types of Philosophy*, revised edition, pp. 195ff. Charles Scribner's Sons, New York, 1939.

² Alfred C. Ewing, *Reason and Intuition*. Oxford University Press, London, 1942.

artists, philosophers, and religious leaders, to the effect that their creative achievements have often resulted from sudden insights or moments of inspiration.

3. Intuition is a higher kind of knowledge, different in nature from that disclosed by the senses or by the intellect. The outstanding representative of this point of view is Henri Bergson, 1859-1941, the French philosopher. For Bergson intuition and intelligence are pointed in opposite directions. Intelligence, or intellect, is the tool of science which is able to deal with matter. It deals with things and with quantitative relations. It solidifies whatever it touches and is incapable of dealing with the nature of life or with duration. Intuition, which is instinct that has become self-conscious, can lead us to the very inwardness of life. If the sympathy, which is intuition, can extend itself, it will give us the clue to vital operations. We discover the *élan vital*, the vital impulse of the world, by intuition, which is inward and immediate, rather than by intellect, which is external and describes the living in terms of the static and the dead.

4. Intuition, according to the mystics, may enable us to gain a vision of reality, to receive the inspirations of an immanent God, or to experience a unity with God. Followers of all the great religions declare that their leaders have gained a unique insight into religious and moral truths. Without mystic intuition, it is doubtful whether prayer, worship, and religious rituals would have continued throughout the history of mankind. Buddha, the Hebrew prophets, Christ, Saint Paul, Saint Augustine, Mohammed, Bernard of Clairvaux, Meister Eckhart, and a host of others, past and present, bear testimony to the strength of these convictions.

Wherever there is feeling there is an awareness of some object or situation. Fear, anger, and jealousy arise due to our awareness of some unpleasant situation. Love, sympathy, and laughter involve knowledge. Feeling appears to contain essential elements of truth needed to meet various life situations and our adjustment to them. In the case of animals there is a feeling knowledge in connection with food-getting, nest-building, and migration which gives a true sense of situations and which sustains the life of the organism. Professor W. E. Hocking, in pointing out such facts, raises the question whether it is possible that this feeling sense may become in man "a valuable organ of knowledge." The intuitionists believe that a "total response to the total situation"

may supplement the particular senses and the efforts of the intellect. The student of this problem will need to watch two types of experiments, one seemingly negative, the other apparently positive. The first includes the experiments by Kuo, Rowan, and others, dealing with possible causative factors in the behavior of rats and the migration of birds.¹ The second includes the experiments in human extra-sensory perception carried on at Duke University.²

Intuition may function more adequately in connection with elemental, or basic, life interests as distinct from those judgments which are complex, or composite. W. P. Montague says: "We might take as an example of an elemental interest romantic love and the judgment of faith on which it is based. It would surely be a vain and preposterous undertaking to discover one's true sweetheart by accepting the authority of others, by using deductive reasoning and calculation, by cold-blooded empirical analysis of her perceivable qualities, or by considering the extent to which she might be a practical utility. All of these non-mystical methods would doubtless be appropriate in the selection of a business partner, a housekeeper, or even in making a marriage of convenience. But no one either could or would fall in love for any other reason than that the beloved appealed in a direct and unanalyzable manner to his heart or his feelings. In other words, the lover as such is and must always remain a mystic. And even in forming the belief on which one bases his choice of a friend, intuition is almost as indispensable as in choosing a sweetheart. True friendship is certainly not based upon either calculation or utility, but upon the direct appeal to our sympathies and affections. The same might be said of objects of art, the primary enjoyment of which is not based upon considerations that are rationally analyzable."³

The weakness or danger of intuition is that it does not seem to be a safe method of knowledge when used alone. It goes astray very easily and may make absurd claims unless it is controlled or checked by reason and the senses. It must turn to the percepts of the sense organs and the concepts of reason when it attempts to

¹ See Leland W. Crafts and Others, *Recent Experiments in Psychology*, Chapters I and II. McGraw-Hill Book Company, New York, 1938.

² See Joseph B. Rhine, *New Frontiers of the Mind*. Farrar and Rinehart, New York, 1937.

³ From William Pepperell Montague, *The Ways of Knowing*, The Library of Philosophy, edited by J. H. Muirhead, p. 226. George Allen and Unwin, Ltd., London, 1925. By permission of The Macmillan Company, publishers.

communicate and explain its insights or to defend them against false interpretations or attacks. Intuition seems to presuppose and to be affected by our previous experience and thought. Intuition of some truth, combined with some logical evidence for its acceptance, may lead us to justify its acceptance, where intuition alone or reason alone would have been insufficient.

Whether we think of intuition as present to some extent in all awareness and knowledge, as the funding of our experiences, as immediate insight into the totality of some situation, or as super-sensuous revelation, there appears to be an element of intuition in knowledge. At least we should keep our minds open to the possibility of such insight. Intuition, however, must abandon any claim to certainty or infallibility. The art of living demands that intuition, intellect, and sense experience be kept together. The insights of the poet, the artist, and the seer are often as true as those of the scientist.

REASON AS A SOURCE: RATIONALISM

How do we know that of two contradictory statements both cannot be true at the same time — that if two things each equal a third thing, they are equal to one another? We may say that such things are self-evident or that they appeal to our reason.

The thinkers who stress reasoning or thought as the central factor in knowledge are known as rationalists. Rationalism is the view that we know what we have thought out, that the mind has the ability to discover truth by itself, or that knowledge is obtained by the method of comparing ideas with ideas. The rationalist, in emphasizing man's power of thought and what the mind contributes to it, is likely to assert that the senses, by themselves, cannot give us coherent and universally valid judgments. The highest kind of knowledge consists in the universally valid judgments that are consistent with one another. The sensations and experiences we gain by means of the senses — sight, sound, touch, taste, and smell — are just the material of knowledge. These sensations must be organized by the mind into a meaningful system before they become knowledge. For the rationalist, knowledge is found in concepts, principles, and laws, not just in raw sensations.

In its less extreme form, rationalism makes the claim that the mind of man has the power to know, with a fairly high degree of certainty, various truths about the universe which the senses

through outward observation would not give us. For example, if A is greater than B and B is greater than C, then A is greater than C. We know that this is true quite independent of any actual instances. We know that it applies generally to boxes, to cities, or to men, even though we have not experienced it or tried it out. Other "necessary truths" are: five plus five equals ten; the three interior angles of a triangle are equal to two right angles.

In its more extreme form, rationalism may make the claim that men are capable of arriving at irrefutable knowledge independent of sense experience. From this point of view the rationalist claims to be able to provide us with genuine knowledge. Furthermore, the thoroughgoing rationalist is likely to interpret these laws, discovered by thought, as basic principles of nature in general.

The question as to whether there is any *a priori* knowledge, or knowledge that does not spring from experience, is an exceedingly controversial issue. The examples most frequently used are the formal disciplines of logic and mathematics, where the principles used appear to have a high degree of certainty and universality. Logic and mathematics are products not of the senses, but of reason; yet they give us reliable knowledge. For example, consider the statements: "If equals be added to equals, the sums are equal," "A thing cannot exist and not exist at the same time." We can see by *thinking* about them that these principles and relations must be true, although we have not tested them out in all the possible situations. Concrete experience does not increase or diminish our assurance of them. In order to think clearly, men are obliged to accept the validity of certain laws of thought. These would include: the Principle of Identity, that we must stick to our meanings or definitions throughout an argument; the Principle of Contradiction, that two contradictory propositions cannot both be true; and the Principle of Sufficient Reason, that there must be a cause for every happening. Accepting, it is said, a few fundamental axioms or principles, a mathematician, providing he reasoned accurately and was sufficiently intelligent, could deduce the whole system of mathematics. The mind, it is said, has certain ready-made principles or certain innate ways of operating. The empiricist (the person who emphasizes sense perception or experience) will regard these principles as mere constructions in the mind and not genuine sources of knowledge.

In the light of these claims by the rationalists, we may need to

admit that we do possess some knowledge not directly derived from sense experience. We must be careful, however, not to extend these claims too far, as some of the more extreme rationalists do. Furthermore, it is probable that some sense experience is necessary to draw out or to make clear these general principles. We need to deal with particular things before we get a sense of numbers, and to experience lines, angles, and triangles before we can build geometrical systems. Again, it appears to be clear that such *a priori* knowledge as we have in fields like logic and mathematics is purely formal or abstract, and that it does not inform us of what actually exists in the physical world. Such knowledge deals not with the existing external world, but with our world of relations and meanings. All this knowledge is of the "if . . . then . . ." variety. To say that "five plus five equals ten" is not to say that any particular thing exists; it is to say that if you have five things (of anything) and five other things, then you have ten things. So far as the external world is concerned, we become acquainted with its rich variety of contents by means of the senses and not by means of any *a priori* knowledge.

The danger of the extreme forms of rationalism is that men may substitute their deductive reasoning for empirical observation. In so doing they may come to accept some system which has logical consistency but little relevance to the world in which we live. The medieval schoolmen, as well as Descartes, Spinoza, Kant, and other thinkers past and present, have set forth systems of thought that have a high degree of logical consistency. Quite obviously they cannot all be true. The medieval schoolmen, assuming that perfect motions were circular and that planetary motions were perfect, reasoned that planetary motions must be circular motions; yet this conclusion is clearly false, as observation has proved.

Today, in our civilization as a whole, we suffer from a neglect of reason rather than from its overemphasis. Creative intelligence has accompanied every advance in the history of civilization. We need to think more, not less, in the fields of science, morals, and religion, as well as in the routine affairs of daily living. War, fascism, and economic collapse are the result of human irrationality and wrongdoing and might be avoided if we were more intelligent. In order to live well, we must live on the basis of principles which are well thought out and tested in human experience. Reason may save time, energy, and human life.

THE SENSES AS THE SOURCE: EMPIRICISM

How do we know that water will freeze or that it will revive the drooping plant? How do we know that it is better to be courteous than discourteous or that democratic governments can be successful? We may say that we know by means of our sense organs or by our past experiences.

What we see, hear, touch, smell, and taste — that is, our concrete experiences — constitute the realm of knowledge, according to the empiricists. The view that knowledge comes through the senses is known as empiricism. If rationalism says, "Stop and think," empiricism replies, "Look and see." Emphasis is placed upon man's power of perception, or observation, or upon what the mind receives from the environment. Knowledge is obtained by forming ideas in accordance with the observed facts. Stated briefly, we know what we have found out from our senses.

Empiricism may take a number of forms. As a narrow sensationalism, it asserts that knowledge is essentially sensation and that there is no other knowledge. In the eighteenth century, John Locke regarded the mind as like a piece of wax or a blank photographic plate or a recording machine, which registers impressions as they come from the world outside. More recent empiricism abandons this copy-theory of knowledge. Pragmatism, as a form of "radical empiricism," views the mind as active in selecting and molding its experiences in accordance with the interests and purposes of the organism. It emphasizes the ongoing, changing world of experience. Pragmatism is considered separately as a type of philosophy.

Modern science, which is especially interested in particular facts and relations, is empirical. The special sciences are interested in controlled observations and experiments, not just in general sense perceptions and experiences. Irrelevant factors are kept from disturbing the examination of some special problem or isolated event. Items can be changed or manipulated, and the effects can be recorded. Furthermore, if the conditions are controlled and definite, the experiment can be repeated by other observers. Thus more accurate and objective information can be obtained. Special instruments can be used to aid observation, to help eliminate errors, and to measure results. The conclusions, however, are always tentative and are set forth in the form of hypotheses, theories, or possibly laws, which after

further observation and research may need to be modified or changed. The process of building up the great body of scientific knowledge is a slow process which involves the labor of countless thousands of persons in many parts of the world. This knowledge enables us to exercise considerable control over our world, and it is of constant service in our daily lives.

While we depend upon empirical knowledge for our acquaintance with the particular facts and relations of our everyday world, we do need to exercise caution and to realize that we can be led astray even in this field. Prejudices and emotions may distort our view so that we select our "facts" to support our expectations. We tend to see what we expect to see or are trained to see. Our human knowledge is infected with a personal and subjective coloration. The ease with which some philosophers and scientists have cast doubt upon just what it is that is outside or beyond us, or even whether there is an external world at all, should keep us humble. If there were no external world, science would not thereby be discredited. It would be the study of possible human experiences under varying conditions and, as such, would continue to be useful. To what extent the world is appearance or reality is considered in the next chapter.

If the method of empiricism is carried to the extreme and the claim is made that the objective knowledge revealed by the senses alone is real, then material values tend to become paramount. The social and psychological sciences begin to follow the physical sciences and to treat man and human culture and consciousness in the way that physics and chemistry treat inorganic phenomena. The tendency is toward a relativism that obscures the distinction between truth and falsity and right and wrong, and toward a materialism that considers religion an absurdity. Reason and logic are valuable, according to this point of view only as long as their deductions are supported by the testimony of the senses.

THE SOURCES AS COMPLEMENTARY

The various sources of knowledge, in the view of the author are complementary and not antagonistic standards for the discovery of truth. The sensory, the rational, and the intuitive, as well as the secondary source of the testimony of others, are genuine sources of knowledge. Each one has some permanent

contribution and value, and each may be superior to the others in certain areas. Sense perception, or empiricism, is the most widely applicable and reliable source, especially in the field of particular facts and specific relations. This method is more immediate and analytic; through the aid of induction it may help to discover the general propositions that are implied by the examination of any group of concrete facts. The senses without the aid of reason and intuition, or unchecked by them, may furnish only an unorganized mass of sensations and impressions.

Reflective thinking, reason, or the method of rationalism is also an indispensable source of knowledge. Rationalism is more indirect and synthetic. Through deduction it attempts to discover the consequences implied by groups of facts and general propositions. Reason, however, can lead to genuine knowledge only when its premises are empirically verifiable.

In some situations in life, intuition in the form of direct or immediate insight appears to be of great value. Some persons will insist that every experience includes an intuitive element. Total situations are grasped only intuitively, they say. Uncontrolled and unchecked by reason and the senses, intuition may lead to serious errors.

The testimony of others retains a dominant position in dealing with the past and with areas which we are unable to investigate for ourselves. Our authorities, however, must be accepted critically or with caution. We can be led astray by them.

The attempt to extend the area of any one source of knowledge and to make it the one supreme or all-inclusive source for the determination of truth leads to abuses and to protests. No one of them in isolation from the others is satisfactory or can encompass the entire field of knowledge. A society guided by any one-sided view of knowledge tends to be led astray and to lose its appeal and its creativeness. Possibly this has been one important reason for the decline of some societies and civilizations.¹

A number of men, writing from different points of view, have stressed the complementary nature of these sources of knowledge. In *The Ways of Knowing*, W. P. Montague, from whom the author has received fruitful suggestions, discusses the "federation of the methods." He says that the empiricists "acquire the food of

¹ See P. A. Sorokin, *The Crisis of Our Age*. E. P. Dutton and Company, New York, 1941. Dr. Sorokin thinks that our extreme empiricism is one important cause of the crisis which we face.

science," while the rationalists "digest and assimilate it." He sees them as complementary standards for the discovery of knowledge: "neither can be substituted for the other; neither can contradict the other."¹

In discussing empiricism and rationalism, J. A. Leighton says: "The sound position may be called *rational empiricism* or *empirical rationalism*. In contrast with *a priori* rationalism, it stresses the dependence of all our knowledge on experience. In contrast with sensationalistic empiricism, it insists on the purposive activity of the mind in knowing and holds that the success of this activity implies a vital intercourse between the mind and reality. Such a point of view makes an organic synthesis of the valid claims of both rationalism and empiricism. From this standpoint we explicitly hold that the materials of knowledge come to us in experience, but the materials thus given are organized by the activity of reason into the texture of our sciences."²

THE GENETIC APPROACH TO KNOWLEDGE

Modern psychology and logic have suggested that knowledge is not something that comes in neat packages which can be traced to separate sources. Knowledge is a growth in which a living organism, with certain specific interests and drives, is in constant contact and interaction with a changing environment. This relation between the organism and its environment is sometimes described in terms of "stimulus and response." Since the organism may select the stimulus to which it is to respond, better terms would be "organism, stimulus, and response." Out of this relationship awareness arises. The organism becomes aware of various specific things, relations, and events, and as a consequence acquaintance, language, meaning, and thinking emerge.

In various writings John Dewey has pointed out that a new conception of experience and of the relation between sense perception and reason is needed in order to conform to the newer developments in biology and psychology. Wherever there is life there is activity or behavior. There is a continuous interaction between

¹ William Pepperell Montague, *The Ways of Knowing*, The Library of Philosophy, edited by J. H. Muirhead, pp. 126 and 130. George Allen and Unwin, Ltd., London, 1925.

² Joseph A. Leighton, *The Field of Philosophy*, revised and enlarged edition, p. 555. D. Appleton-Century Company, New York, 1930. Used by permission of the publishers.

the organism and the environment. Each tends to mold or to modify the other. The higher the form of life, the greater is the control exercised over the environment. "Knowledge is not something separate and self-sufficing, but is involved in the process by which life is sustained and evolved. The senses lose their place as gateways of knowing to take their rightful place as stimuli to action. To an animal an affection of the eye or ear is not an idle piece of information about something indifferently going on in the world. It is an invitation and inducement to act in a needed way. It is a clue in behavior, a directive factor in adaptation of life in its surroundings. It is urgent not cognitive in quality. The whole controversy between empiricism and rationalism as to the intellectual worth of sensations is rendered strangely obsolete. The discussion of sensations belongs under the head of immediate stimulus and response, not under the head of knowledge."¹

In describing this approach and pointing out that it is better to investigate "the conditions of knowledge than its sources," G. T. W. Patrick says: "What we have rather is an organism with profound interests and propensities exploring a hostile and a friendly world and interacting with its environment. The result is experience, and this experience may be funded, drawn up in specific new situations, and these situations may be intelligently dealt with, controlled, mastered. Evidently it is this *funded experience* which we call knowledge, later classified, expressed in language, codified into the shorthand of scientific terms. Knowledge, therefore, is experience rationalized; that is, organized. Empiricism and Rationalism thus lay aside their historic rivalry and join friendly hands."² The conditions of knowledge are "a self with certain innate interests, an environment with which the self enters into relations, an intelligence that can fund, capitalize, and organize this experience and deal effectively with new and complicated situations. Knowledge is funded experience, but in the funding process mental powers and activities are the significant things — memory, thought, conceptual analysis, reflection, selective organization, creative synthesis. Knowledge is therefore not something which *drifts in* from a ready-made world in the form of impressions, as the old Sensationalism taught; nor is it the dis-

¹ John Dewey, *Reconstruction in Philosophy*, p. 87. Henry Holt and Company, New York, 1920. Used by permission of the publishers.

² George T. W. Patrick, *Introduction to Philosophy*, revised edition, p. 338. Houghton Mifflin Company, Boston, 1935. Used by permission of the publishers.

titled product of certain *a priori* universal principles of thought, as the older Rationalism taught. It is a product of the interaction of the self and the environment, in which the remarkable powers of the self are the most significant factors."¹

»»» QUESTIONS AND PROJECTS «««

1. Are there any innate or inborn ideas? See John Locke's criticism of innate ideas. What are the arguments in his *Essay Concerning Human Understanding*? See pp. 96-110, Book I, of *Locke Selections*, edited by Sterling P. Lamprecht (Charles Scribner's Sons, New York, 1928).
2. Does the fact that a belief has been held since primitive times justify its acceptance today? Are the ancients younger or older intellectually than we are? See Durant Drake's *Invitation to Philosophy*, pp. 20ff. (Houghton Mifflin Company, Boston, 1933).
3. What groups and institutions express the authoritarian attitude today? What are the reasons for this attitude, and what is its justification?
4. To what extent can we accept authority: (1) in the realm of the physical sciences; (2) regarding the facts of history, including the explanations of causes; (3) in moral standards; (4) in the realms of politics, social philosophy, and religion?
5. Are some sciences more empirical and others more rational? W. P. Montague speaks of empirical sciences like botany as being more immature and less highly developed than sciences like physics. (See William Pepperell Montague's *The Ways of Things*, p. 43. Prentice-Hall, Inc., New York, 1940.)
6. Is there any truth in the statement, sometimes heard, that "on the whole, women are more intuitive and men more rational"?
7. Can you give any examples of the difficulties or dangers that may occur when a man who is an expert in one field tries to speak in another field which is outside his area of special knowledge?
8. Read the story of the discovery of the planet Neptune in *The Nature of the World and of Man*, edited by H. H. Newman, pp. 14-15 (The University of Chicago Press, 1927). What does this account appear to indicate regarding the nature of human reason and the nature of the universe?
9. Why do some conservative religious persons use the term *rationalism* in a derogatory sense? Is reason a danger to or a means of defense for religion?

¹ George T. W. Patrick, *Introduction to Philosophy*, revised edition, pp. 339-340. Houghton Mifflin Company, Boston, 1935. Used by permission of the publishers.

The Nature of Knowledge

The second question we are to consider in the field of epistemology, and in some ways the fundamental question, concerns the nature of knowledge. This is the issue of appearance versus reality. Is there a real objective world outside the mind, or is the world, in part at least, a reflection of our minds or a mental construction?

THE COMMON-SENSE VIEW

The common-sense view of the world, held quite generally by “the man in the street,” is that known as *naïve realism*. According to this view, the distinctions between thoughts and things (physical objects), past and present, present and absent, knower and object known are comparatively fixed and are common to all spectators. Persons see stars, rocks, trees, houses, tables, and other things. These things exist in their own right quite independent of our perceiving or thinking about them. We may become aware of them; when we do so, we perceive them just as they are in and of themselves. Consciousness, like a flashlight or a searchlight, lights up or illuminates, in perception, the events and objects of our experience. Our senses are thought of as something like windows which enable us to contact the world and to know it as it is. Things seem to be non-mental, or neutral, and common to all observers who examine or come to know them. Furthermore, the things, processes, and relations which we experience are continuous in the sense that they go on all the time, whether we happen to experience them or not.

As part of this common-sense view of the world, some persons make a distinction between substances and their qualities. The

external world consists of substances like rocks, wood, and water. These, in turn, possess qualities. For example, a thing may be hard, smooth, brittle, and black or soft, rough, pliable, and red. The person with some knowledge of chemistry and physics may speak of solids, chemical compounds, molecules, atoms, electrons, and protons. He probably thinks of these things as being external to, and independent of, all observers. He also thinks that he knows the difference between the real and the imaginary, and knows what is genuine knowledge as distinct from mere opinion.

THE DIFFICULTIES WITH THE COMMON-SENSE VIEW

When philosophers and others have reflected upon the nature of knowledge and upon the world which we are attempting to understand, they have found that it is much more complicated and baffling than most persons realize. They were attempting neither to confuse the public nor to belittle our popular assumptions, but to understand the world more adequately. Let us look at some of the problems that arise in sense perception, using some of the simpler examples that occur frequently in the literature on the subject.

THE SENSE OF SIGHT

As we look at objects, they appear to have some color. Where or what is color? If I put on blue-colored glasses, the world looks blue. If I put on red glasses, the world looks red. If we get an overdose of santonin or if we put it in our eyes, everything looks yellow. Color appears to be either wholly or in part affected by the condition of our visual organs. In the cases mentioned, nothing has been done to the "outer" world. A man with "normal" vision may see an object and call it "red," while another person who is color-blind sees it as grayish. But if two people with supposedly normal eyes look at the same object and call it red, have we any assurance that they both see the same shade of red? Even if they do see in exactly the same way, does that mean anything more than that they both have the same type and quality of visual apparatus?

If our eyes were constructed more like microscopes, would we live in the world in which we now live? On the other hand, if they were gauged more like telescopes, we would live in a still different world, would we not? Some animals, we are told, can see by the ultraviolet light which gives man no color sensation. Light from

some of the stars which I saw last evening took thousands of years to come to the earth. What I see is not the star but a little bit of light. Conceivably the star may have disappeared years ago.

There is a coin on my desk. People say it is circular, but from most points of view it looks elliptical. There are only two points of view from which it appears circular: directly over it or directly under it. Many observers could have many different sense data of it. Apparently the sense data and the coin (whatever it is) are not identical.

When I say that I "see" a book on my desk, what I see ordinarily is a part of the cover or jacket and one end or one side of the book. The book is in part perceived, but it is in part a mental construction. This is characteristic of most of the objects we are said to experience. When I put pressure on my eyeball at just the right place, I see double; for example, I can see two pencils on my desk, not just one. If all of us had grown up with a bone pressing at that point, would we all see two things where we now see just one? Someone will reply, "No, because we would put out our hand and find that there was just one pencil." Is that the case, or would we see two hands picking up two pencils?

THE SENSE OF SOUND

In the area of hearing we are presented with the same problems that arose in the field of vision. If I am standing by the railway tracks and a whistling locomotive rushes past me, the pitch of the whistle changes very definitely as the engine approaches me, is opposite me, and then recedes. The engineer or the fireman will insist that the pitch was the same throughout. Here are two different sense data with apparently one object.

At a track meet the starting pistol must sound before any of the runners leave the starting line. If you are at the far end of some tracks, you may see the runners start before you hear the pistol report; that is, the order of your sense data may reverse what other observers insist are the "facts" of the situation. As we shall see in the case of dreams and hallucinations, we may have a vivid impression of voices or other sounds when there are no external factors to correspond.

THE SENSE OF TOUCH

As the philosopher George Berkeley pointed out years ago, water may feel warm to one hand and cool to the other if one of

our hands is warm and the other is cool and if we plunge both hands into the same water.

If I stand near the fire, I experience the sensation of heat. In common practice we speak of the heat as a quality of the fire. But is it, or is that just a naïve way of looking at things? As I move nearer to the fire or possibly into it, I experience the sensation of pain from the greater degree of heat. Yet the pain is my pain and not in the fire. Is the heat, also, a sensation of mine rather than a property of the fire? Raise the temperature of our bodies only a few degrees and the world will feel different and will look different. Professor C. E. M. Joad, who points out some of these facts,¹ suggests that there is no particular reason why the sensations possessed by a Nordic adult with a body temperature of 98.4 degrees should be privileged to be considered real.

If parts of our nervous system are appropriately stimulated, we can get various sensations of touch. There is much testimony to the effect that a man may lose a limb and still experience a sense of touch or of twitching or of pain in the missing limb, as if it were still intact.

THE SENSES OF SMELL AND TASTE

The sense organs of smell and of taste are especially fickle, as many persons can testify. They are sometimes influenced by what we have just been eating or smelling, and a head cold may greatly diminish their range and consistency. Here again our experiences seem to be affected by the nature and the condition of the sense organs, as well as by what may be "out there."

MEMORY, IMAGINATION, DREAMS, ILLUSIONS, AND HALLUCINATIONS

We can remember past objects, persons, and events. Sometimes our memory is very clear and vivid. We can imagine all sorts of things with equal vividness. In dreams and hallucinations we seem to see, hear, touch, smell, and taste that which has no present position in the spatio-temporal order, as we and others may judge the situation at a later time. There is a dualism here which leads men to ask whether in ordinary perceptions we may be creating our sense data in part or wholly. What is appearance, and what is reality? What do we mean by the "real" world?

¹ Cyril E. M. Joad, *Guide to Philosophy*, p. 30. Random House, New York, 1936.

SUBJECTIVISM

Subjectivism, or what is more technically called Epistemological Idealism, is the view that objects, or the qualities of the world which we perceive by our senses, do not exist independent of a consciousness of them. The external world is dependent upon mind, so that reality consists of conscious being and its states.

Historically, this position is represented best by the philosopher George Berkeley, 1685-1753. His famous expression is "To be is to be perceived." Berkeley starts with the philosophy of John Locke, 1632-1704, who holds to the reality of material substance, spiritual substance, and ideas. Locke separates the qualities of material substance into the primary qualities (form, extension, solidity, motion, number, etc.) and the secondary qualities (color, sound, taste, odor, etc.). The latter do not really belong to bodies in the external world; they vary from person to person and are, therefore, in the mind. Berkeley, however, went on to show that the same arguments can be applied to the primary qualities. Thus material substance disappears, and all the qualities are mental constructions. This left Berkeley with only spiritual substances and ideas or with conscious beings and their sensations or ideas. If both the primary qualities and the secondary qualities are in the mind, what is the object itself? All that the term *matter* can mean is a certain group of qualities, impressions, or ideas. The student should turn to the chapter on "Idealism" and read the section on "Subjective Idealism," where this position is stated more completely. If possible, he should read Berkeley's *Principles of Human Knowledge* and get the full force of his arguments and his refutation of objections to the position. This subjectivism, or epistemological idealism, should not be confused with the various types of objective idealism.

The problem before us in this section is what Ralph Barton Perry has called the *ego-centric predicament*. No matter what we do or how hard we try, we cannot get outside or beyond our own experience. Anything we know is always an object known. What it would be apart from this relationship there is no way of knowing. When you think of any object, you must think of it in terms of all these various sense qualities. The object is red or smooth or sour. We have already seen that the condition of the sense organs or mental factors enter into the construction of these objects. Possibly there are no independent objects, and the world may

be a mental construct. To say that you can think of objects and can experience them as existing independently does not alter the situation, as you are still dealing with your perceptions or sense data.

In *The Ways of Knowing*, W. P. Montague sets forth seven stages of subjectivism.¹ The student will do well to reflect upon these and to ask himself how many of these steps he is willing to take. The stages are partly historical and partly logical in their development.

1. *The subjectivity of such objects of experience as dreams, illusions, hallucinations, and the whole range of perceptual and conceptual errors.* Dreams may seem very real. Primitive man actually thought that his soul had wandered off and had had these experiences. We all experience illusions at times when we mistake the identity of some person or object. Drugs or fever may bring hallucinations to a person who is otherwise normal. We put all these objects of experience in the mind and not in the outer world.

2. *The subjectivity of our images or sense data.* From the examples given earlier in the chapter, it appears that we need to make a distinction between whatever is given or present in the outer world and our sense data. If two things can vary independently, then they are not identical. The sense data of the coin and the star were found to be quite variable.

3. *The subjectivity of the secondary qualities, such as color, sound, taste, smell, and tactual sensations.* Not only philosophers like John Locke but many modern scientists have interpreted the outer world in terms of quantitative relations alone, and have put the non-quantitative qualities in conscious states. For example, colors and sounds are merely the effect of light and sound waves of certain lengths upon human sensory organs.

4. *The subjectivity of the primary qualities, such as extension, figure, motion, mass, size, and shape.* If we take this step, we have arrived at the stage of subjectivism proper, or the belief that there is no reality outside of experience. This is the position taken by Berkeley. If we take this step, we pass from epistemological dualism to epistemological monism. There is now a single realm of knowledge, and it consists of conscious beings and their ideas. The subjectivist insists that the primary qualities vary, and are

¹ William Pepperell Montague, *The Ways of Knowing*, The Library of Philosophy, edited by J. H. Muirhead, pp. 265-290. George Allen and Unwin, Ltd., London, 1925.

affected by the condition of the sensory organs, and are elements of experience, the same as are secondary qualities. However, there is some difference, which accounts for the distinctions that have been made between primary and secondary qualities. The primary qualities are common to many minds and are shareable or public experiences in the sense that secondary qualities are not. This is why they have been called physical qualities or states, to distinguish them from the purely private experiences which we call mental or psychical.

Berkeley says that these common or shareable experiences, the primary qualities of our world, are caused by something beyond ourselves, and are different from the secondary qualities which arise out of our own mental activity. The agency is still, however, a conscious being or a conscious will infinitely wiser and more powerful than we are. The order of nature arises, according to Berkeley, from the ideas in the mind of God.

5. *The subjectivity of space and time, and the classes and laws of nature.* The work of Berkeley had not affected the laws or relations that unite the various experiences of men. The order and laws of nature seem to be independent of the minds that experience them. Immanuel Kant made this fifth step. The mind, he said, imposes its own forms of organization or synthesis upon the unorganized sensations it receives from an unknown source. The mind functions through the three faculties of sensibility, understanding, and reason. The first set of forms consists of space and time. The second set is called the "categories," the higher classes or divisions within which things are organized. These include such forms of relationship as quantity, quality, cause, effect, unity, and plurality. The third set is the "ideas." When, as scientists, we marvel over the mathematical relations and harmonies of the world, we are merely projecting in outer form the relations and the harmonies of our own minds.

Kant's arguments are difficult and complicated and cannot be presented here in detail. Merely a brief statement regarding his arguments for the subjectivity of space and time is in order: a person can imagine the non-existence of any particular object in space and time, say the building which we occupy, but he cannot imagine the non-existence of space and time themselves. Try to think of a limit to space. What is beyond your limit? Is there "a time when time was not"? That time and space adhere or stick to the mind is a proof of their subjectivity. They are, in Kant's

view, logically and existentially prior to the bodies that occupy them. Space and time exist *within* consciousness.

Our thinking about the properties of space and time appears to possess a certainty and a necessity that are not present when we think about the various objects of our world. This can be explained most adequately by the assumption that they are forms of the mind itself. If space and time were objective, we would have to think of them as being either finite or infinite. If we think of them as finite, we can easily pass in thought beyond their limit. To think of them as infinite seems to imply their completion. That may mean only that we cannot think of any limits to these relations.

The argument from selective relativity, as Professor Montague points out, can be used here as well as in the earlier stages of subjectivity. The object in time and space and the various time and space relationships which we experience are determined, from this point of view, primarily by the nature and condition of the conscious self, and only secondarily by whatever (unknown and unknowable) may exist beyond the experiences of conscious selves.

6. *The subjectivity of the ultimate basis of our sensations, so that the many selves become parts of one all-inclusive absolute self.* One single cosmic self or absolute self becomes the ground of our sensations and of all the forms and relations of our experience. The deeper selves in each of us constitute a universal self. This position has been accepted by various post-Kantian idealists. The outstanding representative of this position is Hegel, 1770-1831, whom we shall consider briefly in the chapter on idealism.

7. *A final possible stage, solipsism.* Solipsism is the view that the individual self alone exists, or "the subjectivity of the absolute subject." This point of view has not been held by any school of philosophers nor by any outstanding thinker. The term *solipsism* comes from the Latin *solus*, meaning "alone," and *ipse*, meaning "self." It is the *reductio ad absurdum* of subjectivism.

INTERMEDIATE POSITIONS

Standing between subjectivism and objectivism, some writers identify positions known as phenomenism and as epistemological dualism. The position of the phenomenist, of which Kant is a representative, is that we can know only phenomena; we

cannot know ultimate reality. The external world, *as we perceive it*, is not necessarily the same or even like the external world which stimulates our sense organs. In attempting to answer the question, "What can we know?" Kant divided the world into three parts: an inner world of subjective states (images, sensations, and the like), which is not the realm of knowledge; the world of ultimate reality (noumenon, or thing-in-itself), which is unknown and unknowable by sense perception; and the world of nature or of experience, the phenomenal realm, which is the realm of human knowledge. The mind is active and forms into a system of knowledge all the materials brought in by the senses. Whether you call this position "phenomenalistic realism" or "Kantian idealism" or just "phenomenalism" will depend upon what aspects of this approach you choose to emphasize.

Epistemological dualism recognizes two separate areas which are involved in the knowledge process. There are, first, the sense data, or those elements which are immediately present in our consciousness. Then there is, second, the external order of nature which is inferred from the sense data. Epistemological dualism may take many different forms, since both of these areas may be physical or mental, or one may be mental and the other physical. It has been called the "copy theory" and the "representative theory." My image of the mountain is not the mountain itself but a copy or a representative of it. In critical realism we have one example of this point of view.

OBJECTIVISM

Objectivists, or epistemological realists, reject the view of Berkeley that to exist is to be a mind or an idea in some mind. They insist that there is an independent reality apart from minds. In the early part of the chapter we considered naïve realism, which maintains that we perceive the physical object itself. In the chapter on realism we shall find that the new realists hold a position rather close to this. During the eighteenth century the "copy theory" or "representative realism" of John Locke was widely accepted. For him, primary qualities were in the outer world, but the secondary qualities were in the mind. The mind knows the copies or images of the external things. The critical realists of the twentieth century would claim that what we per-

ceive is not an object but what is called sense data. Realism and its types and its general philosophical implications are considered in a later chapter. Here we are interested in understanding the epistemological claims of objectivism.

Before considering the case for objectivism, let us ask: *Where* are the sense data (*sensa*)? Where are these elements of our experience which we think are immediately in consciousness? This is one of the most baffling issues in philosophy. Let us state some possibilities, without elaborating the answers in detail. First, the *sensa* may be out in the physical world where they seem to be. If they are in the outer world, then they may exist independent of their being sensed, or they may be created in the outer world by the knower at the time of perception. These views seem difficult to hold in the light of the facts presented earlier in the chapter. Second, the *sensa* may exist within the person who is the knower or perceiver. In this case they may be the result of stimulation in the nervous system and the brain or they may be explained in terms of mental events which imply a dualism of mind and matter. The idealists and some realists will prefer the latter statement, while others will not. Third, the sense data (*sensa*) cannot be located anywhere in particular. Excitations or signals in the form of a pattern of waves produce a pattern of "brain events" which have a correspondence with the events from which the messages have come. The *sensa* are imaginative projections of these brain states.¹

Let us turn next to some of the simpler arguments in the case for objectivism. Some of these arguments are negative in the sense that they attempt to show the weakness of the subjectivist's position; others are more positive and constructive.

1. Objectivists accuse the subjective idealists of the fallacy of *non sequitur*, or of drawing a false conclusion from a true proposition. "The true proposition is, 'It is impossible to discover anything that is not known,' since it becomes known by the mere process of being discovered. From this proposition it follows that it is impossible to discover with certainty what characteristics things possess when they are not known. The idealist then proceeds falsely to conclude, 'Things have no characteristics when they are not known; therefore, the characteristic of being known is that which constitutes their existence; therefore, things only

¹ This position is held by Drake, Santayana, and others. See Durant Drake, *Invitation to Philosophy*, pp. 175-179. Houghton Mifflin Company, Boston, 1933.

exist when they are known.'"¹ The only valid conclusion is that "all known things are known," and this is merely a truism. Because we cannot tell for certain what characteristics things possess when they are not known, it does not necessarily follow that all things are known or that being known is a prerequisite to existence. Because I cannot know a thing unless it is experienced does not mean that there cannot be unexperienced things.

2. The subjectivists are accused of a misuse of the word *idea* when they use it for both the subject and the object of human thinking. This double use of the word really "begs the question" and assumes without proof that there is no real difference between the mind and that toward which the mind's experience is directed. Bertrand Russell says, "There is a confusion engendered by the use of the word 'idea.' We think of an idea as essentially something *in* somebody's mind, and thus when we are told that a tree consists entirely of ideas, it is natural to suppose that, if so, the tree must be entirely in minds. But the notion of being in the mind is ambiguous. We speak of bearing a person in mind, not meaning that the person is in our minds, but that a thought of him is in our minds. When a man says that some business he had to arrange went clean out of his mind, he does not mean to imply that the business itself was ever in his mind, but only that a thought of the business was formerly in his mind, but afterwards ceased to be in his mind. And so when Berkeley says that the tree must be in our minds if we can know it, all that he really has a right to say is that a thought of the tree must be in our minds. To argue that the tree itself must be in our minds is like arguing that a person whom we bear in mind is himself in our minds."² Knowledge is the direct experience of things, and the object of an act of thought should be clearly distinguished from the act of thought itself.

3. Belief in the existence of a world quite independent of our experience and knowledge of it conforms to the assumptions of everyday life and is implied in all our special sciences. Such an assumption, while it cannot be proved with finality, explains the events and the peculiarities of our lives better than any alternative approach. In all of our conscious acts we are aware of

¹ Cyril E. M. Joad, *Guide to Philosophy*, pp. 65-66. Random House, Inc., New York, 1936. Used by permission of the publishers.

² Bertrand Russell, *The Problems of Philosophy*, pp. 62-63. Used by permission of Oxford University Press, London.

something outside of or beyond ourselves. We are not only aware, at times, but we are aware that we are aware. A common characteristic both of our sense perceptions and of our moments of reflection is that we are aware of something other than ourselves. This something, most men believe, is unaffected by the mind's consciousness of it.

The fact that the evidence from the different sense organs converges and builds up a unified picture of our world furnishes us with additional evidence. Elements of time and space fit into the series of events and appear to be genuine aspects of a world beyond us. Astronomers, geologists, historians, and others report the details of a long process of development which seems to be explained most adequately in terms of an enviroing nature which we are gradually coming to describe.

Within our human experience there appears to be a clear distinction between those experiences which we ourselves create, such as our imaginations, thinking, and dreams, and the sense perceptions which are forced upon us by an external world. If objectivism is to some degree true, this distinction is easily understood. If it is false, then the distinction is rather baffling. Our sense perceptions are ordinarily vivid, steady, and consistent, whereas these other images are less distinct, unsteady, and often confused. This leads us to the next point.

4. Causal interactions are going on both within and beyond the realm of our experiences. These perceptions or experiences must have a cause. Events that break into our field of consciousness are often quite unrelated to our previous train of thought. Furthermore, they seem to obey laws which are quite independent of our minds, so that we are unable to get rid of them even by great effort.

A fire is burning briskly in our fireplace. We leave it, then return an hour or two later to find that it has burned low. These and other events lead man to believe that causal sequences continue to operate in the same way whether they are within or without the knowledge of anyone. Both Berkeley and Kant recognized this problem and attempted to meet it. Berkeley said that God was the cause of the order of the external world. Kant posited a thing-in-itself which was unknown and unknowable. The realist would say that to accept the world of our experience at its face value is the most reasonable position.

The answer to the problem of the nature of knowledge will depend, at least in part, upon the type of philosophy (considered later) a person is inclined to accept. In a problem which is so complex, it is especially easy to take some part of the knowledge situation and attempt to make that part appear to be the whole. Both the more extreme forms of subjectivism and the more extreme forms of objectivism may be equally guilty of this error. Undoubtedly there are important subjective elements in our knowledge. We experience things from a particular frame of reference and by means of a particular set of sense organs which might be quite different than they are at present. Our perceptions are relative to the self. When I see a tree or a man, there is a specific neural or organic process that is the condition of that experience. As the conditions of our organism vary, the objects of our experience change. The world of things is in some sense relative to the conscious self that experiences those things. On the other hand, there is a "given" from beyond us. That there are objects that have an existence quite independent of our experiences appears to be certain. It seems to be the easiest assumption that enables us not only to explain and to reconcile the numerous experiences we have, but also to relate these experiences to those of our fellow men.

While we cannot prove for certain the existence of an external world, it appears that such facts as the sequence of events in our world, the discovery of objects which are unexpected and which "break in" upon our consciousness, and the assumptions of everyday living and of scientific progress are explained more adequately by the hypothesis of the existence of an external world than by any of the more extreme forms of subjectivism. The discussion further on of the various types of philosophy indicates additional approaches to this problem.

»» QUESTIONS AND PROJECTS ««

1. Construct additional examples, similar to those given in the text, to show how our sense data and images may vary independent of the objects of our experience. Do objects appear to be independent of our perception of them?
2. How many of the steps toward subjectivism are you willing to take? Give your reasons for going that far and no farther.

3. Is it true, as has been said, that "every animal species inhabits a home-made universe" and that this world of sense experience is only a small part of the world as a whole? If we possessed other or different types of sense organs, or if the range and power of our senses were keener or duller than they are now, would our world vary accordingly?
4. To what extent does our training and our past experience affect our perceptions? Is it true that we see largely what we are trained to see or expect to see?
5. A distinction has been made between "descriptive," "explanatory," and "interpretative" knowledge. What are the distinctions, and how important do you think they are? See Gamertsfelder and Evans, *Fundamentals of Philosophy*, pp. 202-226 (Prentice-Hall, Inc., New York, 1930).

The Validity of Knowledge

Is the human mind capable of discovering or finding any genuine knowledge? When or under what conditions is knowledge valid? Why are some beliefs true and others false? Centuries ago, when Jesus stood before him for trial, Pilate asked, "What is truth?" Before this, Socrates, Plato, and other Greek philosophers had given thought to this question. Today men are still seeking the answer.

Throughout the past, opinions and beliefs have tended to change — not only the common everyday beliefs but also the beliefs held in the fields of science and philosophy. Scientific theories that were once accepted as true have been replaced at a later time by other theories. Are these beliefs more than guesses or opinions based on the "climate of opinion" of the day? Among philosophers of the past and of the present there has been a great diversity of belief.

Before we study the three main "tests of truth" that have survived the philosophical discussions of recent centuries, let us consider briefly two schools of thought: one that denies that knowledge is possible, and another that limits knowledge to "the facts of objective experience."

THE NEGATIVE ANSWER: SKEPTICISM

Skepticism, broadly speaking, is the view that "nothing can be known," or that no trustworthy knowledge is possible. The skeptic is one who doubts what others allege to be true. Skepticism arose in ancient Greece, and it is connected with certain sophists like Gorgias, *c.* 483–375 B.C., and with the name of

Pyrrho, c. 360–270 B.C., in the later Graeco-Roman period. In more recent times David Hume, 1711–1776, is one of the best known skeptics.

There are many possible degrees or types of skepticism. In the field of philosophy, it may be found in at least three forms. First, it may be the attitude of suspending judgment and of questioning all assumptions and conclusions so that each one will be forced to justify itself before the bar of critical analysis. This type of skepticism, represented by the questioning attitude of Socrates, has much to be said in its favor, since it helps to free men from superstition, prejudice, and error and to clear the way for intellectual progress. Second, it may take the position that knowledge deals only with experience or phenomena, and that the mind of man is unable to know the source or ground of experience. This position is represented by the phenomenalism of Kant. Third, it may claim that knowledge is impossible and that the quest for truth is in vain. This is skepticism in its strictly philosophical sense. Gorgias asserted that nothing exists; and that if it did, we couldn't know it; and that if man did come to know anything, he could not impart this knowledge to his fellows. Anatole France says that "it is plain that we can know nothing, that all things combine to deceive us, and that nature is only making a cruel sport of our ignorance and helplessness."¹

The skeptics tend to stress the follies and foibles of the various ways of attempting to gain knowledge. They point out that all knowledge is human, that our human faculties are frail and limited, and that the senses and reason seem to be equally unreliable. Even the so-called experts in all the areas of research show a great diversity of opinions. The skeptic is pessimistic about the possibility of genuine progress in the realm of knowledge.

A certain amount of skepticism has tended to precede and to stimulate philosophical reflection. It is a reminder of the need of caution and of the dangers of dogmatism. It says to us: "Don't be too sure." "Don't be dogmatic." "You may be wrong." "Be tolerant and open-minded." A thoroughgoing skepticism, however, would lead to such a noncommittal attitude as to make any intelligent and consistent action almost impossible; as such, it cannot serve as a satisfactory primary ideal for personal life or for society.

¹ Anatole France, *The Garden of Epicurus*, 2d edition, translated by Alfred Allinson, p. 72. John Lane, The Bodley Head, Ltd., London, 1920.

Very few outstanding thinkers have been skeptics or disbelievers in the possibility of knowledge. Skepticism is self-refuting, since the denial of all knowledge is a claim that refutes itself. If nothing can be known, then how does the skeptic know that his position is a valid one? If he affirms his own position as the truth, he is attempting to distinguish between the true and the false. He must have some idea of what is the truth in order to appeal to the principles of valid reasoning in arguing against the possibility of truth.

A term closely related to skepticism is *agnosticism*, which means "unknown" or "without knowledge." The term is connected with the names of Thomas Huxley and Herbert Spencer in the nineteenth century. The agnostic's position is a profession of ignorance rather than a positive denial of any valid knowledge. Agnosticism implies man's ignorance of the real nature of such ultimates as matter, mind, and God.

POSITIVISM

The growing emphasis upon empiricism and scientific method during the nineteenth century led to a point of view known as *positivism*, which would limit knowledge to observable facts and their interrelations. Auguste Comte, 1798-1857, French philosopher, pioneer in the field of sociology and advocate of a "religion of humanity," was the founder and leading exponent of positivism. He divided history into three periods, each of which is characterized by a certain way of thinking. The first stage is the theological, in which imagination has free play and events are explained by spirits and gods, with the world defined in animistic or in supernatural terms. The second stage is the metaphysical, in which events are explained in terms of such abstractions as causes, inner principles, and substances which replace supernatural agencies. The third or "positive" stage is the final and highest stage. This is the period of scientific description which does not attempt to go beyond the area of observable and measurable facts. Man gives up his earlier efforts to discover the causes, the destiny, and the ultimate nature of things. What is beyond this world of experience is of no concern, and we should confine our attention to the natural sciences. Comte classified the sciences in order of increasing complexity, as follows: mathematics, astronomy, physics, chemistry, biology, and sociology. Science

is the final stage of human thought, and its task is to make the present world safe for humanity.

The positivistic attitude and outlook have influenced various modern schools of thought, including pragmatism and instrumentalism, humanistic naturalism, and behaviorism. More directly, the development of the point of view of positivism has led to movements which have been designated "logical positivism" (Vienna Circle), "logical empiricism," "scientific empiricism," and the "Unity of Science Movement."

Since the task of adding to our knowledge necessarily falls to one or another of the various sciences, what is the task of philosophy, according to this approach? Logical positivists are likely to reply that its task is the logical analysis of language, especially the language of science. Attention is given to symbolic logic and the theory of signs or symbols. Writing on logical empiricism, Herbert Feigl says that philosophy can lead us in the direction of "maturer ways of thinking, thinking which possesses the virtues characteristic of science: clarity and consistency, testability and adequacy, precision and objectivity."¹ Distinguishing this movement from the earlier types of empiricism and positivism, he says that it emphasizes "the systematic pursuit of the problem of meaning by means of a logical analysis of language."²

While no one would wish to cast any reflections on the splendid achievements of the various sciences, many persons will question the attempt on the part of positivists to limit knowledge in so definite a way. The positivists seem to combine a thoroughgoing skepticism with respect to the beliefs of religion and speculative philosophy with an almost dogmatic acceptance of the findings of the sciences. Chapter VII shows that there are limitations to the methods used by the objective sciences.

TESTS OF TRUTH

Men were believing many things and were living on the basis of those beliefs before it occurred to them to ask: Why are some beliefs true and others false? There must be some knowledge before problems and theories of knowledge emerge. The search

¹ Herbert Feigl, "Logical Empiricism," p. 376 in *Twentieth Century Philosophy*, edited by D. D. Runes. Philosophical Library, Inc., New York, 1943.

² *Ibid.*, p. 377. For the history of the movement, see pp. 405ff.

for knowledge and the long experience of the human race throughout the centuries have given us an accumulation of facts and beliefs which we take largely for granted. Furthermore, out of the experience and thinking of the past has come the discarding of various possible tests of truth as inadequate. Few informed persons would base truth on custom or tradition alone. While customs and traditions are often valuable, they may also lead one astray. They sometimes conflict, and they do not provide for change and progress. The appeal to "universal agreement" is equally insecure, since some beliefs that have been widespread and firmly believed over long periods (e.g., that the earth is flat) have later been found to be false. Others, in the past, have appealed to instinct. The instinct theory, however, has been under criticism, and many things formerly explained on the basis of instincts are now explained more adequately by "conditioning." Still others have appealed to the strong feeling that a thing is true; yet feelings may be determined by our moods, our health, or our training.

We shall find that there is no complete agreement regarding the test of truth. Each answer will call forth some severe criticisms from opposing points of view. The reader will do well to ask: Is one of these tests the true and only one or does each one contain some angle or vision of the truth? Do they need to be combined in some way? The three theories of the test of truth which we shall consider are: the correspondence theory, the coherence or consistency theory, and the pragmatic theory.

THE CORRESPONDENCE THEORY

The correspondence theory of the test of truth is the one most widely accepted among the realists. According to this theory, truth is "fidelity to objective reality." Truth is that which conforms to fact or agrees with the actual situation. Truth is the agreement between the statement of fact and the actual fact, or between the judgment and the environmental situation of which the judgment claims to be an interpretation. Things by themselves are neither true nor false; they just are or are not. Truth has to do with the assertions or the claims that we make about things.

If I state that the United States is bounded on the north by Canada, my statement is true according to this approach, not because it happens to agree with other statements previously

made or because it happens to work, but because it corresponds to the actual geographical situation. This, it is said, is what the word *truth* means in everyday usage. It is also the characteristic view of the scientific man who checks his ideas with his data or findings and is glad to submit his conclusions to objective tests by other investigators.

Truth and falsehood refer to judgments and propositions. However, according to this point of view, the presence or absence of belief has no direct bearing on the issue of truth or falsehood, since truth and falsehood depend on the conditions or set of conditions which has been affirmed or denied. If a judgment corresponds with the facts, it is true; if not, it is false. If I say, "There is an automobile parked in our driveway," my statement can be found to be true or false by empirical investigation.

The critics of the correspondence theory, however, do not think that it is so clear and so self-evident as its supporters affirm. The first critical question is usually this: "How can we compare our ideas with reality?" We know only our own experiences. How can we get outside our experiences so that we can compare our ideas with reality as it actually is? The correspondence theory, they say, assumes that we know our judgments and also the actual circumstances apart from our experiences.

The theory of correspondence seems to assume that our sense data are always clear and accurate, and that they disclose the nature of the world just as it is. Idealists and pragmatists will seriously question this assumption, and will point out that in perception the mind tends to enter into and to modify our views of the world. If our powers of perception were diminished or increased either in keenness or in area, or if we possessed fewer or additional sense organs, the world might appear quite different from what it does at present. Since we cannot know an object or an event apart from our sense data, it is foolish to talk about whether or not our judgments correspond with the thing as it is in itself.

Finally, we have knowledge of meanings, relations, and values, as in mathematics, logic, and ethics. Some of these ideas, the truth of which we desire to know, have no objects outside the area of human thought with which we can make comparisons and check to see whether they correspond. In these areas, at least, the "Copy Theory" of truth does not seem to apply. Yet the knowledge in these fields possesses a high degree of certainty.

THE COHERENCE THEORY

The coherence, or consistency, theory is the test of truth quite generally accepted by idealists, although it is not necessarily confined to that school of thought. Since we cannot directly compare our ideas and judgments with the world as it is, the coherence theory places its trust in the consistency or harmony of all our judgments. A judgment is true if it is consistent with other judgments that are accepted or known to be true. True judgments are logically coherent with other relevant judgments.

Under ordinary circumstances, we judge a statement to be true or false on the grounds that it is or is not in harmony with what we have already discovered to be true. On this basis we reject many ideas as absurd and pronounce some experiences to be illusions or false perceptions. They do not "fit in" with what has happened in the past or with what we reasonably expect to happen. This does not mean, however, that new ideas or new truths are not to be accepted. Occasionally some new facts or ideas will force themselves upon us and impress us so strongly with their truth that we need to revise our whole system of thought. The Copernican world view and the biological theory of evolution are two such outstanding changes. We accepted them because they gave us a larger degree of coherence and consistency in that they explained some things previously unexplained.

The simplest form of the coherence theory demands an inner or formal consistency in the system under consideration, quite apart from any interpretation of the universe as a whole. For example, in mathematics, taking certain definitions and axioms for granted, men can build up the system of geometry which is implied by them and which is consistent with them. This system is then accepted as true. The principle of consistency or the principle of logical implication underlies our systems of mathematics and formal logic and, to a considerable extent, any science or organized body of knowledge. Consistency with certain formal laws of thought — like the law of contradiction, which it seems impossible to deny — is the very basis of such systems of truth, according to this approach.

The idealists tend to enlarge the principle of coherence, or consistency, to include an "all-inclusive and self-consistent whole of reality." Plato, as well as modern philosophers like Hegel, Bradley, and Royce, enlarged the principle of coherence to in-

clude the universe, so that every true judgment and every partial system of truth is continuous with the whole of reality and gets its meaning from that whole. "This leads us to the idealistic principle of consistency according to which truth is a reciprocally consistent *system of propositions, each of which gets its truth from the whole system.*" The idealists add that "it is the consistency of our human beliefs with that whole which makes them true when they are true. Thus purely formal consistency is abandoned and coherence with reality is made the essence of truth. It is this fact which justifies calling this a metaphysical form of the coherence theory."¹

Advocates of the coherence theory claim that any adequate theory of truth, in addition to satisfying other requirements, must be able to explain "the relativity of truth," or how a belief can be held to be true at one time and false at a later time. The coherence theory meets this requirement. In so far as every judgment is a partial meaning separated from the whole of which it is only a part, it is to some extent one-sided and possesses only a degree of truth. From this point of view, truth grows and is never complete or final until we reach the whole of reality.

While inconsistency and incoherence do tend to disturb the human mind and to lead men to seek unity, the critics of the coherence theory say that we can construct coherent systems which are false as well as those which are true. The theory, they say, does not distinguish between consistent truth and consistent error. They may point to numerous systems of the past which are logically consistent, yet apparently quite false. Correspondence with facts is a condition which even the most self-consistent system must meet.

Critics of the coherence theory say also that it is rationalistic and intellectualistic and deals mainly with the logical relations between propositions. Because of this, it fails to furnish an adequate test for the judgments of everyday experience. If the test of coherence is used, then it needs to be stated more in terms of factual consistency, or the agreement between a judgment and a definite environmental situation. Other critics of these tests of truth suggest a quite different approach — the test of utility.

¹ Daniel S. Robinson, *An Introduction to Living Philosophy*, pp. 104-105. Thomas Y. Crowell Company, New York, 1932. Used by permission of the publishers.

THE PRAGMATIC THEORY — THE TEST OF UTILITY

Pragmatism as a philosophy is considered in a later chapter. Here we give merely a brief statement of the pragmatic conception of truth and of the tests of truth.

Truth cannot be correspondence with reality, since we know only our experiences. On the other hand, the coherence theory is formal and rationalistic. Pragmatism claims to know nothing about substances, essences, and ultimate realities. It opposes all authoritarianism, intellectualism, and rationalism. The pragmatists are thoroughgoing empiricists in their interpretation of the flux of experience. For the pragmatists the test of truth is utility, workability, or satisfactory consequences.

According to this approach, there is no such thing as static or absolute truth. Truth is redefined to mean something that happens to a judgment. Truth is made in the process of human adjustment. Truth happens to an idea. According to William James, "true ideas are those that we can assimilate, validate, corroborate, and verify. False ideas are those that we can not." John Dewey says: "That which guides us truly is true — demonstrated capacity for such guidance is precisely what is meant by truth. . . . When the claim or pretension or plan is acted upon, it guides us truly or falsely; it leads us to our end or away from it. Its active, dynamic function is the all-important thing about it, and in the quality of activity induced by it lies all its truth and falsity. The hypothesis that works is the true one; and *truth* is an abstract noun applied to the collection of cases, actual, foreseen and desired, that receive confirmation in their works and consequences."¹

This redefinition of the nature of truth leads naturally to a repudiation of the older tests of truth and to the defense of new ones. An idea or a theory or a hypothesis is true if it works out in practice or if it leads to satisfactory results. The phrase "satisfactory results" may be highly ambiguous. The supporters of this test of truth, however, have tended to stress one or more of three approaches, as follows: (1) That is true which satisfies the desires or purposes of men. True beliefs must satisfy not just some whims, but our whole natures, and satisfy them over a period of time. The reader will need to ask whether a belief that satisfies us

¹ John Dewey, *Reconstruction in Philosophy*, pp. 156-157. Henry Holt and Company, New York, 1920. Used by permission of the publishers.

thereby demonstrates its truth or merely the fact that it is comforting to us. (2) That is true which can be experimentally verified as true. This test, it is claimed, is in harmony with the spirit and practice of modern science. Whether we are in the laboratory or in daily life, when questions as to truth and falsity arise we should "try it and see." (3) That is true which aids in the biological struggle for existence. The instrumentalism of John Dewey, discussed in a later chapter, stresses the biological function of ideas and doctrines.

The test of workability, or utility, has keen critics as well as able supporters. Durant Drake has called it a "dangerous doctrine," since it seems to confer upon persons a right to hold many satisfying beliefs which they ought not to hold unless they conform to the facts. Many beliefs which comfort and fortify people are plainly untrue. Drake says that this test does not hurt us much in our everyday life because we do not use it there. "We don't believe that stocks are going up because it consoles us to think they are" or that "a business venture is going to succeed because it is an inspiring belief." We are more likely to use this test in the regions "where we can pretty safely live in happy illusion" and where we are not likely to be checked by more empirical tests.

To define truth in this way and to accept satisfactory consequences as a test of truth is to assert, by implication at least, that there can be one truth for you and another for me. Such relativism tends to blind our judgment and to make us less able to judge evidence impartially and objectively. We ought to learn to view things as they are and to control our hopes, wishes, emotional cravings, and prejudices.

Innumerable theories — in religion, in economic life, in science, and in other fields — have "worked" for considerable lengths of time. Untrue ideas often lead to what large numbers of people call "satisfactory results." Again, some other ideas cannot be pragmatically verified. While beliefs that are true tend to work in the long run, many will question the truth of the statement that beliefs which work are therefore true.

EVALUATION OF THE TESTS OF TRUTH

Each one of the separate tests of truth appears to have value under certain circumstances. The test of correspondence seems to be widely used in the experience of everyone, as well as in the

various sciences. There are many occasions when we seem to be able to check our "ideas" with the "facts," and to receive confirmation after other investigators have checked our results. There are many times, however, when we are dealing with elaborate and complicated areas of human experience and thought, when the correspondence theory does not seem to apply. In such cases we may have to appeal to coherence, or consistency. At still other times we may attempt to defend a concept like democracy by showing that it has actually worked well and has produced satisfactory results in human experience.

Each of these separate theories of truth may be so stated that it seems to include the truth of the other theories. In the opinion of the author, the theories supplement rather than directly contradict each other. They might be combined in some definition like the following: Truth is the faithful adherence of our judgments and ideas to the facts of experience or to the world as it is; but since we cannot always compare our judgments with the actual situations, we test them by their consistency with other judgments which we believe are valid and true, or we test them by their usefulness and practical consequences.

In the case of a philosophical theory, we accept it as tentatively verified or true if it has been formed after a careful and impartial examination of all the relevant data, including the testimony of history and of present experience, and when it is in harmony with the well-established principles of science and of philosophy. Life is a continuous process of forming, testing, and remolding our knowledge of the universe and our basic convictions regarding life.

Some writers make a distinction between two different kinds of knowledge. If the distinction is a valid one, then possibly the way by which we come to know some facts may differ from the way by which we come to know others. There is, first, *knowledge by description*, or knowledge *about* a thing. This includes the matter-of-fact knowledge which we gain of the objects and events around us and which has its most accurate expression through the natural sciences. There is, second, *knowledge by acquaintance*, which includes the intimate appreciation such as friends have of one another. For example, there is a difference between a scientific description of love, whether from a chemical or a psychological point of view, and the actual experience of being in love. There is the same distinction between the description of a symphony and

the appreciation of that music as it is played and evokes deep emotional and aesthetical responses.

In the realm of knowledge it may be that what a man is determined to some extent what he is able to know. When a man has an interest which makes him receptive and adaptive to certain aspects of experience, he will discover a range and depth of meaning and knowledge which a person without those qualities will ignore and possibly will deny. To the unmusical, the unpoetic, and the unloving, music, poetry, and love have little meaning or reality.

While a person can gain much accurate knowledge from scientific descriptions of living organisms, there is a quality about life which a person can know only by acquaintance or from within. What a man knows of the inner nature of life depends primarily upon "the depth and the range of his own personal experience," his "imaginative sympathy" with the experiences of others, and "the extent to which he has reflected on the material so presented."¹ Furthermore, some of the basic elements in human experience appear to be difficult to communicate, if not impossible. The other person cannot be given the knowledge; he must experience it directly himself. Even such simple sensations as light and color cannot be described to one who has known nothing but darkness.

If there are different levels of existence as we pass from the inorganic to the organic and from the organic to the realm of consciousness, then these different levels may require new and different means for an understanding of them. The ways of knowledge may be many rather than one, or single.

CONCLUSIONS

1. Knowledge is gained through continuous growth and constant quest. Man's experience is never complete, and his knowledge grows along with his growing experience. Growth is one of the fundamental laws of life. Man needs to strive constantly to be significantly informed, to cultivate a flexibility of mind, and to face the realities of the world in which he lives.

2. No one can claim rightly to have the final knowledge of the world. We must avoid both irresponsibility and fanaticism. The

¹ Burnett H. Streeter, *Reality*, p. 36. The Macmillan Company, New York, 1926.

way to knowledge is not through a dogmatism that takes present knowledge as certain and final, nor through a skepticism that believes that knowledge is impossible. All mental processes are subject to our human limitations, to the play of personal interest and desire, and to the social, economic, and religious outlook of the period. These factors enter into seemingly objective scientific discussions, as well as into philosophical and religious doctrines.

3. Even though our knowledge is incomplete and growing, it is valid as far as it goes. Truth is not a man-made principle or convention, to be taken up or cast aside at will. Our knowledge discloses a world that is to some extent self-communicative and objective. Our vision may at times be warped and distorted, but it is not a phantom world in which we live. There is a "given" of some sort to which we must adjust ourselves.

Our growing body of knowledge has been built up by the efforts of countless thousands of men and women throughout the ages. It is ours by inheritance, and we must add to it and then pass it on to others. As new facts and insights are discovered, this knowledge is remolded or restated in more satisfactory terms.

We need to live confidently and courageously by what we know today, and to be ready to change these convictions as new evidence appears to indicate the need for change. Far better to run the risk of acting wrongly than not to act at all.

»» QUESTIONS AND PROJECTS ««

1. State as clearly as you can, in your own words, the three main tests of truth. If you think that each test has some use or value, give examples showing where each test may be used to advantage. Give examples of situations where one or another of these tests does not seem to apply.
2. What is the function of skepticism? What are its values? What are its dangers?
3. What are some of the main obstacles to knowledge? See Gamertsfelder and Evans, *Fundamentals of Philosophy*, pp. 268ff. (Prentice-Hall, Inc., New York, 1930); Edwin A. Burt, *Principles and Problems of Right Thinking*, revised edition, Chap. III (Harper and Brothers, New York, 1931).
4. To what extent can we say that there has been progress through the years in philosophy? See Joseph A. Leighton, *The Field of Philosophy*,

revised and enlarged edition, pp. 591-597 (D. Appleton-Century Company, New York, 1930).

5. How do we know that the intelligent life is the best?
6. What is the difference between reason, rationalism, and rationalization?
7. Why do we need to be tolerant in holding our views or convictions? See Hendrik Van Loon, *Tolerance* (Liveright Publishing Corporation, New York, 1940); Reinhold Niebuhr, *The Nature and Destiny of Man*, Vol. II: *Human Destiny*, pp. 220-243 (Charles Scribner's Sons, New York, 1941).

»» PART THREE ««

THE TYPES OF PHILOSOPHY

Materialism and Naturalism

Philosophies vary so widely, yet overlap in so many points, that no one classification is ever satisfactory. In the three chapters which follow this one the three main schools are presented: idealism, pragmatism, and realism. In this chapter we discuss materialism, both mechanistic and dialectical, as well as humanistic and empirical naturalism. Mechanistic materialism and dialectical materialism are forms of realism, yet they differ from many forms of realism which we wish to present. Some humanistic and empirical naturalists are also pragmatists, but other pragmatists are not included within these approaches. The philosophies presented in this chapter are thoroughgoing naturalisms, but they do not exhaust this field, as we shall see. *Naturalism* and *materialism* are related terms; they are not synonymous. All materialistic systems of philosophy are also naturalistic, but some naturalistic systems are not materialistic.

MECHANISTIC MATERIALISM

Materialism is a narrow or more limited form of naturalism in that it considers “nature” and “the physical world” to be one and the same. The term *materialism* may be defined in various ways: as the view that there is nothing in the world except matter; as the theory that extended, self-existent atoms of matter in motion are the constituent elements of the universe, and that mind and consciousness — including all psychical processes — are mere modes of such matter and are reducible to the physical elements; and as the doctrine that the universe can be interpreted without residue in terms of the physical sciences. These definitions, however, tend to represent the more traditional

forms of materialism. In recent times the doctrine may be expressed in terms of "energism," which reduces everything to some form of energy, or as a form of "positivism," which emphasizes the positive sciences and disclaims concern regarding the nature of reality. It is more likely, however, to take the form of mechanism or mechanistic materialism, and it is from this point of view that we consider it.

From a negative point of view, mechanistic naturalism rejects everything in the nature of supernatural agencies. There is no controlling or directing intelligence at any point in the cosmic processes. Man and the world are the products of non-intelligent forces. While modern materialists do not find it necessary to deny the "self," they do insist that a physical substratum underlies all mental phenomena and that the self does not exist prior to experience. The self is neither an entity nor an autonomous thing. It is socially created, and it can be understood only in relation to the environment.

For the mechanistic materialist, all changes in the world, from the atom to man, are strictly determined. There is a complete and closed causal series. This causal series is to be explained in terms of the natural sciences alone, and not as the expression of purpose. Mechanistic materialism is the doctrine that the world is governed by natural laws which may be described in mathematical terms when the necessary data are available. It is that type of metaphysics which enlarges the concept machine and stresses the mechanical nature of all processes, organic as well as inorganic. If it does not reduce all processes to the terms of physics and chemistry, it does claim that all phenomena are subject to the same methods of explanation. That is, the concepts mechanism, determinism, and natural law have universal application. The only world which men know or can know is the one that reaches them through the physical sense organs.

HISTORICAL SKETCH

In our previous discussions of the nature of matter, of living creatures, and of mechanism, we gave some of the historical backgrounds of mechanistic materialism. Students interested in the history of materialism should give special attention to the atomism of Democritus in ancient Greece. He gives what is probably the first systematic presentation of materialism and mechanism. Lucretius, the Roman poet, in his *De Rerum Natura*, popularized

atomic materialism for a short period before it went into almost total eclipse during the medieval period.

From the fifteenth century to the seventeenth, materialism gained considerable support in European thought by the development of the mathematical sciences and of objective, experimental methods in the natural sciences. As a result of the scientific and intellectual revolutions started by Copernicus (1473-1543) and by Descartes (1596-1650), men came to believe that the physical universe was governed by universal laws. There was a natural cause for all mundane things. As time went on, men came to rely more and more on the visible, tangible things of the physical world as the only realities. They tended to neglect or to disparage an appeal to the invisible, to the supernatural, and to teleological principles. They came to believe in a great mathematical or machinelike order of nature. The world, they thought, was mathematical, quantitative, and physical through and through.

Descartes had applied mechanistic concepts to the physical universe only. Thomas Hobbes (1588-1679) went further and attempted to raise the new science of his day to a philosophy by presenting a thoroughgoing mechanistic materialism. He extended the mechanistic conception of the physical world to include man and his mental life. He explained conscious life in terms of sensations that are movements in the brain and nervous system. All that exists is matter, and motion is the only kind of change in the universe.

During the eighteenth century, materialism was given support in France by the writings of La Mettrie, Diderot, Holbach, and other leaders of the French Enlightenment. La Mettrie opposed the idea of a spiritual substance and maintained that man is essentially a machine. All things are of one substance, matter, which undergoes a constant change of forms. Apart from more elaborate wants, the higher forms are no different from the lower. Man does not differ essentially from animals and plants. Mind was interpreted as a function of matter.

During the nineteenth century, mechanistic materialism received support from Karl Vogt (1817-1895), Ludwig L. Buchner (1824-1899), Ernst Haeckel (1834-1919), and T. H. Huxley (1825-1895). Buchner in *Force and Matter* dismissed such ideas as God, soul, values, and freedom and stressed energy as the basic concept in the interpretation of reality. Haeckel in his *Riddle of*

the Universe emphasized force and matter as pervading infinite space. Man and his civilization are but specks in a vast and perishable matrix of nature. Huxley spoke of the "gradual banishment from all regions of human thought of what we call spirit and spontaneity."

The earlier foundations of materialism were laid in the mathematical sciences. Soon, however, geology was uncovering evidence to show the great age of the earth and to view its processes as reaching far back in time. Darwin and his followers were including man in a process of natural selection to explain the evolution of all living forms. Many physiologists, biologists, and psychologists were beginning to employ physical and chemical explanations in their interpretation of man. All movements, from those of the distant stars to the thoughts of men, could be explained, it was claimed, without appeal to any extra-physical principles.

WHY MECHANISTIC MATERIALISM APPEALS

Most men are occupied most of the time with physical things. The problem of obtaining the necessary food, clothing, and shelter is a constant one. The materialist is impressed with the stability and permanence of these physical things and their necessity as a basis for life. For this reason it is easy to believe that the material things are the real things of life and that non-material things depend upon the physical. If there are "things" which are not based on physical processes, they are said to be the result of imagination or wishful thinking.

Again, mechanism is the method of the natural sciences. These sciences have made great progress not only in the direction of mechanistic explanations but in the practical use and application of mechanistic methods. As a science develops it tends to become more mechanistic rather than less. Men do not feel that they can explain things adequately until they can interpret them in such terms. In this sense intelligibility appears to be synonymous with a mechanistic and a materialistic explanation.

Mind and its activities are forms of behavior, according to materialism. There is no mental life which is not associated or correlated with material processes. Apart from a brain and a nervous system, no conscious states are present. Psychology becomes a branch of biology. Mind and consciousness are interpreted in terms of physiological behavior — muscular, neural,

or glandular. These processes, in turn, may be explained in the terms of physics and chemistry. In this way everything may be reduced to the terms of the physical world. Values, meanings, and ideals become subjective labels for different physical situations and relations.

Materialism appears in numerous forms from the materialistic atomism of earlier times to the "metaphysical behaviorism," "animistic materialism," and "physical realism" of more recent times. Today there is a tendency to replace the mechanical outlook of the traditional materialism with the notion of a dynamic universe. Some adherents of this approach recognize a plurality of systems or orders of nature which have evolved from a physical basis. All seek to employ one basic principle of explanation which does not look beyond the purely objective methods of the natural sciences.

In addition to its simplicity, mechanistic materialism, in its thoroughgoing forms, seems to relieve man of a sense of personal or moral responsibility. Moral standards and appeal to ideals have meaning only if man is to some degree a free agent. For some men this lack of responsibility is comforting, because it causes problems of ethics and morality to drop out of the picture or to become purely subjective and relativistic.

IMPLICATIONS OF MECHANISTIC NATURALISM

If the sciences are able to explain all things in terms of simple mechanical causation, then there is no God and no purpose in the universe. The same laws operate in man as in the lower animals and the stars. Consciousness and thinking are the result of changes in the brain or the nervous system. "The universe is governed by the physical laws of matter, even to the most refined and complex processes of the human mind."¹ "Living is merely a physiological process with only a physiological meaning."²

Mechanistic materialism, as we have seen, would interpret mind and consciousness as physiological behavior of a neural, glandular, or muscular type. All human activity takes place according to physical laws. Just as we do not need mind and consciousness to interpret what happens when we put a cent in the slot machine and get out a stick of gum, so we may dispense with

¹ Hugh Elliot, *Modern Science and Materialism*, p. 174. Longmans, Green and Company, New York, 1919.

² Joseph Wood Krutch, *The Modern Temper*, p. 235. Harcourt, Brace and Company, New York, 1929.

them in interpreting man's behavior. The action of stimulus and response through the nervous system also is automatic and mechanistic. Consciousness may be discarded or interpreted as epiphenomenal or as an accompanying glow or emanation from the brain. Thinking is "sub-vocal speech"; it is talking under one's breath or silent talking. The movement of certain muscles in the larynx and certain neural impulses in the brain are not observed. That fact, however, should not lead us to deny that thinking is a bodily response to some stimulus either internal or external. We are conditioned to react to certain words as we would react to the objects for which they stand. When this happens we are said to know the meaning of the symbols or words. The law of cause and effect operates universally, and the human organism offers no exceptions. All behavior can be explained in mechanistic terms.¹

A complete mechanism implies complete and universal determinism. There is no real freedom of choice. One must merely accept the physical facts as they occur and as they are described by the natural sciences. These are the implications of a thoroughgoing mechanistic naturalism.

While mechanistic materialism has appealed to some persons as giving a simple interpretation of the universe in line with the scientific temper, the attacks upon it have been many and varied. Recent developments in the natural sciences have weakened, if they have not fairly completely shattered, the foundations of the older mechanism and materialism. Late in the nineteenth century Herbert Spencer could refer to the five ultimate realities as space, time, matter, motion, and force. Today, however, we are impressed by the lack of finality in the studies concerning the nature of matter and the concepts related to matter.

Mechanistic materialism appears to be a denial of certain immediate facts of human experience. If mechanism is complete and final, then thinking, freedom, value, and even truth become meaningless. In the actual lives we live these things seem to be central. If everything in the universe is the necessary outcome of what has gone before, it would appear to be logically impossible to appeal to ideas, ideals, or principles of reason. If mechanism is true, why should one appeal from "what is" to "what ought to be"? Why should one set of motions in space be any better or any worse than any other set of motions in space?

¹ See the writings of John B. Watson, K. S. Lashley, and A. P. Weiss.

Mechanistic materialism seems to be forced to do one of two things: first, to deny many things which are fundamental realities to large numbers of persons; second, to endow matter with the power to become self-conscious persons interested in the promotion of truth, beauty, goodness, and love. The universe has produced men who are the discoverers of mechanisms and the builders of machines; this fact should not be overlooked. Nature has produced men — men with loves and hates, with hopes and aspirations, with consciousness and reason. Men strive to attain ideals. They exhibit creative activity, and they look into the past and into the future. Man, the observer, the discoverer, must not be forgotten.

Mechanistic materialism is a philosophy which easily grows out of man's life and work in a world of machines. In a machine age, men who operate machines get little sense of ownership, of pride of workmanship, or of creativity. Standardization not only affects the body in terms of habits but also influences intellectual life in terms of a mechanistic outlook. Life tends to become more impersonal. Life is adapted to the machine instead of the machine to life. Thinking tends to be directed along the lines of mechanical cause and effect rather than in terms of purpose and personal values.

The philosopher who is a teleologist and who accepts purpose as a principle of explanation is usually quite ready to admit that many sciences, perhaps all of them, may be stated in mechanistic terms. What he claims is that mechanism does not tell the whole story. Most persons acknowledge that there are systems in the world which can be stated most adequately and accurately in mechanical terms. Few persons would question the value of using these methods in any field where they aid our understanding or control. However, many do doubt the ability of mechanistic principles to give a satisfactory explanation of *all* the facts of human existence.

DIALECTICAL MATERIALISM

Dialectical materialism grew out of the intense social struggle that arose as a result of the Industrial Revolution. It is connected with the names of Karl Marx (1818-1883) and Friedrich Engels (1820-1895). Dialectical materialism has received added impetus from the success of the Communist revolution in Russia, where it

has become the official philosophy of the Soviet Union. It receives quite general support from communists throughout the world. This philosophy of the "Socialist Sixth" of the world needs to be understood by persons who wish to keep abreast of the thought movements of their time. Dialectical materialism has little in common with the mechanistic materialism which we have just considered. It is an approach from the point of view of history and politics rather than from objective science, although it holds science in high esteem.

BACKGROUND FOR THE DIALECTIC

In order to understand dialectical materialism, we need to go back to Hegel (1770-1831). Marx was a student of Hegel. Hegel was an idealist who said that reality is mind or idea out of which develop the processes of nature, human history, and the organizations and institutions of society. Matter, for Hegel, was the least real of all things that existed. Marx rejected the idealism of Hegel. He turned Hegel's philosophy upside down and said that matter, not mind or ideas, is fundamental. Matter, especially in the form of the economic organization of society and the mode of production, determines the social and political institutions of society. These in turn influence ethical, religious, and philosophical ideas.

While Marx and Engels reject Hegel's idealism in so far as it places the emphasis upon mind and ideas, they do accept his logical method almost completely. The world, according to Hegel, is in an organic process of development. All such organic processes of change are dialectical. The theory of dialectic is that everything is in a process of continual change and that these changes proceed through an affirmation or thesis to some denial or antithesis, to an integration or a synthesis. All development both of things and of thought is brought about through the overcoming of contradictions. For example, the idea of "being" leads one to think of "non-being." Non-being and being, when united, give the concept "becoming." In society, to use another illustration, a trend in the direction of extreme individualism tends to generate a counter-movement toward collectivism, or the opposite. Out of these extremes may come a society which recognizes the value of both individual freedom and collective action.

Marx and Engels accept the dialectic. They say that while the early Greeks had discovered it, Hegel was the first to explain it in a fully conscious way. His mistake was to give it a mystic form.

When stripped of its idealistic form and turned around, it is a profound truth. The dialectical process, Marx and Engels contend, is a pattern which has been discovered in nature. It is an empirical fact derived from the order of nature and supported by the causal interconnections brought to light by historians and scientists. They do not think of it as a metaphysical principle nor as a mechanistic or a completely determined process. They do emphasize pluralism and causal interaction in which the production of the means of life is the predominate factor. Change and development take place continuously. When a synthesis has been reached, it tends in time to generate its own contradictions, and so the process proceeds. There is a continuous emergence of new qualities which grow out of the interpenetration and unity of opposites.

HISTORICAL MATERIALISM

Materialism means that matter, nature, or the observable world is accepted as real in its own right. Dialectical materialism rejects the primacy of mind, since mind is not regarded as an independent and spontaneous activity in the world. It also rejects all dualisms of man and nature, as well as all forms of supernaturalism. Material forces are determinative in society and give the clue to evolutionary development, as well as to all phenomena — inorganic, organic, and human. Dialectical materialism is a physical realism which is sometimes spoken of as “historical materialism” and as “economic determinism.” The decisive factor in historical change and in human society is the production and reproduction of life in its material aspects. The first need is to live and therefore to care for the necessities of life. Thus the mode of production at any particular stage of history is of prime importance.

Marx and Engels were students of the inorganic, organic, and social sciences. The sciences, they claim, disclose a world in constant change. Fixity and rigidity can no longer be accepted, since the physical universe has a history and exhibits change in time, just as does the world of life and human society. Darwin’s theory of natural selection eliminates any further need of teleological concepts in the natural sciences. There was a time when no man existed; there was an earlier time when there was no life. Quite clearly, they assert, everything has had a natural development from the inorganic, or from matter.

Dialectic materialism, as we have pointed out, is not a mechanistic nor a completely deterministic philosophy. Man can influence his own life and history, but only within the framework of the materials at hand. Life comes from the inorganic, and man is a part of nature. Man and animals differ in degree rather than in kind. Man is able to make nature serve his ends, however. Man alone can create the conditions in which he lives and, in a sense, help to make his own history. The springs of action reside not in ideas, nor in men's desires, nor in their brains, but primarily in the processes of production and the class relations in society.

A PHILOSOPHY OF SOCIAL CHANGE

For dialectical materialism, action is primary and thought is secondary. An activist theory of knowledge is accepted. Knowledge is inseparably bound up with action, and it changes the thing known. There is no such thing, it is claimed, as knowledge which is a mere contemplation of the world of nature. Men who live differently think differently. Consciously or unconsciously, men derive their ideas from the practical relations and conditions in the midst of which they live. Theory and practice are one; to refashion society is to remake men. In the past, Marx tells us, philosophers have explained the world in many different ways. The present task is to change it, and that is the task and historic mission of the communists. In this task the communists do not hesitate to use direct action and violence to obtain their objectives. In fact, they believe that violence is the only way out if the evils in society are to be eradicated.

Society, like all particular things and persons, is in a process of change. It cannot be static, since matter itself is dynamic and not static. The groups of persons in society that maintain some common economic relation to the instruments of production, distribution, and exchange are known as "classes." The conflict of interest of such groups is known as the "class struggle." These economic relations of society, while not the only factors, exert a powerful influence upon social progress. The mode of production and the relation of the classes tend to determine the social, political, and spiritual processes of life. Chapter XXIV on "The Philosophy of History" considers in greater detail the social and revolutionary program which is operating throughout history, according to communist ideology.

While some persons would classify dialectical materialism as

closer to mechanistic materialism than to the naturalisms which we are to consider next, E. A. Burt calls the communistic philosophy a "realistic humanism."¹ In so far as dialectical materialism is a materialism and a deterministic system, it is open to the criticisms which we have already presented. In so far as it is humanistic, it is open to the criticisms directed against humanistic and empirical naturalism. Attention is given here to only a few points that are distinctive of this approach.

The course of history is not so fixed and inevitable as the Marxians seem to believe. Marx apparently assumes that the blind forces of economic change are the determinative factors in human history and in social change. While the economic factors are important in human history, the social and ethical attitudes of a people are more important than Marx realized. Different groups of people react differently to the same stimuli. Any single or monistic interpretation of history and human affairs is one-sided if not false. Dialectical material has been dogmatic and doctrinaire in its interpretations, and it has been dictatorial and authoritarian in its program.

Many persons will want to condemn the methods of direct action and violence advocated and used by the communists. If a program is good for the majority, we ought to be able to persuade them of that fact. To adopt antisocial means to attain social ends is dangerous. There is too great reliance on force and on the expectation that a revolution will solve most of our problems. History shows that great changes may be brought about through peaceful means.

These and other criticisms that may be directed against dialectical materialism as a philosophy, and against the methods used by the communists in various parts of the world, should not blind us to various commendable points. Probably most of us will be willing to applaud the passion for social justice, the elimination of race prejudice, and the economic progress exhibited by the Soviet Union in recent decades.

HUMANISTIC AND EMPIRICAL NATURALISM

The term *naturalism* stands over against the term *supernaturalism*, or *other-worldliness*. It takes nature as the whole of reality,

¹ Edwin A. Burt, *Types of Religious Philosophy*, p. 398. Harper and Brothers, New York, 1939.

but *nature* is interpreted in many different ways. Baldwin's *Dictionary of Philosophy* gives many different uses of the term *nature* in philosophical discussions. When the term is used to designate a point of view, it is necessary to use some adjective to make the meaning clearer. For example, there are the logical or structural or realistic naturalists who look to mathematics and physics for their orientation. There are the poetic naturalists like George Santayana. There are the humanistic naturalists who stress the social studies and the welfare of man. There are also the empirical or experimental naturalists who emphasize the universal applicability of the empirical, experimental methods of the natural sciences. In this section we deal with humanistic naturalism and empirical naturalism.

HUMANISTIC NATURALISM

Humanistic naturalism is a philosophy which places emphasis upon man or upon human interests and affairs. It has also been called humanism, the new humanism, evolutionary naturalism, and scientific humanism. A recent definition by two contemporary humanists is as follows: "Scientific humanism is the doctrine that men, through the use of intelligence, directing the institutions of democratic government, can create for themselves, without aid from 'supernatural powers,' a rational civilization in which each person enjoys security and finds cultural outlets for whatever normal human capacities and creative energies he possesses."¹

Humanistic naturalism is to be distinguished from two other movements of thought. First, it is not to be confused with mechanistic materialism. Materialism is a way of thinking that is constructed on the basis of a rigid determinism and mechanism and that tends to reduce everything to the terms and the laws of the physical sciences. In contrast, humanistic naturalism places its main emphasis upon the social studies and seeks to do justice to the organic and to human interests and aspirations. It acknowledges that which is unique in man, and its defenders claim that it is as sensitive as idealism to man's interests and welfare.

In the second place, humanistic naturalism is to be clearly distinguished from the humanism of the Renaissance although it has been called "Renaissance humanism modernized and brought up to date." The humanists of the Renaissance admired the

¹ Oliver L. Reiser and Blodwen Davies, *Planetary Democracy*, p. 212. Creative Age Press, Inc., New York, 1944. Used by permission of the publishers.

Greeks, especially for their reasonable balance of life, and they placed emphasis upon the classics. The movement was a literary one, although there was a new confidence in man and in human reason. There was a revival of classical as opposed to ecclesiastical studies. A modern movement, known as "literary humanism" and led by Irving Babbitt, Paul Elmer More, and Norman Foerster, supports a classical type of liberal education and opposes the present vogue for vocational education. This movement should not be confused with humanistic naturalism.

Humanistic naturalism has much in common with the "Religion of Humanity" of Auguste Comte in the nineteenth century, and with the pragmatism of William James and the instrumentalism of John Dewey. While a few of the humanistic naturalists are realists, many of them are pragmatists. In 1933 a group of thirty-four college professors, ministers, and other "progressive thinkers" issued "A Humanist Manifesto" summing up their convictions in fifteen brief propositions.¹ In 1941 an American Humanist Association² was founded. It publishes a quarterly journal, *The Humanist*.

THE METHOD

The humanistic naturalists have a profound respect for modern science and they accept its assumptions and postulates at face value. However, they are more particularly interested in biology, psychology, medicine, and the social studies, since their attention is centered upon man and his welfare. Science is viewed not as a transcript of reality but as a human construct to secure control over the world. The "laws" of nature are recognized as based on hypotheses which are man-made structures.

The ultimate court of appeal is to empirical facts or to man's verifiable experience. All distinctions between a "sacred" and a "secular" disappear. Humanistic naturalism is thus a philosophy based on the empirical scientific method and interested in hypotheses and experimentation for the purpose of human control.

THE HUMANIST WORLD VIEW

Humanistic naturalists regard the universe as "self-existing and not created." They have abandoned all conceptions of a supernatural and all forms of cosmic support. The world beyond man

¹See *The Christian Century* for July 7, 1933, pp. 743-745.

²Schenectady 8, N.Y.

is not interested in his weal or woe. Consequently, man must give up all teleological conceptions and realize that the world order is non-purposive and neutral in its relation to human values. Life is dependent on a physico-chemical order. It is likely that "life is a local and episodic phenomenon in the cosmos at large."¹ The quest for an understanding of the ultimate origin, nature, and goal of the universe is felt to be futile.

That the universe is an objective order which goes its own way without regard to the human venture has been forcefully stated by M. C. Otto: "It is thus a constructive social suggestion that we endeavor to give up, as the basis of our desire to win a satisfactory life, the quest for the companionship with a being behind or within the fleeting aspect of nature; that we assume the universe to be indifferent toward the human venture that means everything to us; that we acknowledge ourselves to be adrift in infinite space on our little earth, the sole custodians of our ideals."² Thus humanists support an "unreservedly naturalistic" view of the universe and of life.

MAN AND HUMAN SOCIETY

The manifesto mentioned on page 229 states that humanists hold an "organic view of life"; reject the "traditional dualism of mind and body"; and believe that "man is a part of nature and that he has emerged as the result of a continuous process." Man with all his faculties is a part of one all-embracing natural order. He is the highest product of the creative forces of the universe, with "nothing above or beyond him" but his own aspirations.

While man is a part of nature, that does not mean that there is nothing distinctive about him. "Evolutionary naturalism does not sink man back into nature. It acknowledges all that is unique in him and vibrates as sensitively as idealism to his aspirations and passions. Its claim is that its canvas is larger and its perspective truer."³ Nature must be interpreted so as to make a place for man.

The humanistic naturalists stress the worth of every human

¹ Edwin A. Burt, *Types of Religious Philosophy*, p. 369. Harper and Brothers, New York, 1939.

² Max C. Otto, *Things and Ideals*, p. 289. Henry Holt and Company, New York, 1924. Used by permission of the publishers.

³ Roy W. Sellars, *Evolutionary Naturalism*, p. 343. The Open Court Publishing Company, La Salle, Ill., 1922.

being. They claim that they are gaining a new sense of human values. The values of life are the products of human relationships. A realization of this fact can bring a new human confidence. Men are now able to look to the future with a new spirit of progress, of adventure, and of courageous conquest. Our task, as men, is to appropriate the instruments which science has given us and to co-operate in building a more satisfactory life on earth. We need to naturalize the spiritual values of life and to humanize the mechanical world of things. The humanists have a strong faith in the possibility of improving human life and in the essential unity of mankind.

The humanistic naturalists stand for human freedom — freedom of choice and the civil liberties. They are opposed to determinisms of every kind. They are also exponents of democracy, education, peace, and international co-operation. Most of them oppose an acquisitive society and favor a socialized and co-operative social and economic order. "The goal of humanism is a free and universal society in which people voluntarily and intelligently co-operate for the common good. Humanists demand a shared life in a shared world."¹

THE RELIGIOUS

Many of the humanists retain the word *religion* and give it a new meaning. Some of them would prefer to drop the term *religion* for "the humanist way of life."² There is a complete abandonment of the orthodox or traditional conceptions of religion. Religion is viewed as a social product. It is loyalty to the values of life and the co-operative human quest for the good life.³ The religious or the spiritual is not something alien to man or imposed from without. It is a quality of man's life which is grounded in his own human activity. The spiritual in man is man at his best fighting bravely and courageously for the values of life. It is co-operating for human welfare, projecting ideals and struggling to attain them, and making room for sympathy and love. "Any activity," says John Dewey, "that is pursued in behalf of an ideal and against obstacles and in spite of threats of personal loss because

¹ "A Humanist Manifesto," part of point 14.

² The "Humanist Manifesto" of 1933 uses the term frequently. Corliss Lamont in "The Meaning of Humanism" (*The Humanist*, Vol. II, No. 2, pp. 41-45) deplors the use of the term. See discussions in succeeding issues of *The Humanist*.

³ Albert E. Haydon, *The Quest of the Ages*, pp. ix and 1ff. Harper and Brothers, New York, 1929. See also Haydon's *Man's Search for the Good Life*, published in 1937.

of conviction of its general and enduring value is religious in quality."¹ The essence of religion is interpreted as the integration of the human personality around loyalty to some high ideal. It is "a religion without God," but the humanists claim that it meets the needs which religion has always met in that it unites men in devotion to human interests and values. The humanists hope to integrate scientific, social, and religious thought into one unified philosophy which aims to realize the best life that is possible for man.

EMPIRICAL NATURALISM

The empirical naturalists have much in common with the humanistic naturalists. The differences are largely matters of emphasis. Writing under the general title *Naturalism and the Human Spirit*,² some of the supporters of this position point out that empirical naturalism emphasizes the universal applicability of the methods of experimental inquiry. This method, they claim, is self-correcting and indefinitely progressive. It does not need to be checked or tested by some "higher" or non-experimental principles. This emphasis upon the universal applicability of scientific method rules out the intuitions of the mystics, *a priori* principles, the primacy of spirit, and all systems of thought that accept or imply a bifurcation of nature.

Until the late nineteenth century, man and his various experiences had usually been set over against nature and had been interpreted independently. The theory of biological evolution and the application of scientific methods to all areas of existence put man and all his powers and activities in the nature over against which he had previously been placed. Basic to experimental naturalism is the view that nature is the whole of reality. Naturalism is "opposed to all dualisms between Nature and another realm of being — to the Greek opposition between Nature and Art, to the medieval contrast of the Natural and the Supernatural, to the empiricist antithesis of Nature and Experience, to the idealist distinction between Natural and Transcendental, to the fundamental dualism pervading modern thought between Nature and Man. For present-day naturalists 'Nature' serves

¹ John Dewey, *A Common Faith*, p. 27. Yale University Press, New Haven, Conn., 1934.

² Edited by Yervant H. Krikorian. Columbia University Press, 1944.

rather as the all-inclusive category, corresponding to the role played by 'Being' in Greek thought or by 'Reality' for the idealists."¹ Whatever man encounters in any area of experience or in whatever way is regarded as "natural."

Empirical naturalism stresses the principle of continuity. There is no sharp distinction between intellectual, biological, and physical processes. There is, they assert, continuity between the less complex and the more complex. Intellectual processes 'grow out of' organic or biological processes, and organic processes arise from physical processes without being identical with them. This is a methodological postulate and is in no sense an attempt to "reduce" one to the other. The naturalist thus insists upon continuity of analysis in the sense that all phenomena must be interpreted by the experiential methods of verification used by the special sciences. There is continuity between the 'human' and the "physical," between the "logical" and the 'biological,' and the method of inquiry in each of these areas must be experiential and objective.

The experimental naturalists contend that the richness of human experience and the great variety of natural phenomena can neither be "explained away" nor "reduced" to something else. This opposition to reductionism separates this form of naturalism from the older materialism. The world is what it is in all its qualitative variety and its different kinds of activity. Empirically there are numerous qualities and different types of activity. The new naturalism can accept physical and intellectual (mental) processes at their face value. It finds some processes to be mechanical and some to exhibit teleology or purpose. It accepts all these as experimental facts. The new naturalism thus attempts to avoid the oversimplification of nineteenth century naturalism, which attempted to explain away the richness of human experience.

In the new naturalism the categories of "matter" and "motion" have been replaced with the categories of "events," "qualities," and "relations." That is, nature operates in terms of 'processes.' Existence is not to be interpreted in terms of indestructible atoms in motion. All ranges of existence are now considered complex, fluid, and interactive. The naturalism which emphasizes events is not committed to any single hypothesis

¹ From *Naturalism and the Human Spirit*, edited by Yervant H. Krikorian, p. 357. Columbia University Press, 1944. Used by permission of the publishers.

regarding the nature of the qualities and relations which are found by observation or experience. To experience change or process is to be aware of differences of the kind called "qualitative." The naturalists insist that they are not committed to any one interpretation of the nature of anything. Neither the theory of levels nor the principle of reduction is used. Observation merely indicates that some existents differ sharply from one another and some differ less sharply. An explanation is acceptable when it is supported by the observed evidence. Scientific knowledge is not limited to any field of subject matter; it may deal with the processes of history, with values, with the fine arts, and with the experiences of purpose.

Many persons will commend the humanistic naturalists for their emphasis upon man and his distinctive human traits, and the empirical naturalists for their emphasis upon scientific method and a willingness to face "facts" with courage and a Promethean will. They will admire in both groups such things as their faith in creative intelligence and the notion that the world is still in the making.

What will be more difficult for many persons to accept is their exclusive faith in the methods of the objective sciences and in man's ability to attain a satisfactory life in a universe that is alien to man's interests and aspirations. If nature has produced man, as the naturalists say, then it would seem that man is some indication of the nature of nature and that man is probably a better indication of the nature of the universe than are rocks and stars. Is a position which separates man so completely from the universe beyond him a reasonable view?

The modern naturalists want to guard against the charge of anthropomorphism, or of attributing human qualities to the non-human realm. They wish to avoid the danger of projection or of "reading into nature" our human hopes and aspirations. Is there an equal danger that we may go to the opposite extreme and "read out of nature" some qualities and aspects that may be present? If "wishful thinking" is a bad thing, as it is, is it equally undesirable to assume that the truth is contrary to what we desire?

The question as to whether the universe is friendly, merely neutral, or unfriendly is a fundamental issue for man to face. Is it true, as one writer suggests, that "a cold and suspicious

ttitude toward the cosmos is hard to combine with a trustful and affectionate attitude toward human beings"?¹

Many of the convictions of the humanists will be acceptable to theists, especially to those who hold the position known as mechanistic naturalism. Theism, however, is an interpretation of the universe which affirms a cosmic support for man's ideals and values. It insists that there is meaning and moral purpose in the universe as well as in man's life.

»» QUESTIONS AND PROJECTS ««

- . Point out the distinctive emphasis in each of the three naturalisms presented in this chapter.
- . Wherein does humanism agree with and differ from mechanistic naturalism and dialectical materialism?
- . Comment upon the following statements:
 - (1) "The mechanistic conception of life is a structural approach in the main, whereas the teleological view places emphasis mainly on function. These are complementary rather than antagonistic approaches."
 - (2) "In materialism the emphasis was upon order, law, immutability. In the new way of thinking which is developing, the emphasis is upon spontaneity, creativeness, initiative."
- . To what extent are the humanists optimists, and to what extent are they pessimists? How is their melioristic attitude affected by this outlook?
- . Review: Hugh Elliot, *Modern Science and Materialism* (Longmans, Green and Company, New York, 1919); Jacques Loeb, *The Mechanistic Conception of Life* (The University of Chicago Press, 1912); Charles J. Herrick, *The Thinking Machine* (The University of Chicago Press, 1932); Joseph Wood Krutch, *The Modern Temper* (Harcourt, Brace and Company, New York, 1929); Joseph Walker, *Humanism as a Way of Life* (The Macmillan Company, New York, 1932); Albert E. Haydon, *Man's Search for the Good Life* (Harper and Brothers, New York, 1937); Oliver L. Reiser, *The Promise of Scientific Humanism* (G. E. Stechert and Company, New York, 1940); John Macmurray, *The Philosophy of Communism* (Faber and Faber, Ltd., London, 1933); Vernon Venable, *Human Nature: The Marxian View* (Alfred A. Knopf, New York, 1945).

¹ Walter M. Horton, *Theism and the Modern Mood*, p. 82. Harper and Brothers, New York, 1930.

Idealism and Its Implications

In the popular mind the term *idealist* has a meaning which is quite different from the philosophical use of the term. Popularly, the word may mean: (1) One who accepts and lives by lofty moral, aesthetic, and religious standards. Such a man is said to be a man of ideals, or an idealist. (2) One who is able to see and to advocate some plan or program which does not yet exist. Every social reformer and prophet is an idealist in this sense because he is supporting that which has not yet come into existence. Those who work for permanent peace or for the elimination of poverty may be called idealists. The term may be used in a complimentary sense, meaning that which is excellent of its kind. It may be used as a term of reproach. For example, a person may be called a "fanatical idealist" if he stands for what other persons believe to be unattainable goals or if he seems to ignore the "facts" and practical conditions of any situation.

The philosophical meaning of the term *idealism* is determined more by the meaning of the terms *idea* and *mind* than by the term *ideal*. Professor W. E. Hocking, an idealist, says that for sense the term "idea-ism would be more to the point."¹ The letter *l* has been inserted for euphonious reasons. Idealism asserts that reality is akin to ideas, thought, mind, or selves rather than to material forces. There are many and diverse types of idealism, but in one form or another idealism is a point of view which has held the allegiance of many cultured thinkers, both in the Occident and in the Orient, for more than two thousand years. To sketch the history of idealism in its many forms would carry us a considerable way along the history of philosophy from Plato to the present.

¹ William E. Hocking, *Types of Philosophy*, revised edition, p. 248. Charles Scribner's Sons, New York, 1939.

During the latter half of the nineteenth century, idealism was the dominant philosophy of the thinkers of Western civilization. Since the beginning of this century, however, idealism has had to share the philosophical field with other non-idealistic movements. In this chapter we can do little more than give a brief general statement of idealism, distinguish between three main types, and set forth a few of the characteristics and implications of idealism. The reader is urged to consult the works of the philosophers themselves for a more complete elaboration.

WHAT IDEALISM IS

Idealism is a way of interpreting human experience and the world which places emphasis on mind as in some way prior to matter. Just as materialism emphasizes matter, so idealism stresses mind. Whereas materialism says that matter is the real and mind is an accompanying phenomenon, idealism contends that mind is real and matter is in a sense a by-product. On the negative side, idealism is a denial that the world is basically a great machine to be interpreted in terms of matter and mechanism or in terms of energy and the physical sciences alone.

More positively, idealism is a world view or a metaphysics which holds that the basic reality is constituted of, or closely related to, mind, ideas, thought, or selves. The real is the rational and the intelligible. The world has a meaning apart from its surface appearance. The approach to the meaning of things is through the self rather than through an objective analysis of nature. The world is interpreted by means of a study of the laws of thought and of consciousness and not exclusively by means of objective science.

Since the universe has a meaning, there is a kind of inner harmony between the world and man. What is "highest in spirit" is also "deepest in nature." Man is "at home" in the universe and not an alien or a mere creature of chance, since the universe is in some sense a logical and a spiritual system. The self is not an isolated entity; it is a genuine part of the world process. This process at its high levels manifests itself as creativity, mind, and selves, or persons. Man, as a part of the cosmos, expresses its inner structure in his own life.

Nature, or the objective world, is real in the sense that it exists and demands our attention and adjustment to it. Nature, how-

ever, is not sufficient in and of itself since it depends to a certain degree upon mind. In nature we find matter, life, mind, and values. Idealists believe that nature is to be interpreted in terms of its later and higher manifestations rather than in terms of its earlier and lower ones. Idealists are willing to let the physical scientists tell us what matter is providing they do not reduce everything in the world to that category. They are willing to let the biological sciences describe life and its processes providing they do not reduce all other levels to the biological or the physiological.

Idealists stress the organic unity of the world process. Whole and parts cannot be separated except by a dangerous abstraction. There is an inner unity, an unfolding series of levels, from matter to vegetable forms, through animals to man, mind, and spirit. Thus a central principle of idealism is that of organic wholeness.

TYPES OF IDEALISM

Idealism, as an historical movement, is a complicated doctrine, with many points of view and with elaborate arguments emanating from its many supporters. There are many classifications of the various types of idealism, yet no one classification seems to be entirely satisfactory, and there is much overlapping. We may speak of the different types of idealism under the names of their illustrious representatives, such as Plato, Descartes, Leibnitz, Berkeley, Kant, Hegel, Lotze, and Royce, to mention only a few. In each of these men there is something distinctive or different. Some students of idealism, after the fashion of an earlier psychology that divided mind into intellect, feeling, and will, have spoken of rationalistic, affective (or romantic), and voluntaristic types. Representatives of these types would be, in order, Hegel, Schelling, and Schopenhauer. In this chapter we briefly consider subjective idealism, objective idealism, and personalism, as being a simpler classification and one more easily grasped by the beginner in the field.

SUBJECTIVE IDEALISM

This type of idealism is sometimes called mentalism or even phenomenalism. It is the least significant and prevalent type and the one most frequently attacked by opponents of idealism

Minds or spirits and their perceptions or ideas are all that exist. The "objects" of experience are not material things; they are merely perceptions. Things such as buildings and trees exist, but they have no independent existence apart from a mind that perceives them. The subjective idealist does not deny the existence of what we call the "real" world; the question at issue is not its existence but *how* it is to be interpreted. It is not independently real apart from a knower. No one can get outside or beyond his own experience.

This type of idealism is probably best represented by George Berkeley (1685-1753), an Irish philosopher. Berkeley accepted the psychology of John Locke (1632-1704), who said that our knowledge deals only with ideas. Locke accepted the existence of spiritual substance, ideas, and material substance. He distinguished between the primary qualities of matter (form, extension, solidity, figure, motion, number, and so on) and secondary qualities (colors, sounds, tastes, odors, and the like). The secondary qualities are not in the material substance; they are in the mind or they are the way in which the primary qualities affect the mind or knower. The secondary qualities vary from person to person. Berkeley went further than Locke and attempted to show that the primary qualities have no existence apart from minds. Berkeley insisted that the arguments used by Locke to prove the subjectivity of secondary qualities apply equally well to the primary qualities.

For Berkeley, minds and ideas are therefore all that exist. *Esse est percipi*, "to be is to be perceived," is the center of his philosophy. An *idea*, according to Berkeley, is an object known. Objects exist only as they are perceived. There is no distinction between primary qualities and secondary qualities, since both are in the mind. All that is real is a conscious mind or some perception or idea held by such a mind. How, he asks, could we speak of anything that was other than an idea or a perception?

When we assert that we can imagine objects existing when they are not seen, and that men do believe in the independent existence of an external world, Berkeley tells us that the order and consistency of the world of nature is due to active spirit, even though I, as an individual, am not responsible for it. God is the author and the governing spirit of nature, and God's will is the law of Nature. He determines the succession and the order of our ideas. This explains why we cannot determine what we shall

see when we open our eyes. When we say that any object exists, we mean that it is perceived by some mind.

The subjectivist holds, then, that there can be no object without a knower; that the subject (mind or knower) in some way creates its object (matter, or thing known); and that all that is real must be a conscious mind or a perception by such a mind. To say that a thing exists is merely to say that it is perceived. What anything would or could be apart from its being known, no one can think or say. What we see or think is a mental fact, and the world is a mental world. For an understanding of Berkeley's position and the force of his arguments, the student should read *The Principles of Human Knowledge* (1710).

Immanuel Kant (1724-1804) is a phenomenalist who stands about midway between the subjective and the objective idealists. Since his world is in some sense a mind-made world, let us make the transition to objective idealism through his interpretation. For Kant there are three realms. There is the inner world of subjective states, which is a purely personal world and not a realm of knowledge. There is the outer world of ultimate reality, the noumenon, which is unknown and unknowable. Man's contact with this world is through the sense of duty or the moral law. There is also the world of nature or phenomenon, which is the realm of human knowledge.

According to Kant, the mind has an innate way of working. Form and order are thrust on nature by the mind. Sensory experience merely furnishes the content. The mind is active; it forms into a system of knowledge the raw material brought in by the senses. Just as the potter takes the formless clay and fashions it into one form or another, so the mind forms or organizes the material of the senses. Thus our thoughts regarding the world are determined in large part by the structure of the mind. The understanding prescribes its laws to nature.¹

OBJECTIVE IDEALISM

A large number of idealists, from Plato to Hegel and the present, reject subjectivism, or mentalism, and also the view that the world is in any real sense man-made. They do not accept the principle of *esse est percipi* ("to be is to be perceived"). They regard the organization and form of the world, and hence knowledge, as determined by the nature of the world itself. The mind

¹ See Kant's *Critique of Pure Reason*.

discovers what there is in the order of the world. They are idealists in that they interpret the universe as an intelligible order whose systematic structure is expressive of rational order and value. When they say that the ultimate nature of the universe is mind, they mean that the universe is expressive essentially of the mental or spiritual in character and that it is an organic whole.

Although the term *idealism* has been used only in recent times to designate a school of philosophic thought, the beginnings of idealistic speculation in Western civilization are often attributed to Plato (c. 427–347 B.C.). Plato believed that behind the empirical world of change, the phenomenal world which we see and feel, there is an ideal world of eternal essences, forms, or "Ideas." He believed in the objective reality of our ideals and values. For Plato the world is divided into two realms. There is, first, the world of sense perception, the world of sights, sounds, and individual things. This concrete, temporal, perishable world is not the real world; it is the world of appearances only. Second, there is the supersensible world of concepts, ideas, universals, or eternal essences. The concept "man" has more reality than any individual person has. We recognize individual things through our knowledge of these concepts or eternal patterns. This second realm contains the patterns, forms, or types which serve as standards for the things of sense perception. Ideas are the original, transcendent pattern of things, the reality of which perceptions and individual things are mere copies or shadows. Reality is found in what is common to all individuals. While reality is thought of as immaterial, Plato would not say that there is nothing real except mind and its experiences. The unchanging Ideas, or essences, are known to man through his reason. The changing world of matter is known to him through his senses. To Plato, the soul of man is an immaterial essence imprisoned for a time in the body. Plato's views have had a profound influence in the history of thought right down to modern times.

Some idealists maintain that all parts of the world are included in one all-embracing order which finds its unity in the ideals and purposes of an Absolute Mind. Hegel (1770–1831) represents one of the best known systems of absolute or monistic idealism. His system is sometimes called evolutionary, logical idealism. Thought is the essence of the universe, and nature is the whole of mind objectified. The universe is an unfolding process of

thought. Nature is the Absolute Reason expressing itself in outward form. Consequently, the laws of thought are also the laws of reality. History is the way the Absolute appears in nature and human experience. Since the world is one and since it is purposive and intelligent, it must be of the nature of thought. The world expresses itself in our thinking; our thinking does not determine the nature of the world. When we think of the total world order as embracing the inorganic, the organic, and the spiritual levels of existence in one all-inclusive order, we speak of the Absolute, or the Absolute Spirit, or God.

Instead of the fixed or static reality and the separate and complete self of traditional philosophy, Hegel sets forth a dynamic conception of a self that is so interrelated with its environment that a clear-cut distinction cannot be drawn between the two. The self is in and is experiencing reality at all times; thus we have the conception of a concrete universal. The universal is present in all the experiences of the dynamic process. In such a philosophy, distinctions and differences belong to the phenomenal world and are relative. They do not affect the unity of the one purposive intelligence.

Since the time of Hegel there have been many systems of objective idealism. Omitting the contemporary thinkers,¹ we can name such outstanding idealists as Josiah Royce, Mary K. Calkins, and J. E. Creighton in the United States and T. H. Green, Edward Caird, and F. H. Bradley in England — to mention only a few.

The objective idealists do not deny the existence of an external or objective reality. In fact, they believe that their position is the only one which does justice to the objective side of experience, since they find in nature the same principles of order, reason, and purpose that men find within themselves. There is purposive intelligence at the heart of nature. This is discovered, they believe, and is not "read into" the world. Nature existed before me, the individual self, and will exist after me. Nature also existed before the present community of selves. The existence of meaning in the world, however, implies something akin to mind or thought at the core of reality. Such a significant order of reality is given man to comprehend and to participate in. This belief in

¹ For a list of twenty-six contemporary British and American idealists, see Daniel S. Robinson, *An Introduction to Living Philosophy*, p. 368. The Thomas Y. Crowell Company, New York, 1932.

meaning and intelligence in the structure of the world is a basic intuition underlying idealism.

Panpsychism is a form of idealism standing somewhere between objective idealism and personalism. Panpsychism, which means literally "All-Soul," is the doctrine that reality is psychic in character or that everything has mind. Mind is universal throughout nature so that the world is alive. According to Leibnitz (1646-1716), the world is composed of monads, or atoms of energy, which are really psychical in nature. There are no breaks in nature and nothing is dead. The inorganic order represents the sleeping monads; in the animals they are dreaming, in man they are waking, while God is the fully conscious Monad. The monads are separate and distinct, but there is unity due to a pre-established cosmic harmony. Friedrich Paulsen (1846-1908) in Germany and James Ward (1843-1925) in England defended idealism of the panpsychic variety.

PERSONALISM, OR PERSONAL IDEALISM

Personalism is a protest against both mechanistic naturalism and monistic idealism. For the personalist the basic fact is not abstract thought or a thought process but a person, a self, or a thinker. Reality is of the nature of conscious personality. The self is an irreducible living unit which can be divided only by a false abstraction. The personalists believe that recent developments in modern science, including the theory of relativity, have added support to their position. The "standpoint of the observer" is a concept coming to be recognized in recent research. The knower or the spectator must be considered as well as the phenomena which he observes. What is "out there" can be understood only in relation to what is "in here." Reality is a system of personal selves, hence it is pluralistic. Personalists emphasize the reality and the worth of individual persons, of moral values, and of human freedom.

Nature, for the personalists, is a real objective order. However, it does not exist in and of itself. Persons transcend or rise above nature in interpreting it. Science transcends itself through its own theories, and the world of meaning and of values surpasses the world of nature as the final explanation. Personalists such as Rudolf Hermann Lotze (1817-1881), Borden P. Bowne (1847-1910), and the contemporary personalists have emphasized this point of view. Lotze attempted to reconcile the mechanical view

of nature as set forth by the special sciences with the idealistic interpretation of a spiritual unity. For Bowne, self-conscious mind realizes itself through the order of nature and transcends it.

Nature was created by God, who is the Supreme Self in a society of persons. The Supreme Spirit has expressed Himself in the material world of atoms and in conscious selves which emerge at distinct points in the world process. There is a society of persons, or selves, related to supreme personality. Such a supreme personality is creatively present in the on-going of the world. Ethical and spiritual values are reinforced by and gain their meaning from the Personal Creative Spirit to whom all men are related. Personalism is theistic; it furnishes both religion and ethics with metaphysical foundations. God may be thought of as finite, as a struggling hero, working for lofty moral and religious ends. At least the goodness of God must be retained, even though it may involve some limitation in his power. The goal of life is a perfect society of selves who have achieved perfect personalities through struggle.

As a group, the personal idealists have shown more interest in ethics and less interest in logic than have the absolute idealists. Logically, the personal idealists hold that life is more important than any verbal forms of expression or fixed meanings. Ethically, they stress the realization of the capacities and powers of the person through freedom and self-control. Since personality is the greatest value, society must be so organized as to give each person fullness of life and of opportunity.

IDEALISTIC ARGUMENTS

The form and the content of the arguments which have been used in defense of the various types of idealism are too numerous to attempt detailed elaboration of them. Four lines of approach are presented briefly, however.¹

1. *An argument from the analysis of matter and related concepts.* Idealists have been heard to say that it makes little difference where a person begins, because if he presses far enough in his thinking, he will come to the point of view of idealism. Take, for

¹ For a more detailed discussion of the arguments for idealism, see G. Watts Cunningham, *The Idealistic Argument in Recent British and American Philosophy*. D. Appleton-Century Company, New York, 1933.

example, the study of matter. The world of nature which men see and feel is evidently a world of appearances whose real nature is different. In their attempt to explain the various transformations that take place in matter, men have pushed their analysis back through molecules to atoms, and from atoms to protons and electrons. But what are atoms, protons, and electrons? Are they more than mental constructs arrived at through a process of reasoning or logical analysis? Evidently the fundamental character of matter is not that of its outward appearance. Matter finally appears to be something more like ideas; at least we get back to energy of some kind. If we try to stop at this point in our interpretation, the idealist will point out that psychical energy is that which is most real to us. Even though we start with so-called physical things or with matter and push our investigation far enough, we are forced into what appears to be a mental world. In any event, we are led to the conclusion that there are mental forces within or behind the world of nature.

2. *An argument from the nature of knowledge.* This argument varies in its emphasis or approach, depending upon whether one leans toward subjective or objective idealism. When men say that a thing exists, what do they mean? They mean, do they not, that it is perceived by them or by someone else? Men know and can know only that which is in consciousness or in some mind. What objects are in themselves or apart from knowing minds is a meaningless question. Men cannot get outside their own experiences. Consequently, knowing the world-out-there implies that the world is in some sense mental or akin to the mental. From a more objective point of view, men may hold to the "objective reference of thought" and insist that ideas refer to something beyond themselves. Nevertheless, to be known, reality must be similar in nature to the knowing process. If minds have been produced by nature, are actually parts of nature, and interpret nature's ways, the same principles of rational order operate throughout both of them. If the two realms were of entirely different orders, how could events be known and predicted as the result of thinking about the world? For a further discussion of the problems of knowledge, consult Chapters XII through XIV.

3. *An argument from the structure and order in the universe.* The world appears to be an orderly, intelligible structure which exhibits direction. Consider the long period through which the earth was prepared for the growth of life, the fairly continuous improve-

ment in organic structure, and the increasing control exercised by the mind over the body and the environment. This long process of development, culminating in the mind of man, suggests that there is a direction in the universe. The evolutionary process has produced men with knowledge and the power of reflective thought. Such concepts as "natural selection" and "emergence" are descriptive but are not explanatory. This development is unintelligible unless the course of evolution is directed. The mind that knows, appreciates, and values is not a stranger appearing suddenly and accidentally in the universe.

The fact that two men can read and understand the same book is an indication that their minds are of the same order and work the same way. They are governed by the same laws of logic and intelligibility. The fact that man is progressively unfolding and interpreting the structure of nature is an indication that there is an intelligible structure or a mind in nature. Order, intelligibility, meaning, and law seem to be at the basis of both mind and the system of nature.

4. *An argument from man's moral nature.* The idealist is likely to claim that his interpretation is the only one which recognizes and satisfies the moral, aesthetic, and religious demands of the race. The purely naturalistic view of man and the universe is untrue; otherwise the deepest moral convictions of the race throughout human history are false. Man's ideals and aspirations, however, have emerged along with man from the processes of nature. They are man's half-conscious realization of his own inherent possibilities. The presence of moral values and a sense of moral obligation ("I ought") in the human realm is regarded as requiring a purposive interpretation of the world. Man's sense of moral obligation has been a directive force in human history. Men have lived strenuously and have died courageously to uphold their ideals. A large and representative group of church leaders recently made this declaration: "We believe that moral law, no less than physical law, undergirds our world. There is a moral order which is fundamental and eternal, and which is relevant to the corporate life of men and the ordering of human society. If mankind is to escape chaos and recurrent war, social and political institutions must be brought into conformity with this moral order."¹ Since moral experience is always associated

¹ "A Message From the National Study Conference on the Churches and a Just and Durable Peace," Delaware, March, 1942.

with minds and purposes, the facts of man's moral life point to the existence of mind and purpose in the universe.

The student may wish to consult other and more elaborate forms of the moral argument.¹

IMPLICATIONS OF IDEALISM

During the medieval period most men thought in terms of a supernatural dualism. There was a fixed "plan of salvation" and the steps could be described from the days of "creation" to the "end of the world." There were two worlds which were clearly separated: a supernatural world and the natural world of men's daily activities. Men lived in a static or fixed universe, and they possessed the truth which had been revealed to them.

Before long, however, expanding intellectual horizons were forcing a change in the thinking of men. The Renaissance, the Reformation, the Copernican Revolution, the development of the mathematical sciences, the theory of evolution, and the rise of historical criticism were all causing men to think less of the "other" world and to direct their attention to this world and to the natural processes as disclosed by the sciences. As this trend was taking place, idealistic philosophy tended — especially during the nineteenth century — to furnish a basis for a new integration which enabled men to retain their older values while accepting the modern knowledge.

MAN LIVES IN A FRIENDLY UNIVERSE

While rejecting the traditional dualism and the idea of a fixed universe, idealism helped men to make the adjustment from traditional supernaturalism to the discovery of God and moral and religious values in the world of nature.

For the idealist there is a universe, a cosmos, which is purposeful and the real nature of which is spiritual. He can think neither in terms of a traditional dualism with one world about to be destroyed nor in terms of a world rushing toward some final destruction. While he accepts the interpretations of the modern empirical sciences, he is likely to point out that they tend to eliminate all mental aspects of sense data and to construct a world that is "closed to mind." Man lives in a universe that is

¹ See Kant's *Critique of Practical Reason* and William R. Sorley's *Moral Values and the Idea of God* (The Macmillan Company, New York, 1918).

akin to him, since its laws are in harmony with the demands of his intellectual and moral nature. Thus idealism pictures the universe as developing under the control of moral, aesthetic, and religious ends.

Though man is a part of the world process and in that sense natural, yet he is a spiritual being in the sense that there is a principle in him which is not reducible to the bare material. Doctrines of total depravity, as well as all interpretations of human nature as evil, are out of place in such a system. Equally inadequate are all interpretations of man which would make him a mere animal or the result of purely physiological or mechanical processes. Man has only begun to attain the possibilities and capabilities which are before him. He is coming to a more complete consciousness, a deeper moral sense, and a keener intellect. Moreover, it is through man and his aspirations that we find the best clue to the nature of God.

For idealism, God is no longer apart from the world but is the indwelling life principle. Though God may be transcendent, he is also immanent in the world process. He is found in the processes of nature, in history, in the social order, and pre-eminently in the human heart. Man's aspirations tend to show the nature of God. All nature is infused with divinity. Consequently, the older distinction between the natural and the supernatural tends to break down. For monistic idealism, God is the immanent logic and purpose or the creative spirit of the cosmic process. The absolute idealist thinks of God as infinite and as the ground for all existence. The personalist, who is a pluralist, may think of him as finite. He will be a struggling hero, the Supreme Self or Person in a society of persons. In any case his administration is no longer external, and men do not have to look to some outside agent or event for divine revelation. Men live in a universe that is pulsing with life and creativity. They attribute to God all those qualities which are of supreme worth and which they believe are fulfilled in God.

IDEALISM AND MAN'S SOCIAL RELATIONSHIPS

What are the social implications of idealism? Does it lead to a quietistic support of conditions as they are or to a spirit of reform and progress? The answer depends much on the type of idealism and the point at which emphasis is placed. Idealists tend to have considerable respect for culture and tradition. They think of the

values of life as grounded in a realm beyond the individual and the social groups. In absolute idealism the universal comes before and is superior to the individual, so that men may come to believe that the absolute is expressed in history and through the institutions of society. In such cases, there is less tendency to recognize individual rights and values in the presence of society and the state. The philosophies of Hegel and Fichte have been criticized because of the part which they played in the elevation of the concept of the state in Germany.

While Plato's philosophy has been the inspiration for many reform movements, his idealism, with its view of Ideas or universals as transcendent essences, led through Plotinus and Augustine to a dualism between this world and the next which dominated the whole of medieval society and tended to fix all human relationships.

In contrast with Platonic and Hegelian types of idealism, many modern idealists, from Descartes and Leibnitz to the contemporary personalists, have emphasized the person or the consciousness of the individual. Thus interest has shifted to the human personality. Institutions exist for the individual, and all that mars the human personality stands condemned. Men are viewed as free moral agents. Values, however, are man's discovery, not his creation. Idealism thus gives an objective basis for moral values and obligations as opposed to relativistic views, which would stress customs and mere opinion, public or private. Self-realization, or the development of the person, is the supreme value to which all other values are subordinate. Man's worth and significance come from his cosmic relationships.

EVALUATION OF IDEALISM

The fact that idealism has survived so many centuries and has been supported by so many outstanding thinkers, both in the Orient and in the Occident, would seem to indicate that it has stood for something that men need. The strength of idealism is that it places emphasis upon the significance and the permanency of the person, the mental, or the spiritual. Idealism gives meaning and dignity to the individual self; man has abiding worth and is superior to institutions and to things.

While accepting the modern scientific account of the world, idealism makes room for religion. Moral and religious values are

present in the world of nature. Idealism is thus in harmony with many of the intuitions and aspirations of men. Men want to believe that what is "highest in spirit" is also "deepest in nature," and idealism seems to make such a belief not only possible but reasonable. Idealism, its supporters claim, brings intelligence into the spiritual intuitions of the race.

In their struggles toward a better life, many men feel that there is a power beyond them upon which they may depend for aid. Idealism gives them the assurance that mind and values are structurally part of the universe. Thus men have a sense of confidence and come to feel "at home" in the universe.

The critics of idealism, on the other hand, say that it is vague and abstract in its terminology, and that it is traditional and lacks a genuinely scientific outlook in its methods. Pragmatists such as John Dewey claim that it tends to substitute an antiquated attitude of other-worldliness for that of a vigorous participation in the struggle for a new society here and now. To regard institutions as expressions of the universal reason may lead men to think more about order and stability and less about change and progress.

Other opponents charge that the idealists confuse the "accidental" with the "essential" features of objects. When idealists claim that existence is dependent on the knowing of it, or upon some mind, the realist is likely to insist that "being perceived" is an accidental feature of an object whereas existence is an essential feature. The fact that we can never refer to an object without holding it as an idea does not mean that it does not exist apart from the presence of an idea or a mind. There is the danger in idealism that we pass from mere thought to being or that we turn from the environment to the mind that thinks about the environment and then fail to bring the two together.

Idealism does not deal satisfactorily with the problem of evil, according to some non-idealists. For most philosophers the problem of evil is how to reduce its existence and power or how to get rid of it entirely. For idealism, however, there is the additional and insoluble problem of how there can be any evil or imperfection in the world. Monistic idealism, at least, appears to give a too easy tolerance of evil and to justify the *status quo*, since whatever is appears to be good or a part of the World Spirit.

»»» QUESTIONS AND PROJECTS «««

1. What are the common assumptions and convictions underlying the various schools or types of idealism?
2. What is the place in idealistic philosophy of: (1) the self, (2) mind, (3) nature, and (4) religion?
3. Is there any justification for the criticism that idealists identify spirit too simply with reason, and reason too easily with God?
4. Is Christian Science within the general framework of or closely related to idealistic philosophy? If so, to which of the types is it most closely related? Mrs. Mary Baker Eddy, the founder of Christian Science, said: "I gained the scientific certainty that all causation was mind, and every effort a mental phenomenon" (*Retrospection and Introspection*, p. 38). "God is good. Good is mind." "God, Spirit, being all, nothing is matter" (*Science and Health, with Key to the Scriptures*, p. 113).¹
5. Theosophy has been called "the body of truths which forms the basis of all religions." Look up some facts regarding theosophy and its beliefs. Does it have any relationship to idealistic thought?
6. Review the following books: George P. Adams, *Idealism and the Modern Age* (Yale University Press, 1919); R. T. Flewelling, *Creative Personality* (The Macmillan Company, 1926); Edgar S. Brightman, *A Philosophy of Ideals* (Henry Holt and Company, 1928); *Contemporary Idealism in America*, edited by Clifford Barrett (The Macmillan Company, 1932); Theodore A. Miller, *The Mind Behind the Universe* (FREDERICK A. STOKES COMPANY, 1928).

¹ Mrs. Eddy's works are published by the Christian Science Publishing Society of Boston.

Pragmatism and Its Implications

Pragmatism is a philosophy that has had its chief development in the United States, and it bears many of the characteristics of life on the American continent. It is connected chiefly with the names of William James (1842–1910) and John Dewey (1859—). It has appeared under various names, the most prominent being pragmatism, instrumentalism, and experimentalism. While it has had its main development in America, similar ideas have been set forth in England by Arthur Balfour and by F. C. S. Schiller, and in Germany by Hans Vaihinger.

WHAT PRAGMATISM IS

Pragmatism is an attitude, a method, and a philosophy which places emphasis upon the practical and the useful or upon that which has satisfactory consequences. The term *pragmatism* comes from a Greek word *pragma*, meaning “a thing done,” a fact, that which is practical or matter-of-fact. Pragmatism uses the practical consequences of ideas and beliefs as a standard for determining their value and truth. William James defined pragmatism as “the attitude of looking away from first things, principles, ‘categories,’ supposed necessities; and of looking towards last things, fruits, consequences, facts.”¹

Pragmatism places greater emphasis upon method and attitude than upon a system of philosophical doctrine. It is the method of experimental inquiry carried into all realms of human experi-

¹ William James, *Pragmatism*, pp. 54–55. Longmans, Green and Company, New York, 1907. Used by permission of the publishers.

ence. Pragmatism is the modern scientific method taken as the basis of a philosophy. Its affinity is with the biological and social sciences, however, rather than with the mathematical and physical sciences.

The pragmatists are critical of the systems of philosophy as set forth in the past. They say that philosophy in the past has made the mistake of looking for ultimates, absolutes, eternal essences, substances, fixed principles, and metaphysical "block systems." The pragmatists would put the emphasis upon empirical science and the changing world and its problems. They would subordinate the intellectual to the practical and stress the world as it is today. For John Dewey the word *experience* is central. Experience is the all-inclusive reality outside of which there is and can be nothing. Experience includes both the natural and the human or social totality in which life finds itself.

THE ORIGIN OF PRAGMATISM

As a school of philosophy, pragmatism is a comparative newcomer, although William James called it "a new name for old ways of thinking." Similar attitudes and ideas can be found in a number of earlier thinkers. The word *pragmatic* is used by Immanuel Kant to apply to rules and standards based on experience as distinct from those he thought were above or beyond experience. He appealed to our moral nature and interests, or to the will, to establish certain beliefs (freedom, God, and immortality). For example, while we cannot prove the necessity of freedom by reason alone, Kant says that it is a demand of the moral life. We cannot deny the sense of "ought," and it is impossible to escape it at times except by satisfying it. But if nature controlled man completely, it would be ridiculous to ask him to rule nature and to choose between alternatives. Freedom is a demand of the moral law, the sense of duty, or of conscience. Kant's principle of the "primacy of practical reason" was to some extent an anticipation of pragmatism.

—Charles S. Peirce (1839–1914), sometimes called the founder of pragmatism, was influenced by Kant and gave serious consideration to the way in which problems of metaphysics can be solved if one gives attention to the practical consequences of ideas. Peirce was a logician interested mainly in the methods of the laboratory sciences. He called his approach "pragmaticism."

The meaning of ideas, he said, is best discovered by putting them to an experimental test and observing the results. An idea is a plan of action. Peirce did not expound his ideas in systematic form, but he did influence William James.

WILLIAM JAMES (1842-1910)

Any complete discussion of the men who influenced William James would take us back to Lange, Mach, Pearson, and Renouvier, as well as to Charles Peirce. The rapid development of pragmatism was due largely to the fertile soil which it found in America and to the brilliant exposition made by William James. In his book *Pragmatism*, James contrasts the tender-minded rationalist or intellectualist, who usually has an idealistic and optimistic outlook, with the tough-minded empiricist, the lover of facts, who is often a materialist and a pessimist. To both of these James says: "I offer the oddly-named thing pragmatism as a philosophy that can satisfy both kinds of demands. It can remain religious like the rationalisms, but at the same time, like the empiricisms, it can preserve the richest intimacy with facts."¹

RADICAL EMPIRICISM

For James, as we have seen, pragmatism is an attitude of looking toward results and facts instead of toward first principles and categories. It is an acceptance of the experience and facts of everyday life as fundamental. Reality is just what it is experienced as being. It is flux or change. Experience is fragmentary. Pragmatists find things partly joined and partly disjoined and accept them as such. Consequently they insist that reality is pluralistic rather than monistic or dualistic. There is *the given*, the data of the senses, which is brought in as stimulus from the region beyond us. Added to this is the *interpretative element* which the conscious being supplies. The on-going creative whole of experience, which includes both "the given" and the "interpretative element," is the one category and the one reality we know.

Knowledge is founded on sense perception or on experience, which is the continuous, flowing stream of consciousness. Consciousness displays interest, desire, and attention. It is volitional as well as sensory, and the will rather than the intellect is determinative. The will determines how and what we shall think; thus thinking is secondary to willing. Our consciousness selects

¹ William James, *op. cit.*, p. 33.

and rejects among the possibilities. What is selected and emphasized is made vital and real. Thus the world is largely of our own making.

As with our sensory perception, so with our ideas. Those which interest us and engage our attention tend to exclude others and to dominate the scene. The ideas that satisfy our desires and dominate our attention tend to express themselves in our actions. The selection is made on the basis of what brings the greatest satisfaction to us. This form of empiricism, which ceases to look beyond experience for supposed necessities and metaphysical entities and which stresses the present stream of consciousness, is known as radical empiricism.

TRUTH AS THAT WHICH "WORKS"

William James and other pragmatists make a distinct break with the traditional conception of truth. In the past truth had meant some fixed or static relation. James asks, "What concrete difference will it make in life?" An idea becomes true or is made true by events. A thing is true if it works or if it has satisfactory consequences. "The proof of the pudding is in the eating." "By their fruits ye shall know them." Truth is relative; it grows. The true is "the expedient in the way of our thinking," just as the right is "the expedient in the way of our behaving." Ideas, doctrines, and theories become instruments to aid us in meeting life situations. They are not answers to riddles. A theory is a man-made affair to suit some human purpose. The only satisfactory standard of the truth of theories is that they lead to results that are beneficial. *Workability, satisfactions, consequences, and results* are the key words in this pragmatic conception of truth.

FREEDOM AND MELIORISM

Morality, like truth, is not fixed but grows out of present life situations. The source and authority for beliefs and conduct are to be found in human experience. The good is that which makes for a more satisfactory life. The evil is that which tends to destroy life. As against the determinists, James was a strong defender of moral freedom and indeterminism. Determinism, he thought, is an intellectualistic falsification of experience. As against both the optimists and the pessimists, he supported the doctrine of meliorism — that the world is neither completely evil nor completely good but is capable of improvement. Men who believe

that the world can be made better and who act on that belief are likely to live in a better world than they would have lived in otherwise. Human effort to improve the world is worth while and the trend of biological and social evolution is in that direction.

THE WILL TO BELIEVE

William James was a man of positive religious interests and he gave considerable attention to religion. The doctrines of pluralism and meliorism, as well as his doctrine of the will to believe, all played a part in his views of religion and of God.

Let us consider first his doctrine of the Will to Believe. Men often face crucial situations in life where they must choose and act. In many of these situations they do not have all the evidence available, and they may not be able to find it. Consequently, they must act without adequate evidence. This is where their will to believe may enter and create new truth or new value simply through the will to believe. Life is more than logic and more than theory. Life's values are empirical and are found in experience as men test them. The belief tends to create the fact. This will to believe in turn leads to discovery and to conviction or belief.

Again, according to James, in many experiences of life man has contact with a "More." He feels about him something akin to his higher nature, something sympathetic. He is ever falling back upon it in worship and in prayer. It brings comfort, happiness, and peace; furthermore, it has been almost universal in the race. In the religious sense, God is the name of this ideal tendency in human experience.

James, as we have seen, was impressed with the novelty, freedom, individuality, and diversity of our world. Consequently, he insists that God is finite and not absolute. Pluralism means that there are real possibilities for good and real evils in our world. No good, all-powerful God could have created the world as we know it. When God is part of the world rather than all of it, divinity and humanity have more in common. God is moral and friendly. James' doctrine of meliorism implies the belief that man can co-operate with God in struggling to create a better world.

THE INSTRUMENTALISM OF JOHN DEWEY (1859—)

If the rapid rise of pragmatism was due to the brilliant exposition of it by William James, its continued growth and strength

is to be attributed to John Dewey's prolific writings and his application of the movement to all phases of life and thought. Dewey has achieved fame in the various fields of philosophy, including logic, ethics, epistemology, and social and political philosophy, and also in psychology and education.¹

Dewey has been a keen and a constant critic of the classical or traditional types of philosophy with their search for ultimate reality and their attempt to find the immutable. Such philosophies have attempted to minimize human experience or to transcend it. In his book *The Quest for Certainty*, Dewey tells us that men have used two ways to escape dangers and to gain security. One way has been to appease or to conciliate the powers around them by means of ceremonial rites, sacrifices, supplication, and religion. A second way has been to invent tools by means of which the forces of nature can be controlled to man's advantage. This is the way of science, industry, and the arts, and it is the way approved by Dewey. The aim of philosophy is the better organization of human life and activity here and now. Interest thus shifts from metaphysical problems to the methods, attitudes, and techniques for biological and social progress. The improvement of human life and its environment is the task of philosophy. The method is that of experimental inquiry, of directed and regulated change, or the scientific method as exemplified in physical research.

EXPERIENCE AND THE CHANGING WORLD

Experience is one of the key words in instrumentalism. Dewey agrees with the radical empiricism set forth by William James. His philosophy is *of* and *for* daily experience. Experience is the whole human drama, and it includes the total process of interaction of the living organism with its social and physical environment. Dewey refuses to transcend human experience or to believe that anyone else has ever done so. In the past, philosophers have attempted to discover some "theoretical super-experience" on the basis of which they might build a secure and meaningful life. Dewey insists that "experience is not a veil that shuts man off from nature"; it is the only means men have of penetrating further into the secrets of nature.

¹ For the writings of John Dewey, see *The Philosophy of John Dewey*, edited by Paul Arthur Schilpp, Vol. I of *The Library of Living Philosophers*, pp. 611-676. Northwestern University, Evanston, Ill., 1939.

This present world of men and women, of fields and factories, of plants and animals, of whirling cities and struggling nations is the world of our experience. We should accept it as it is, should try to understand it, and then should try to make it into something nearer to our heart's desires. Why should we endeavor, by some process of thought, to get beyond this pulsing, dynamic world in which we live and have our daily experiences?

John Dewey takes evolution, relativity, and the time process very seriously. The real is in constant process of change. The world is in the making; it is constantly moving forward. This view of the world stands in marked contrast to the view of reality as fixed and permanent which dominated Greek and medieval thinking and has dominated much of modern science. Max C. Otto, writing on "John Dewey, Philosopher of a New Age," makes much of the fact that Dewey was born in 1859, the year Darwin's *Origin of Species* was published. He says: "Plato and Aristotle gave philosophic expression to the Athenian stage of culture; Thomas Aquinas brought into a workable scheme the traditions of Aristotle and Paul which were at war in medieval Europe; Francis Bacon, standing at the threshold of the seventeenth century, drew a comprehensive projection of the scientific civilization which was just beginning; Immanuel Kant, two centuries later, fashioned a world-view that provided honorable room for the physical science and the ethical aspiration of his day. In the same measure John Dewey has created a philosophy for the present age of evolution and evolution's precocious child, relativity."¹

According to John Dewey, men live in an unfinished world. This is made clear by three aspects of instrumentalism. First, by temporalism, which means that the time process is taken seriously. There is real movement and progression. Nature is a process. Men can no longer continue to hold the spectator view of reality. Our knowledge does not merely mirror or reflect the world; it reshapes it and changes it. Second, by futurism, which bids us look toward the future and not toward the past. We move forward to a world in the making. The future, which is growing out of the past, will not be a repetition of it but will be in some sense novel. Third, by meliorism, which is the view that the world can be made better by our efforts, a view set forth by William James.

¹ Max C. Otto in an article in *The Social Frontier* for May-June, 1937. Used by permission of the author.

THE INSTRUMENTAL THEORY OF IDEAS

Basic in Dewey's philosophy is the instrumental theory of thinking, ideas, and doctrines. Thinking is biological in its nature; it is concerned with the adjustment between an organism and its environment. All thinking and all concepts, doctrines, logics, and philosophies are part of the "protective equipment of the race in its struggle for existence."

Reflective thought arises when there is a problem or when our habits are blocked in particular crises. Intelligence is an instrument for gaining some goal or goals sought after by the individual or by the race. There is no separate "mind" stuff gifted with a faculty of thinking. Mind is stated in terms of doing and results. Knowing and acting are continuous. Knowing occurs within nature, and sensory and rational factors cease to be competitors and are united as parts of a unified process. Ideas are plans of action to be performed. Scientific theories, like other tools and instruments, are "hand-made by man" in pursuit of particular interests and goals. The aim of thinking is to remake experienced reality through the use of experimental techniques.

John Dewey makes little use of such terms as *mind* and *consciousness*. When they are used, he tends to use them as adjectives. Adaptive behavior becomes, at times, reflective, conscious, or mental. Creative intelligence or experimental thinking is what we need to stress. Mind denotes the system of meanings which arise in the process of human adjustments. Consciousness is the awareness of these meanings.

Dewey accepts the theory of truth as set forth by William James but makes certain changes in emphasis. For Dewey the social factors are especially important. For an idea to be called true, it must satisfy both personal and social needs as well as meet the requirements of objective things. An idea may be called true if it leads to more satisfactory conditions for all those whom the idea concerns.

MAN, NATURE, AND FREEDOM

For instrumentalism, man and nature are in continuous interdependence. Man is not part body and part mind. He is naturalized within nature, and nature is so interpreted as to take account of him. Nature in man is nature grown intelligent. Nature is said to be neither rational nor irrational; it is intelligible or under-

standable. Nature is not something to be accepted and enjoyed by men; it is something to be modified and experimentally controlled.

Dewey and the modern instrumentalists have been staunch defenders of both freedom and democracy. Dewey is a defender of moral freedom, or freedom of choice, of intellectual freedom, and of the political and civil liberties, including freedom of speech, of press, and of assembly. On the side of democracy, Dewey stands for an extension of the democratic principles not only in the political and civic realms but also in the racial and industrial areas of life.

VALUES: ETHICAL AND RELIGIOUS

John Dewey and many of his supporters reject all traces of supernaturalism and ground both ethical and religious values solely in the natural relations of man. The values of life are capable of verification by the methods through which other facts are established. "There exist concretely and experimentally goods — the values of art in all its forms, of knowledge, of effort and of rest after striving, of education and fellowship, of friendship and love, of growth in mind and body. These goods are there and yet they are relatively embryonic. Many persons are shut out from generous participation in them; there are forces at work that threaten and sap existent goods as well as prevent their expansion. A clear and intense conception of a union of ideal ends with actual conditions is capable of arousing steady emotion."¹

Dewey has little or no use for religion or particular religions, but he does use the adjective *religious* to describe those values through which one's personality is integrated and enriched. Any activity pursued in behalf of an ideal, because of an abiding conviction of its genuine value, is religious in quality. Dependence upon any external power is rejected as tending to weaken human endeavor. The term *God* may be used if it refers to the unity of all ideal ends in their tendency to arouse us to desire and action.

IMPLICATIONS OF PRAGMATISM

The attitudes, methods, and points of view associated with pragmatism and instrumentalism have implications and applica-

¹ John Dewey, *A Common Faith*, p. 51. Yale University Press, New Haven, Conn., 1934. Used by permission of the publishers.

tions for all areas of human thought and action. Let us consider briefly the implications in the areas of logic, psychology, education, social philosophy, and religion.

LOGIC

Traditional logic or Aristotelian logic, the logic of the intellectuals, held sway until comparatively recent times. It was based on the assumption that thought can be disinterested, or divorced from human desires and purposes. Such disinterested reason follows certain fixed principles or formulae, which include the "laws of thought" and the syllogism or the unit of deductive reasoning. The syllogism includes two premises and a conclusion. Granting the truth of the premises of the syllogism, the reasoning can be pronounced definitely valid or invalid.

The new logic implied by pragmatism and instrumentalism attacks the syllogism and the assumptions underlying traditional logic. The syllogistic logic, it is said, is academic and attains certainty only at the cost of novelty and because it fails to conform to the facts of experience. If the conclusion of the syllogism follows the premises, it is not new; and if it is new, it does not follow from the premises. We gain new knowledge by taking a mental leap which involves guesswork, or a hypothesis, that is accepted if it works and rejected if it fails to give satisfactory results. Thinking is relative and provisional and cannot in practice be separated from our human purposes. The "true" is only the expedient and the satisfactory in the way of thinking, just as the "right" is only the expedient and the satisfactory in the way of behaving. Since our experience is limited and relative, our beliefs cannot be more than tentative. A belief is a truth-claim which we establish or reject as we test it in relation to the purpose before us. Whether the belief does or does not forward our purposes can be ascertained only through our experience and the use of experimental thinking.

PSYCHOLOGY

Pragmatism has been one of the forces attacking the earlier "atomistic psychology" in favor of a more unified and activistic view of mental processes. According to the earlier atomistic approach, the objects we perceive consist of a number of distinct and separate sensations. For example, when we see a stone, we may get the isolated sensations of brownness, hardness, and smooth-

ness. When these sensations are conveyed by the nerves to the brain, we become conscious of them as ideas.

For pragmatism, consciousness is a continuous flow, and experience is one continuous whole. Mental activity, instead of joining together that which is chaotic and separate, tends to break up and to separate that which is actually a continuous whole. The mind is active; according to the purpose which it has in view, it rejects, selects, or makes additions. Thus what is believed to be real is prescribed in part by the interests, the purposes, and the temperament of the knower.

Mind is real in that it is a quality of behavior. Its reality does not imply the existence of a transcendental reason or cosmic mind. Mind is a function which the child acquires as he learns the meanings of things and activities in his environment. He learns to think as he connects what he does with the consequences that follow from his actions.

EDUCATION

The emphasis on experience, experimental inquiry, and the notion that knowing and acting are continuous has had direct and important implications in the field of education. One result has been the growth of the Progressive Education Movement. While not the originator of the movement, John Dewey is largely responsible for the philosophy of education on the basis of which the movement has grown. Emphasis is placed upon the student, who learns as he lives meaningfully, not upon "subject matter" in isolation from its living use.

We learn as we act, and we act on the basis of our interests. Thus projects and activity are stressed. Our desires do not need to be suppressed; they need to be organized and directed along useful lines. Education is the continuous reconstruction of experience; it is not the transmission of a body of beliefs. The growth of the person is the important thing. Education is the process of sharing experiences in associated living. The person needs to discover how to deal successfully with new and changing situations.

The instrumentalist is opposed to an education which by passive rote memorizations would impose standardized subject matter on students. He is opposed to a uniform program of activities which tends to regiment or to warp the development and expression of true individuality. He wishes to give individual attention and consideration to each pupil and to encourage an active

community life within the school. Initiative and independent thinking need to be encouraged and cultivated.

Education is a social process. Since knowing and doing are interdependent, persons learn what they live, especially if the activities of living are self-chosen. They gain freedom not only as they learn but especially as they acquire the disposition of "learning to learn," and as they become responsible and responsive persons in a well-integrated society. The intellectual and the practical, the cultural and the vocational are organically related. Besides formal schooling, education includes the total experience of the person with his social and his physical environment.

SOCIAL PHILOSOPHY

The emphasis on evolution and change, on the close relation between knowing and doing, and on the instrumental nature of all ideas and theories has focused attention upon the social scene. Questions in the field of social philosophy occupy a central position in the thought of most contemporary instrumentalists. In the field of social thought one witnesses the most tragic failure to apply experimental intelligence or scientific method.

John Dewey and his followers have been identified with many of the liberal movements of our time. According to Dewey, the individual and the social cannot be kept apart except by some false abstraction. Likewise, morality includes everything which affects the values of human living. Ends and means are related and must be thought of as a unit. Hence the liberalism which is stressed is not the older individualistic liberalism which fails to recognize the new conditions created by our corporate civilization. The new liberalism must direct its energies to fundamental social change and recognize the need for co-operative social control and organized planning in the interest of human welfare. A traditional liberalism which attempts to resist all social changes by the use of such platitudes as "natural law" and "personal liberty" must be resisted. Insecurity today is likely to be institutional rather than "natural."

We have already mentioned John Dewey's emphasis upon freedom and democracy. Experimentation and creative intelligence require a democratic state. Artificial barriers, whether political, economic, or racial, stand condemned. Governments, however, need to expand as the effects of private actions expand in scope and area. Pragmatists accept social intelligence and reject vio-

lence as the method of social change. They see the future as an open road along which we may direct our course as human needs dictate.

RELIGION

Pragmatism is exceedingly distrustful of ultimate generalizations; it takes its stand upon empirical science and the world of experience. In refusing to define what is real, it attempts to leave behind both the older idealism and the older naturalism. It does not wish to make its world out of physical forces alone or to locate the seat of values and hence of religion and morals in another world or in an area which empirical science is unable to enter.

With the advent of pragmatism, doctrines and theories take on a new meaning. This applies also to religious doctrines. They arise neither from revelation, as with orthodox Christianity, nor in the mind of some Absolute or Knower, nor as a description of the real external world. They originate in the desires of men to find suitable instruments with which to bring about certain desirable results. Religious doctrines are instruments of religious desires and are contingent and changing. There are no absolutely true doctrines, since all ideas are tools to be improved. Doctrines are based upon experience, and they will change as experience changes.

In the field of religion, pragmatism has made its influence felt in two ways. In the first place, it has been used by some persons as a defensive apologetic for doctrines already established in the minds and emotions of men. William James' doctrine of the "Will to Believe" and his conception of truth readily lent themselves to this use. Men said that certain doctrines, like the doctrine of God, were comforting and brought reinforcement in their lives; therefore that was all the proof needed of their validity. Men have a right to accept certain beliefs as hypotheses and to test them in the process of living. If they lead to favorable consequences, they are valid. In this way, pragmatism was used to justify many of the beliefs of traditional orthodoxy. The belief of William James in a finite God, a pluralistic universe, and a world that can be made better has already been set forth.

Pragmatism in its modern dress, or the instrumentalism of John Dewey and his followers, is humanistic and definitely naturalistic in its implications. This is further borne out by John Dewey's *A Common Faith* and by the fact that pragmatists have been the main supporters of the New Humanism, or

Humanistic Naturalism. Instrumentalists are not only opposed to any trace of supernaturalism but object to discussions of metaphysical and cosmological problems as useless. Theories about reality are irrelevant; therefore discussions of theistic and teleological problems are no longer necessary. To reject metaphysics while retaining theism and theology is somewhat contradictory. Emphasis is placed upon reality as experienced, and beyond this we cannot go; we know only that it is many-sided, or pluralistic.

The world men know is the world they experience. There is no consciousness as such, and no objective world as such. Man is in the process, so that he has no vantage point from which to view, interpret, or evaluate the process as a whole. Through the instrumentality of intelligence, however, man is able to exercise a degree of control. Apart from man's directive power, there is no discernible purpose. Religion thus becomes a humanism, a social mysticism, or the co-operative human quest for the good life here and now. Where the idea of God is retained, it tends to be used as a symbol for social values or for ideals.

A religious faith that is worth while is a faith in man's achievable ideals or a loyalty to human values. Anything else tends to siphon human energy and interest from attainable values to another world. Genuine faith is one that remains within experience and that shows concern for moral action.

EVALUATION OF PRAGMATISM

Pragmatism has grown out of certain aspects of contemporary living. It is an expression of the mood of modern technological society, with its emphasis upon getting things done or upon having satisfactory consequences. Pragmatism is to be commended especially for its attempt to bring philosophy "down to earth" and to deal with the living issues of the day. According to John Dewey, the aim of philosophy should be the improvement of human life and its environment or the organization of life and its activities in terms of human needs. We do need a philosophy that makes life better here and now. The world is in the making, and our efforts will play some part in shaping the future. If we accept the melioristic attitude and believe that life can be made better, we are likely to live in a better world than we would without such a conviction. We need to face the facts of experience and to dis-

cover and to live by those principles which stand the test of time and of daily living.

According to pragmatism, or instrumentalism, our knowledge does not merely mirror or reflect the world. Thinking is a creative process which reshapes the world. Theory and practice are closely related. Ideas and doctrines are instrumental and serve the processes of adjustment between the organism and its environment. Such beliefs are built up and tested by experimental methods and our on-going human experience. There is much truth in all of these affirmations.

Pragmatism has generated a liberal habit of mind and an enthusiasm for social progress which has been beneficial. Most pragmatists have been keen supporters of democracy, human freedom, and other progressive or forward-looking movements and trends in modern society.

The critics of pragmatism, as well as its supporters, are numerous and vocal. Brief mention is made of five points of criticism of pragmatism, or instrumentalism.

First, it is asserted that pragmatism has an inadequate metaphysics. Pragmatists are likely to claim that speculations regarding the ultimate nature of reality are a waste of time. This distrust of metaphysics, say the critics, is due to the fact that pragmatism does not rest on a stable foundation. If the pragmatists say that ultimate reality cannot be known, that in itself is a statement regarding the nature of reality. If the pragmatists stress experience and assert that "reality is as it is experienced" and that nature is to some extent "man-made," they move in the direction of the subjective forms of idealism. On the other hand, if they stress the objective, independent world — the given — they move in the direction of realism. Their denial of metaphysics means a confused metaphysics and a fear of facing this issue in the open.

In the second place, it is claimed that pragmatism has an inadequate view of the mind. Mind is undoubtedly a biological aid to survival, as the pragmatists claim. Mind is much more, however, than an instrument for satisfying the practical needs of food, shelter, and protection. Professor Montague suggests that if man did begin to think in order that he might eat and satisfy his immediate needs, he has developed to the place where he satisfies these needs in order that he may think. Man is a problem-solver, it is true; but man also lives in the realm of aesthetic contempla-

tion and of ideas and ideals. He asks about the "how" and the "why" of things. He lives to some extent in the past and in the future, as well as in the present.

In the third place, the critics attack the pragmatic view that truth is man-made and that it has no independent existence. While "true propositions work in the long run," it is an instance of false conversion to turn the proposition around and claim that "all propositions that work are true." Some true beliefs cannot be verified; others are not useful. The small boy may count the number of knots in the board on the fence — just to know! False ideas and fictions are sometimes useful. Lies sometimes work well, especially in wartime. These are disagreeable truths which we must face. We do not create truth by living right; we live right by grasping and following the truth. According to the critics, there is truth to be contemplated, beauty to be appreciated, and an order of nature to be discovered. However, most of us do use the pragmatic test of truth, at least at times.

In the fourth place, there appears to be a serious inconsistency between the claim that philosophy is an outgrowth of social conditions and the demand for objectivity in research. If mind is an instrument to fulfill my desires, how is it possible to demand impartiality in inquiry? If "men who live differently think differently" and there is no objective standard of truth, how can we have any reliable scientific knowledge?

Finally, the question is asked as to whether pragmatism can be used to justify any social attitude that an individual or a group wishes to call progress. If the good is that which can be lived, is everything belonging to the evolutionary process good? Possibly pragmatism places too much emphasis on activity and not enough upon the goals for which men should seek.

»»» QUESTIONS AND PROJECTS «««

1. Give an account of the life of John Dewey, emphasizing his intellectual development and the factors that have influenced his thinking. See *The Philosophy of John Dewey*, edited by Paul Arthur Schilpp, pp. 3-45 (Vol. I of *The Library of Living Philosophers*. Northwestern University, 1939).
2. Wherein do idealism and pragmatism agree and differ?

3. Is there justification for calling pragmatism (or instrumentalism) a biological view of truth?
4. Turn to Chapter X and list the interpretations of the mind-body problem that would be (1) acceptable and (2) unacceptable to pragmatists.
5. How might pragmatism be used to support widely different systems of metaphysics or of social philosophy?
6. Is it conceivable that several hypotheses about the nature of things might work equally well?
7. Are there some beliefs that cannot be verified on pragmatic grounds? How about such beliefs as immortality, the worth of man, and democracy?
8. Review the following books: William James' *Pragmatism, The Meaning of Truth, A Pluralistic Universe, and The Will to Believe*; ¹ John Dewey's *Reconstruction in Philosophy* (Henry Holt and Company, 1920) and *The Quest for Certainty* (Minton, Balch and Company, 1929); John L. Childs' *Education and the Philosophy of Experimentalism* (D. Appleton-Century Company, 1931); William T. Feldman's *The Philosophy of John Dewey; A Critical Analysis* (Johns Hopkins University, Baltimore, 1934).

¹ Longmans, Green and Company published these books by William James.

Realism and Its Implications

The beginning student will do well to get clearly in mind the meaning of such terms as *real*, *reality*, and *realism*. The real is the actual, or the existing. The term refers to things or events belonging to the order of nature or existing in their own right, as opposed to the imaginary, the artificial, the fictitious. *Real* refers to "what is." Reality is the state or quality of being real or actually existent, in contrast to what is mere appearance. In a popular sense, realism may mean devotion to fact and details as opposed to the imaginary. In philosophy, however, the word is used in a more technical sense.

WHAT IS REALISM?

Realism, in a philosophical sense, is the doctrine that the objects of our senses are real in their own right in that they exist independent of their being known or related to mind. Realism is the disposition to think and to act in the light of things as they are; it is a preoccupation with fact or reality; it emphasizes the objective and the scientific as opposed to the subjective and the speculative. For the realist the universe is so inexorably "out there" that the only thing we can do is to make the best terms possible with it. The realist attempts to come to terms with the universe, not to interpret the world in terms of his experience or in spiritual terms.

A contemporary British realist, Professor John Macmurray, says: "We cannot get away from the primary fact that there is a distinction between things and ideas. For ordinary common sense an idea is the idea of something, a thought in our minds which

represents the things that it is the idea of. In that case the thing is the reality while the idea is merely 'how the thing appears to us.' Our thought must, therefore, adapt itself to things if it is to be proper thought, that is to say, if our idea is to be true. If the idea does not correspond with the thing of which it is the idea, then the idea is false and useless. The thing will not accommodate itself to our idea of it. We have to change our ideas and keep on changing them till we get them right. Now, such a common-sense way of thinking is essentially realist, and it is realist because it makes the 'thing' and not the 'idea' the measure of validity, the centre of significance. It makes the thing real and the idea the true or false appearance of the thing."¹

In discussing how anyone could arrive at a conclusion other than that held by the realist, Professor Macmurray says that the philosopher's business is with ideas, therefore he tends to place emphasis upon the world of ideas or thought. Since thought tends to be more important *to him*, he naturally though mistakenly comes to think that ideas are more basic in their nature than are things. Thus he finds it comparatively easy to affirm that reality is of the nature of thought or idea. If a man elevates the life of mind, or reflective thinking, as something higher or nobler than practical activity or than his interest in things, he tends to imply that the idea is more important than the thing of which it is the idea. In the theoretical field as distinct from the field of activity, a man tests his ideas by thinking, so that his knowledge of the world is the world as he knows it. If he confines himself to thought, then thought seems to be the only significant thing. In the opinion of Professor Macmurray, the realistic view is the common-sense view and the only one which will stand up amidst the practical activities of life.

Another realist, Professor A. N. Whitehead, sets forth his reasons for believing that the things we experience are to be distinguished clearly from our knowledge of them.² In defending the objectivist position of realism, which, he says, is adapted to the requirements of science as well as to the concrete experiences of mankind, Professor Whitehead makes three affirmations. First, "we are within a world of colors, sounds, and other sense-

¹ John Macmurray, *The Philosophy of Communism*, pp. 21-22. Faber and Faber, Ltd., London, 1933. Used by permission of the publishers.

² Alfred N. Whitehead, *Science and the Modern World*, pp. 125ff. The Macmillan Company, New York, 1925.

objects." The world is not within us, nor does it depend upon our sense perception. Second, historical knowledge discloses long ages in the past when no living beings existed on earth and when important changes or happenings were taking place. Third, one's activity seems to transcend the self and to find and to seek ends in the known world. Things pave the way for our awareness. A "common world of thought" seems to imply and to require a "common world of sense."

Many philosophers, past and present, and notably the idealists and the pragmatists, have claimed that an object known or experienced is different from the object before it entered such relationships. Since we can never know an object except as it is known or experienced by us, the object's being known or experienced forms an integral part of the object known. Thus knowledge and experience tend to modify or to constitute the object to some extent. The realist holds that such reasoning is fallacious. According to C. E. M. Joad, he makes the following claims:

"(1) The entities (objects, facts, &c.) under study in logic, mathematics, and the physical sciences are not mental in any proper or usual meaning of the word 'mental.' (2) The being and nature of these entities are in no sense conditioned by their being known. Hence (3) Things may continue to exist unaltered when they are not known, or pass into and out of knowledge without prejudice to their reality. (4) Knowledge is a peculiar type of relation which may subsist between a mind and any entity.

"From these propositions there follow the general Realist conclusions: (1) that the nature of things is not to be sought primarily in the nature of knowledge; (2) that, accordingly, the nature of things is what it is independently of our knowing it; and (3) that it is therefore not mental."¹

Now that we have heard from various realists, it might be interesting to hear from an idealist as to what realism is. In essential agreement with the above statements, W. E. Hocking says: "Realism as a general temper of mind is a disposition to keep ourselves and our preferences out of our judgment of things, letting the objects speak for themselves. If we can say of idealism that it has a tendency to read the mind into nature, realism is in this respect its precise opposite. In the interest of allowing every object its full distinctive flavor, realism is inclined to de-personal-

¹ Cyril E. M. Joad, *Introduction to Modern Philosophy*, pp. 11-12. Oxford University Press, London, 1924. Used by permission of the publishers.

ize or de-mentalize the world, to see things starkly and factually in a spirit which it conceives to be at once more objective and more scientific than that of idealism."¹

Apart from these common basic affirmations, realism is a movement in philosophy that it is difficult to present in any comprehensive way in a single chapter, since it includes many different trends or types. It is not a single body of systematic doctrine. At least three tendencies are evident in modern realism. There is, first, a tendency toward materialism in some of its modern forms. For example, mechanistic naturalism is a realism as well as a materialism. Matter alone, or energy, or mechanistic processes are the real elements. This approach has been discussed elsewhere and is not considered again in this chapter. Second, there is a tendency toward idealism. The ground of existence or the reality that is beyond us may be thought of as akin to mind or spirit in nature, or as an organic whole. In his *Personal Realism*,² James B. Pratt represents such a tendency. This form of realism may be hard to distinguish from some types of objective idealism. Third, there are the many realists who claim that reality is neither physical nor mental but some underlying neutral substance (neutral monism); and there are the realists who insist that reality is pluralistic, consisting of many entities of which mind and matter may be only two. In this chapter the greater part of the attention is centered on the dominant tendencies within realism.

THE EARLY HISTORY OF REALISM

Realism, with its assumption of an external world quite independent of the human mind for its existence, has been widely accepted throughout history. In some of its many forms it has had almost universal acceptance among Western thinkers. In fact this view was not seriously questioned until the seventeenth century. Most men think of themselves as existing in the midst of a world of objects which are independent of them. The mind and the external world are in interaction, but this interaction does not affect the nature of the world. The world existed before mind was aware of it and will exist after mind ceases to be aware of it.

Philosophers have differed as to whether they were more or

¹ William E. Hocking, *Types of Philosophy*, revised edition, p. 383. Charles Scribner's Sons, New York, 1939. Used by permission of the publishers.

² The Macmillan Company, New York, 1937.

less realistic. What is sometimes called Platonic or conceptual realism is nearer to modern idealism than to modern realism. Assuming that the real is the permanent or the unchanging, Plato said that the concept, or the universal, was more real than the individual thing. The real, for Plato, is not in the flux of individual things but in what is common to all individuals of the class, that is, in the concept, or the universal, which is beyond the world of sense. For example, the concept *man* has greater reality than an individual man, John Doe. The influence of Plato, in the early part of the Middle Ages, led to a controversy as to the reality of universals.

Aristotle was more of a realist, in the modern sense, than was his teacher Plato. He was an observer interested in the details of individual things. Reality exists in concrete things or in the process of development. The real world is the world of sense, and form (idea or principle of organization) and matter are inseparable.

During the period of Scholasticism in the Middle Ages there was a controversy between the Platonic or classical realists and the nominalists. The realists claimed that class terms (*concepts, universals, general ideas*) were the only realities. Classical realism means the belief that universals or class terms have an existence which is quite independent of the particular things which appear to the senses. The nominalists insist that class terms or universals are names only, and that reality is found in percepts or in individual things. Concepts are mere names or symbols and have no existence of their own apart from the particular things that make up the class.

The discussion was very important for the men of the Middle Ages. If realism were true, there could be a Universal Church with authoritative dogma. All men could sin in Adam, and the doctrine of redemption and the work of Christ could apply to all humanity. If nominalism were true, only particular churches were real; furthermore, the sin of Adam and the work of redemption would not apply to all men. Men might be free to substitute their private judgments for the decrees of the Church. The Medieval Church supported realism in some form, since nominalism tended to undermine the Church's authority and dogmas.

From the twelfth century on, the influence of Aristotle tended to replace that of Plato. Thomas Aquinas (c. 1225-1274) brought Aristotelian metaphysics and Christian theology into harmony. Medieval Scholasticism comes to its most complete expression in

the thought of Thomas Aquinas. His great synthesis was made within the realistic tradition. For Thomas Aquinas, as for Aristotle, the universe is composed of matter and form. Matter is united or organized with forms which have been fixed by the Creator. There are real substances with real qualities. There is a "substantial form" which makes a body what it is. There are also some qualities which may change and which are called "accidents." God created the world, but he should not be identified with the world. God is an original substance. Nature is a separate and created substance or group of substances. Created things, however, are real and exercise genuine powers. The philosophy of Thomas Aquinas is a theistic realism.

During the seventeenth century René Descartes (1596-1650) started a new approach in philosophy. He decided to look within himself. As a result, he started a movement in the direction of subjectivism. From the development of philosophy through Descartes, Locke, Berkeley, Hume, and Kant and his successors, attention came to be centered upon the self, or the knower, as the primary reality. This movement is mainly idealistic in its outlook. The position of John Locke, however, is called *representative realism*. For Locke our ideas merely represent the primary qualities of the external world.

During the second half of the eighteenth century there arose a type of thinking known as the Scottish School of Common Sense Realism. The leader was Thomas Reid (1710-1796) at the University of Aberdeen. The new philosophy was brought to America when John Witherspoon became President of Princeton, then the College of New Jersey, in 1768. Through the work of James McCosh (1811-1894) the movement became influential. Just as personalism was especially strong among the Methodists, this common-sense realism gained a strong following among leaders of the Presbyterian Church. Challenging the subjectivism of Berkeley and the skepticism of Hume, these men asserted the existence of real things quite apart from the impressions and ideas in our minds. There are certain "common notions" which have an authority higher than experience alone and which men hold in common. The mind has a synthetic power, and we know by common sense that there is a world out there beyond us and that there is a mind which has ideas of that world. By the end of the nineteenth century, however, this movement had waned in influence. At that time realism showed very little vigor, while

idealism flourished and had many able supporters both in America and in Europe.

REALISM IN THE TWENTIETH CENTURY

The rise of realism at the beginning of the twentieth century was in considerable part a revolt or reaction against various movements of the nineteenth century which tended to magnify human powers and man's part in knowledge and in reality.¹ Only a few of these trends can be listed here: the increase in human control over nature due to scientific advances; the great advance in human knowledge which led to a new confidence in the power of man to control his own life and affairs; the political emancipation of the individual; the emphasis on self-interest as the all-sufficient motive in industrial activities; the concern for the inner life which made religion and theology subject-centered; the development of idealism and positivism in philosophy, with their attention upon man rather than upon the world and nature. As a reaction against these trends, realism has tended to transfer attention from the mind that interprets nature to the world that is interpreted.

THE NEW REALISM

The first decade of the twentieth century was a time of intellectual ferment. In the United States, William James was challenging the monism and the intellectualism of the dominant types of idealism. In England, in 1903, G. E. Moore published his noted essay, "Refutation of Idealism." Similar protests were arising in Germany. By 1910 six men, all teachers of philosophy in the United States, discovered that they were in considerable agreement and formed a group which published "A Program and First Platform of Six Realists" in the *Journal of Philosophy*. A year and a half later, in 1912, they published a co-operative book entitled *The New Realism*.² This is the movement known as new realism, or neo-realism. The group consisted of Edwin B. Holt, Walter T. Marvin, William Pepperell Montague, Ralph Barton Perry, Walter B. Pitkin, and Edward G. Spaulding.

¹ See Victor E. Harlow, *A Bibliography and Genetic Study of American Realism*. Harlow Publishing Company, Oklahoma City, 1931.

² Edwin B. Holt and Others, *The New Realism*. The Macmillan Company, New York, 1912.

The new realists reject subjectivism, monism, absolutism, all mystical philosophies, and the view that things are either created or modified in any way by the knowing mind. They claim that they seek the emancipation of philosophy from epistemology, and that they are returning to the common-sense doctrine of a real objective world which men know directly in sense perception. The outer world is actually present and is directly experienced; it is not mediated or obscured by a mental state. The world is pluralistic, relations are external and objective, and analysis does not destroy the real qualities of the world. The knowledge of an object does not change the object known. Some particular things and some universals or essences (Platonic realism) are real, whether we are conscious of them or not.

The common objects of sense perception, the objects of scientific analysis, relations, and qualities, appear to exhibit an indifference to the fact that we experience them. Our experience and awareness are *selective*, not *constitutive*. The behavior of such objects of knowledge does not show any signs of their being affected by their presence in consciousness. "Two plus three equals five" is explained by the natures of two, three, and five and not by the nature of the subject, or knower. The function of experience is not to create the things that are experienced but rather to reveal or to disclose them to us. After these objects become known to us, we may initiate action that can or does change them. We may adapt ourselves to the object or we may take action which adapts the object to us and to our needs.

The new realists point out that apart from these basic convictions there is neither a single realistic philosophy of life nor any one inevitable answer to questions regarding such things as mind, freedom, purpose, and the good. However, certain men have set forth fairly complete philosophies in terms of the new realism; for example, Edward G. Spaulding in *The New Rationalism*¹ and Samuel Alexander in *Space, Time and Deity*.²

CRITICAL REALISM

During the decade 1910-1920, seven men found a slightly different community of outlook. In 1920 they published a co-operative volume entitled *Essays in Critical Realism*.³ This group

¹ Henry Holt and Company, New York, 1918.

² The Macmillan Company, New York, 1920.

³ The Macmillan Company, 1920; reprint by Peter Smith, New York, 1941.

included Durant Drake, A. O. Lovejoy, James B. Pratt, A. K. Rogers, George Santayana, Roy W. Sellars, and C. A. Strong. While agreeing with the new realists that the existence of objects is independent of knowledge, they criticize them for making the relationship so immediate or direct. Just as the new realism was an attack upon idealism, critical realism was a criticism of both idealism and the new realism.

For the critical realist the awareness or perception of objects is not so direct and immediate as the new realists claimed. The outer object is not actually present in consciousness. Only the sense data (the mental image, the *sensa*, or the *datum*) are present in experience. They reflect the nature of the external object as well as the nature of the perceiving mind. Except by inference we cannot go beyond or get behind the sense data. We have, then: (1) the perceiving mind, the knower, or the conscious organism; (2) the outer object, the given, or the stark reality with its primary qualities; (3) the sense data, which connect the perceiving mind and the outer object. The critical realist thinks that the sense data give us a fairly direct contact with objects. They reveal in large part what objects are, and they indicate to us the nature of the external world. Furthermore, this approach, he believes, enables us to understand and to explain illusions, hallucinations, and errors of various kinds.

The critical realists have given considerable attention to *sensa*, *universals*, and *essences* and to their status in the universe. When a man looks at a tree or an animal, he gets a visual image of the object (visual *sensa*). He may contact these with additional senses, and there may be olfactory, tactual, and auditory *sensa*. What is the actual status of these immediate objects of sense perception? Are they mental or physical or neutral or just what? Realists differ as to whether they are body-dependent or mind-dependent. The common-sense view is that they are dependent on a physical world which they portray fairly accurately.

Most critical realists believe in the objective existence of a world of *universals* which include logical and mathematical relations. Some realists use the term *essence*. For example, George Santayana says: "By 'essence' I mean a universal of any degree of complexity and definition, which may be given immediately whether to sense or to thought. . . . This object of pure sense or pure thought, with no belief superadded, an object inwardly complete and individual, but without external relations or physical

status, is what I call an essence."¹ Essences have no physical status, but they are real apart from minds that know them. They are unique, eternal, and infinite in number. They can be known and contemplated, but that makes no difference to them. C. A. Strong connects *sensa*, universals, and essences when he says that "the datum is a mere essence, a universal."²

The critical realists, while maintaining substantial agreement in the area of the theory of knowledge, differed widely in their metaphysical views, as did the new realists. Many of the critical realists had written important books before engaging in this joint enterprise, and their views range from the naturalisms of Santayana and Sellars to the metaphysical spiritualism of Pratt.

UNATTACHED REALISTS

In addition to the men who are more directly associated with the two movements, new realism and critical realism as discussed above, there are also a number of equally important realists outside these groups. During recent decades these men have been expounding and developing a realistic point of view. In Great Britain this group would include George E. Moore, Samuel Alexander, Lloyd Morgan, Bertrand Russell, John Laird, and C. D. Broad. In the United States it would include Frederick J. E. Woodbridge, John E. Boodin, Morris R. Cohen, Evander B. McGilvary, Jacob Loewenberg, and Douglas C. Macintosh.

THE NEW REALISM OF E. G. SPAULDING

While there is no one complete system of doctrine that is typical of all the new realists, certain individual realists have given us rather complete statements of their philosophical position. Representative of new realism is *The New Rationalism* by E. G. Spaulding.

1. *Philosophical Realism*. — The position of the author is termed by him "philosophical realism."³ The universe, he says, is what it is, no matter what men think about it. The world is objectively

¹ From *Essays in Critical Realism*, by Durant Drake and Others, p. 168. By permission of The Macmillan Company, publishers, New York, 1920.

² *Ibid.*, p. 240.

³ The quotations throughout this section are used from Edward G. Spaulding's *The New Rationalism* by permission of the publishers, Henry Holt and Company.

there, and the only thing men can do is to analyze it and to make the best terms possible with it.

Realism proceeds in harmony with the development of modern science and is a metaphysics that denies the universality of causation as well as of substance. In place of causation and substance, realism emphasizes relations. It proceeds by induction and holds to the "consistency of relatedness and independence." This system permits the validity of analysis, as against the causation philosophies represented by phenomenalism and the substance or monistic philosophies represented by objective idealism. Terms, relations, laws, principles, regularities, order, classes, and series are discovered, not invented. The "knowing process neither causally affects, modifies, or creates that which is known." We begin with the *world* of our experience, which is inexorably there, and we endeavor by analysis or by human reason and investigation to find out just what kind of world it is in which we live.

2. *Ontological Pluralism.* — Ultimate reality, we are told, is an irreducible pluralism. There is not one quality or substance, either mind or matter, nor some unknown underlying entity of which all other entities are manifestations. A pluralism of such a nature is the only theory of being which stands the test of empirical investigation. Both primary and secondary qualities are located in the objective world. Entities which are correlated with a specific part of space and time are called physical entities; those with a specific time alone are called mental existents. Entities that are not spatially and temporally particularized but are discovered to be facts are called subsistents. In the realm of subsistents we have universals and ideals, such as justice, numbers, and the ideal system of mechanics. Such values as justice, goodness, truth, and beauty, although never completely attained, are nevertheless realities.

3. *Creative Synthesis.* — In the physical world, as elsewhere, it is an empirical fact that, as a result of the "non-additive organization" of parts, wholes are formed which are "qualitatively different from the characteristics of the parts." For example, in water the relation between hydrogen and oxygen is not additive; it is organizing, so that the characteristics of water are not the same as those of its chemical components. This process of the formation of entirely new qualities through the organization of parts into wholes is called creative synthesis.

Consciousness, to take another example, is a new level or a new dimension that arises in the process of creative synthesis. Granted that the "conditions for consciousness" are both spatial and physical, "consciousness itself need not be either spatial or physical" in order to be correlated with spatial and physical things. Consciousness is non-spatial and extra-physical and is not the kind of entity that we can shut within a body or a brain. It is not first in our bodies, brains, or cortexes, then to be extended to a distant object, since it is a "new" dimension that arises as the "result of the organization of 'elements' of which distant object and body are each members."

Man as a human organism exhibits the same principle of creative synthesis. Though he is infinitely complex, he may function as a unit or as a part of a larger whole. One whole of which man is a part is society. Morality is a characteristic which appears in human society with the recognition of personality. There arises, further, the "cognitive consciousness of respect, of reverence, of rights, and of 'ought.'" When this appears, we have the "moral consciousness of society" which is "conditioned by the existence of society, self-regulating and thus free." It does not arise in the individual alone, but it is binding upon him as a member of the group. A new quality is a law unto itself and needs to be described in new terms. Freedom is one such new quality.

4. *Values.* — Values or worths both exist and subsist, and they are real parts of the objective world. They are external and independent of their being perceived, conceived, and appreciated, as well as independent of the physiological organism. Ideals are real, and values like justice, truth, goodness, and beauty are "eternal verities," not subject to the misfortunes that distort the particular time-and-space-conditioned products of the natural process. These things are quite outside time and space and are "not subject to the stress and strain of this slowly evolving earth and this starry universe."

5. *Teleology.* — There is a "teleology in the existential process of the universe." Scientific evidence points to a process in which stars, planets, earth, plants, and animals participate. There are certain things which do not evolve, such as time, space, numbers, and logical principles. Whether or not the process is evolution, it is at any rate change, and the "process 'goes' one way" and one way only. That is, it has direction. We can identify this "empirically established direction" with teleology. "For if we

identify change with evolution, we can show empirically that all evolution is marked by *the production of something new*. *New wholes*, and among these, *values* arise that did not exist before; progress and betterment take place in just this sense."

Evolution is creative, and there is newness and an ascent that gives rise to "new" entities, some of which are values. This interpretation of the universe does not deny agency or power; in fact, it affirms that there is "an efficient agent or power to produce all values"; there is a "power that 'makes for' values, and leads to them or that produces them."

6. *The Idea of God and Religion*. — God is seen as the Being who cares for that which is good and who works for the attainment of that which is good. We are told that for realism, "God is the totality of values, both existent and subsistent, and of those agencies and efficiencies with which these values are identical. He is also at once the multiplicity of these entities and the unity of their organization *in that* they are related. This means that God *is* justice and truth and beauty, both as these are 'above' our world and as they are *in* it, and that He is thus both transcendent and immanent. Accordingly, if God is personality, He is also more than personality even as the moral situation among men is more than personality. He is love and affection and goodness, respect and reverence, as these *exist* among and in men, but He is these also as they subsist by themselves, *and act efficiently* upon men. In brief, God is Value, the active, 'living' principle of the conservation of values and of their efficiency."¹

Purpose is both transcendent, or above the world, and immanent, or in the world. It is transcendent to the extent of time and space. It is immanent to the extent that there is no "existential agent" that is external to the great creative evolutionary process as a whole. In this sense, God may be said to be both immanent and transcendent in the world. In a sense He is supernatural, since He is above or beyond the world of existents. But God does not contradict nature since God and nature are in a different universe or realm of discourse. God is in the world to the extent that particular existences or situations conform to these ideals.

Although there are values in the universe, not all is value. There are two other realms beside the realm of values: first, a realm of non-value entities which include "numbers, space and

¹ Edward G. Spaulding, *The New Rationalism*, p. 517. Henry Holt and Company, New York, 1918. Used by permission of the publishers.

time, electrons, atoms, masses, molecules, and the like" (Spaulding gives considerable attention to this realm); second, a realm of falsity and error, of evil and ugliness, that is directly opposed to the good, the true, and the beautiful. While philosophical literature abounds with attempts to argue evil out of existence, Spaulding believes that the attempts have failed. The realistic approach is the only one consistent and fair to the facts. Men fight evil because evil is evil and not just for the sake of the fight. Men wish to defeat and to eliminate evil and to replace it with the good. This is a solution of the problem of evil that supports a theistic rather than a pantheistic conception of God. God, who represents or is the sum total of all goodness and all values, fights not only beside men but in and through them, working for the development of value and for the good, the true, and the beautiful.

The religious consciousness is the persistent conviction in the lives of men that there are these two powers, one good and the other evil, and that they both have an influence in the realm of human motives and acts. "Respect and reverence and love for values and worths and for all that either *is* these or that 'makes for' them form part of the religious consciousness. But another part also is the *hatred* and detestation of all that is evil and ugly and false, and the desire and will to fight these."¹

POINTS OF EMPHASIS IN MODERN REALISM

1. *Method.* — Realists believe that we must make philosophy strictly scientific. Consequently, they stress a close relationship between science and philosophy. Philosophy can aid the sciences by attempting to integrate the facts and the laws of the various sciences into one consistent whole, and by examining the assumptions or postulates underlying the various sciences. Science can aid philosophy by furnishing numerous facts which contribute toward an adequate interpretation of life and the world. Science can aid also through its methods of experimentation and of logical analysis. Realists are likely to claim that we need to deal scientifically, not speculatively, with the problems of philosophy.

The realist likes to think that he does not shrink from hard facts. He forces his desires and interests to the background and accepts the differences and the uniqueness among things as real

¹ Edward G. Spaulding, *The New Rationalism*, p. 520. Henry Holt and Company, New York, 1918. Used by permission of the publishers.

and important features of the world. He is suspicious of sweeping generalizations that tend to combine all things in one system. He leaves himself and his mind out of consideration while he examines the variety of individual things. A number of realists, including Bertrand Russell, think that philosophy should use the method of reasoning which has been so effective in the mathematical sciences. Such methods will lead to the acceptance of the theory of the externality of relations.

2. *The Theory of External Relations.* — The realists quite generally, and especially the new realists, accept the doctrine of the externality of relations and reject the conception of the internality of relations held especially by the idealists. In order to grasp clearly the distinction, let us contrast the two positions. A relation is said to be *internal* when it exists within and forms a part of the things related. If two things are internally related, the relationship affects their natures. They must also be part of some larger whole which includes them both. A man, for example, is never isolated. He is related to other men and to a larger whole such as the family, and also to humanity, a more inclusive whole. He is also related to the physical world and to the moral and spiritual world order. It is these relationships that make a man what he is. Good and evil may seem opposed and opposites, yet they are related in a more inclusive moral order. The nature of each is partly determined by the existence and the nature of the other. All particular things, whether electrons and atoms or living organisms, depend on their relations to other things. The supreme system which includes all other relationships is what the monistic idealist means by the Absolute.

In contrast to the above, the realist says that relations are *external*, by which he means that objects are the same and preserve their independence regardless of the way or ways in which they may be related. An object may change its relationships with other bodies without itself being changed or without changing these other things. This is true also of the relation between a knower and an object. "Knowing makes no difference to, and neither constitutes nor alters that which is known." The object is the same whether known or unknown, and it would be the same even if there were no existing persons who could know it.

For many realists, the relations themselves, as well as the objects they relate, are objective as well as external. If box A is larger than box B, the relationship *larger than* is real and

objective. If an orange is sweeter than a lemon, not only is the orange real and the lemon real but the relation *sweeter than* is also real. The theory of external relations is said by some realists to be experimentally verifiable and mathematically calculable. Such a point of view leads toward a pluralistic view of the world. Matter, mind, relations, number systems, logical principles, ethical ideals, and the like may all be real. Those things which do not occupy space and time may be called *subsistents*, to distinguish them from those things which do occupy space and time, the *existents*.

3. *The Theory of Emergent Evolution*. — While this theory is not necessarily confined to realists, the realists have emphasized it. Three British philosophers — G. H. Lewis, C. Lloyd Morgan, and Samuel Alexander — have done much to popularize the use of the term *emergent evolution*.

According to this theory, nature is a product of evolution in which new and unpredictable qualities are continuously appearing. These new qualities form new levels of reality. Matter, life, mind, and values represent stages or levels in a creative process, not antagonistic modes of being. Mind, for example, has certain distinctive traits to which there are no neural counterparts.

For some realists, such as A. O. Lovejoy, emergence is confined to the biological and social orders existing at present on our planet. For other realists, such as C. Lloyd Morgan and Samuel Alexander, emergent evolution is a metaphysical principle characteristic of all nature. Growth thus comes to be a part of the very essence of nature, or of reality.

THE IMPLICATIONS OF REALISM

Whereas the pragmatists emphasize “the world of *our experience*,” the realists emphasize “*the world* of our experience.” The world is “out there,” and it is what it is, no matter what men think about it. Whereas the idealists place emphasis upon mind as in some sense the primary reality, the realists tend to view mind as one of the many things that go to make up the world. The realist is suspicious of any tendency to substitute our wishes or desires for the “facts,” or to make our conscious selves the center of importance in the universe. This emphasis upon an external world which is independent of but disclosed to the mind just as it is, is congenial to the natural sciences. Attention is directed

not to the mind that understands but to the reality that is understood. Realism is thus a part of the objectivistic tendency which underlies modern science, and supports it. It is less likely than idealism to concern itself with problems of the whole. Realism "puts reason in the saddle" rather than our sentiments and wishes. It is prepared to find that the world is quite different from what men might wish it to be.

In the realm of social and political thought, realism fosters the growth of social and political pluralism. From the belief in the reality of things independent of minds and of wholes, it is an easy step to the claim that groups within the state or within society, such as trade unions, corporations, schools, and churches, are likewise independent and have rights which must not be abridged. Likewise, the rights of the individual may be defended over and against any claim to exclusive or totalitarian rights on the part of the state.

In literature, realism stands in contrast with the romantic and idealistic glorification of human nature and the world. It lays stress on fidelity to real life and is opposed to the sentimental and the extravagant. It is willing to picture human nature as sometimes petty and ugly, and the world as occasionally cruel and heartless. Facts are portrayed just as they appear, without any attempt to idealize them or to explain them in such a way that the true, the good, and the beautiful are made to outweigh the false, the evil, and the ugly.

Realism in art avoids an imaginative treatment and limits itself to the object as actually observed. The realist stresses accuracy of detail without any conscious selection in the interest of some preconceived ideals. He is likely to portray some familiar scene or well-known event. The term *realism* is sometimes used in a derogatory sense to denote excessive minuteness of detail and attention to trivial, base, or displeasing subjects. Realism, however, does not necessarily emphasize the unpleasant and the distorted, since the real is the normal and the abiding. The realist does aim at correspondence with nature. He attempts to represent his subject matter in its concrete and particular details. The term *realism* is used in a complimentary sense to denote faithfulness to detail and accuracy of presentation.

While some realists deny any interest or validity in religion, there has been a revival of religious realism in recent decades. For the men who are interpreting religion in terms of realism,

there are certain common fundamental interests and assumptions. Religion is defended as an independent and genuine type of experience, but an experience that is directed outward toward the content of experience. The religious object rather than the religious subject tends to be central. There is a Divine Reality, or an object of worship, which may be directly experienced and known. However, this reality exists, whether it is recognized or not, and it may have qualities which do not now appear to us. God may be spoken of as the "process of integration," as that which makes for maximum values, as the totality of values, or in terms of a metaphysical substance.

Within Roman Catholicism, a religious realism or a realistic theism is found in the form of Neo-Thomism or Neo-Scholasticism, which is a restatement of the religious philosophy of Thomas Aquinas in terms more congenial to the modern mind. There is a repudiation of all relativistic and pragmatic philosophies, as well as of all the varieties of idealistic metaphysics which have emanated from a Kantian source. Metaphysical knowledge is possible and essential. Man and nature are separate substances, and the objects of knowledge are not affected by the fact of their being known. On a number of occasions during the last century, Papal Encyclicals have urged the study of Thomas Aquinas as the basic philosophical training in Catholic schools.

Within Protestant Christianity, a considerable group of religious leaders have challenged the idea that a genuine theistic religion depends upon the acceptance of either a traditional dualism or an idealistic interpretation. The book *Religious Realism*, edited by D. C. Macintosh, in which fifteen men discuss religion in terms of philosophical realism, is one expression of this trend. Other realists, both in America and in England, have discussed the religious implications of their philosophies. In Germany, realism has taken a somewhat different form in the Crisis Theology, which is definitely dualistic.

Realism is an attitude which insists upon a recognition of the presence of evil in life; consequently, it is a repudiation of extreme optimism. This recognition does not lead to the denial of the good. There may be a real deliverance from real evil. Religion is a quest for the good or for God, and adjustment is central. Men cannot interpret the world as owing its existence to mind. They cannot translate it into spiritual or human terms, as the idealists and the pragmatists seem to do. They merely make the best pos-

sible terms with the world. Since there is a realm of values, or a realm of good, structurally present in the universe, salvation may be obtained if the right religious adjustment is made.

EVALUATION OF REALISM

Realism is a broad movement in philosophy which ranges from materialism at one extreme to a position near to objective idealism at the other extreme. There is no single realistic view of the universe toward which criticisms may be directed. With the exception of realists like Alfred N. Whitehead, Samuel Alexander, and Edward G. Spaulding, the realists have been stronger on the side of criticism than on the side of construction.

Realism appeals to many persons because it appears to "face the facts" and to put "reason in the saddle." Realism is prepared to accept the world as it is and to make adjustments to the given conditions. The realist says, "Let the facts speak for themselves without forcing our wishes and desires upon them." Realism insists upon an objective world apart from our experiences. It accepts both good and evil as distinct qualities of existence — the good to be increased, and the evil to be eradicated, in so far as possible.

We are all to some extent realistic in outlook. Some of us are more realistic, others less realistic, than our fellows. All modern philosophical schools find a world "out there" to be interpreted. All of them accept the scientific method and outlook upon the world. Much of idealism and of pragmatism is compatible with the realistic assumptions. Meliorism and an emphasis upon growth and creative intelligence may be included within the bounds of any of these philosophies.

The general metaphysical position of realism comes in for criticism from both the idealists and the pragmatists. The idealists claim that it is impossible to prove that there is an object independent of the knower. They also criticize the reduction of mind to one among many things of nature. The realist theory of emergence interprets mind as arising from the non-living or even from Space-Time (Alexander). The idealists, in contrast, view mind as arising from an immanent mind, or from God.

The pragmatists pronounce fallacious the claim of the realists that physical objects are independent of experience. To talk about the world as independent from the knowing process is meaning-

less. No line can be drawn between the two. Since this is the case, all we may claim is that the world is "the world of *our experience*."

In its attempt to be objective and scientific, realism tends to minimize man and the importance of human life. Man as a late product of the evolutionary process lives in a world which is most adequately interpreted by the various physical sciences. This explanation of man is not so much false as inadequate, since it fails to present us with the whole truth.¹

We have now completed our consideration of the main types of philosophy. We have noted their points of difference and their major points of emphasis. We have pointed out certain features which, in our opinion, are worthy of commendation. There is some truth in all of the types, but probably not all truth in any one type. The greatest differences occur between the most widely contrasted types, such as materialism and idealism. However, there are significant points of agreement running through all these visions of the world.¹All agree that there is some order, meaning, or reality that we ought to discover and discuss.²All agree on the importance of intelligence and the need for the continuance of the search for knowledge. Each attempts to make a reasonable appeal to men.³All attempt to make the world meaningful. The problem is how to disclose that meaning.

The findings of modern science are accepted by the supporters of all these types of philosophy. For example,⁴all accept the theory of evolution and the newer views of matter. Their differences arise chiefly over the question as to the adequacy of scientific method and the reliability of the findings of the various sciences. Some would accept *science* as the final word, whereas others feel that the scientific conceptions need to be supplemented.

There is considerable agreement regarding the quest for the true, the good, and the beautiful, though this quest is interpreted in different ways. With the exception of certain forms of naturalism, such as mechanistic materialism,⁵all regard a religious interpretation of life and of the world as possible and reasonable. Views of individual thinkers vary widely, however.

The student of philosophy will need to think out his philosophy for himself and to decide whether he will go "all out" for one type of philosophy or attempt some combination or synthesis.

¹ See Reinhold F. A. Hoernlé, *Idealism as a Philosophy*, pp. 257ff. Doubleday, Doran and Company, Garden City, N.Y., 1927.

Since these types of philosophy present the major alternative positions, he is likely to be drawn more to one type or another. If he thinks that no one type is complete in its vision of the truth, he will have to decide what combination of ideas to accept. There is, first, the method of eclecticism, which selects the best from the several types or from the insights of the great philosophers. Some readers will find themselves drawn to certain features of the different schools. A second possibility is to seek a synthesis or some convergence of the types. Some modern philosophers — Whitehead, for example — are claimed by different schools. These men claim that their philosophies include the major insights of earlier philosophies and that they have achieved a synthesis that leaves the older “schools” behind. There is also a tendency on the part of each of the philosophical systems of thought to appropriate any new truths or insights as they appear.

Possibly the greatest difference exists today between two opposing views of the universe which tend to cut across a number of the types of philosophy. There are those who hold that the cosmic processes are alien to human aspirations and interests. Nature is a stark reality with nothing ideal or humane in it. From this point of view, human ideals are nothing but man’s passing attempt to make life a little more tolerable in a universe that is indifferent to the human venture.

The other point of view, the one with which the author is in agreement, is that there exists in the universe a power greater than man that makes for truth, beauty, goodness, and the development of persons. Man is not an alien in an indifferent or a hostile universe. The creative urge within him is inherited from the universe which has produced him. His aspirations are a reflection of his own inherent possibilities. Meaning, purpose, and values are somehow structurally present, so that man’s ideals are, in part, an expression of the cosmic processes. From this viewpoint the moral and religious aspirations of the race, the Christian outlook upon life and the world, and the quest for companionship and for God are fundamentally valid.

»» QUESTIONS AND PROJECTS ««

1. In your opinion, what are the strongest points of emphasis in realism? Do most persons assume the realistic outlook?
2. Do you think that perceptual errors refute the position of naïve realism? How would you explain such errors?
3. The idealist claims that consciousness and the presence of an object occur together, therefore they are dependent. Do you agree with the realist that this is a tautology mistaken for an axiom? The idealist rests his case on the mere co-presence of consciousness and the object. The real issue, however, is one of dependence or independence, according to the realist.
4. Some idealists assert that the realists usually attack the weaker or weakest types of idealism and then assume that they have disposed of idealism as a whole. Are the criticisms as valid against objective idealism as they are against subjective idealism? May there be points of agreement between realists and objective idealists?
5. Review the following books: Alfred N. Whitehead's *Nature and Life* (University of Chicago Press, 1934) and *Science and the Modern World* (The Macmillan Company, 1925); James B. Pratt's *Personal Realism* (The Macmillan Company, 1937); Roy W. Sellars' *The Philosophy of Physical Realism* (The Macmillan Company, 1932); *Religious Realism*, edited by Douglas C. Macintosh (The Macmillan Company, 1931); Daniel L. Evans' *New Realism and Old Reality* (Princeton University Press, 1928); Wilmon H. Sheldon's *Process and Polarity* (Columbia University Press, 1944).

»» PART FOUR ««

THE REALM OF VALUES

The Field of Values

The issue of the nature of values is one of the central and most persistent problems of human existence. A sense of values is experienced by all men and women. In one form or another, the nature of values has been discussed by persons in all periods of history. Some experiences are agreeable, others disagreeable. We welcome agreeable experiences and call them good, pleasant, beautiful, or true. We wish to increase or to repeat such experiences. We oppose or shun the disagreeable occasions and call them evil, unpleasant, ugly, or false.

Life forces us to make choices, to rate things as better or worse, and to form some scale of values. Remarks heard almost every day — “That isn’t fair,” “I don’t think that’s right,” “You ought to do it,” “Isn’t it beautiful?” — imply some standards, even though we may not be very specific about them. We praise and blame, call actions right or wrong, and declare the scene before us to be beautiful or ugly. Such judgments of value or disvalue must of necessity be made by all human beings. The only alternative to personal choice is to let time or our friends or some forces other than our own wills make the decision for us. The question is not so much whether we are going to have standards, convictions, loyalties, and ideals around which our lives are organized as whether these are to be consistent or inconsistent, life-promoting or life-destroying. To ignore this important field is to produce a very distorted or one-sided view of man and his

world. "Decency and thuggery, love and hate, beauty and ugliness, justice and tyranny — such are the matters about which most men are far more concerned than they are about fact and falsehood."¹

Since the time of the early Greeks, men have been interested in the theoretical side of the problem of values. In recent decades the study has taken on a new interest and importance. The word *axiology*, derived from a Greek word meaning "value," is coming to be used for the study of the general (theory of value,) including the origin, the nature, the classification, and the place of values in the world. Ethics — the study of values in human conduct — and aesthetics — the study of values in the realms of beauty and art — are special fields within this larger conception of value. Sometimes moral values and religious values are said to embrace the entire realm of human life.

WHAT IS A VALUE?

In answering the question, "What is a value?" let us distinguish between a factual judgment and a value judgment. When a question arises regarding such things as the distance between New York and San Francisco, the make or type of some particular automobile, or the age of a friend, the answer, if correct, is a factual statement. Factual judgments are descriptive in that they enumerate certain observable characteristics of a thing. Value judgments, on the other hand, appraise the worth of objects. In his outstanding work *General Theory of Value*,² Ralph Barton Perry quotes three selections which refer to the same object, "England." The first is a dictionary statement giving the location, the number of square miles, the population, and other information. The second is from Shakespeare's *Richard II* and includes such lines as, "This royal throne of kings, this scepter'd isle" and "This blessed plot, this earth, this realm, this England." The third is from Lissauer's "Song of Hate," which appeared in Germany during World War I and which includes such lines as, "We have but one single hate" and "We have all but one foe — England." Quite clearly the last two selections are in a different class from the first. They express positive and negative value judgments.

¹ Harold A. Larrabee, *Reliable Knowledge*, p. 601. Houghton Mifflin Company, Boston, 1945.

² Longmans, Green and Company, New York, 1926. See pages 1-2.

While we can ordinarily distinguish between facts and values or between factual judgments and value judgments, we cannot completely separate them. There is an interaction between facts and values. The observable characteristics of things enter into our appraisals of value. If we change certain facts, our evaluations are altered. That we do value certain things is also a fact from another point of view.

There is no agreement, as we shall see, as to how values are to be defined. In general, we can say that value judgments appraise the worth of objects. The term *value* has been variously defined as "that which satisfies a human need" or a human desire and as the "quality of things" which evoke some "appreciative response." The term expresses an element of desirability in an experience or an object. A value may be defined in terms of the positive property of having worth or of being valuable. In this sense, goodness and beauty would be values, whereas evil and ugliness would be disvalues.

Some students of value claim that value is undefinable and that goodness, beauty, and love are direct and immediate experiences. "‘Good’ is a simple notion, just as ‘yellow’ is a simple notion," says George Edward Moore.¹ Just as you cannot explain yellow to a person who has never experienced it and who does not know it, so you cannot explain the nature of good. "Good is good and that is the end of the matter." We can agree with Professor Moore that words and definitions cannot be substitutes for experience, and that without the living experience there can be no adequate understanding of values. Yet definitions can bring to our attention the common elements of these experiences and aid our thought and discussion of them.

THE CLASSIFICATION OF VALUES

While there is widespread agreement concerning the existence of certain outstanding groups of values, there is not the same measure of agreement regarding their number, nature, and relationship and how they are to be ranked in a scale of values. There are many difficulties, and values seem almost endless in their variety. Since this is the case, more than one type of classification is presented.

¹ George Edward Moore, *Principia Ethica*, p. 7. The Macmillan Company, New York, 1903.

In his influential book *Moral Values*,¹ Walter G. Everett classifies human values in eight groups: (1) Economic values. These values are indicated by market price, and they include all purchasable things. Economic values are instrumental in that they are used as means to obtain other values. Part of the problem of modern civilization is to subordinate these values to other more permanent values. Some writers do not believe that they are values in the strict sense, but only in a secondary or derivative sense.² (2) Bodily values. Here are included those things which "minister to the health, efficiency, and beauty of the physical life." (3) Values of recreation. These would include the values of play and leisure in so far as they contribute to the enrichment of life. (4) Values of association. Here would be included the numerous forms of human association, from friendship and family life to world-wide relationships. These might have been called the social values. (5) Character values. These include the whole range of desirable personal and social virtues, including justice, benevolence, self-control, and truthfulness. (6) Aesthetic values. The values of beauty as found in nature and works of art are the aesthetic values. (7) Intellectual values. Here are included the values of knowledge and the quest for and attainment of truth. (8) Religious values. Religion includes worship, devotion, and commitment to that which one believes is the highest value. Religion is a quest for the good life in which aid is sought from the cosmic order. It does not, however, stand apart from the practical life but seeks to transform, by its faith and spirit, all the activities in which men engage.

In the spirit of modern empirical science and in harmony with the human interests and drives as set forth by psychology, there has been an attempt to deal with values from a more genetic and biological point of view. In his book *Human Values*, Dewitt H. Parker says that there are in man "dominant systems of interests" which "contain values qualitatively alike" and which belong together. "They have their own laws of functioning, their unique and characteristic standards and norms, and they are commonly embodied in institutions. Thus about the religious interest is built the church; about the scientific interest, science and education; about ambition and the closely allied interest in self-preser-

¹ Henry Holt and Company, New York, 1918.

² See Dewitt H. Parker, *Human Values*, p. 47. Harper and Brothers, New York, 1931.

vation, the state and industry; about the aesthetic interest and the interest in workmanship, the arts; about love, friendship, the family, and the community."¹ A survey of human affairs led Parker to list the following as major interests and values: "self-preservation or health; comfort, the interest in a maximum of sensuous pleasure; ambition, the interest in securing a place of consideration and power in the social order; workmanship, the interest in the efficient making and using of things; love in its various forms, as sex love, parental love, friendship, generic love, community love, and ideal love; knowledge; play; art; religion. . . . Characteristic of these is their ability to create norms, and a certain resulting absoluteness. Upon them is based the 'ought,' the imperative."²

From the time of the ancient Greeks to the present, many philosophers have stressed three values as superior to all others: *goodness, beauty, and truth*. These values are said to be self-sufficient. While there have been attempts to reduce one to another or to make one supreme, these attempts have not been widely accepted. To goodness, beauty, and truth some would add happiness.³ Others would include these values in the higher unity of God, or the religious value.

We shall make no attempt to set forth a rigid classification of values as higher or lower. There are, however, certain principles which are quite generally accepted in philosophical discussions.

1. *Intrinsic values are to be preferred to those which are extrinsic.* An intrinsic value is one which is sufficient unto itself. An intrinsic value is good in itself in that it does not depend on something else for its worth. An extrinsic value, on the other hand, is a means to the attainment of other good things. An extrinsic value is a value because it is good for something or because it may be a means to an intrinsic value. Most of the things we see and use in our everyday activities, from books and typewriters to buildings and institutions, are extrinsic values.

Intrinsic and extrinsic values are not necessarily exclusive. The same things may be valued for themselves and for what they may bring, or a thing may be valued now as an intrinsic value and later as an extrinsic value. For example, knowledge

¹ Dewitt H. Parker, *Human Values*, p. 45. Harper and Brothers, New York, 1931. Used by permission of the publishers.

² *Ibid.*, p. 46.

³ See Cyril E. M. Joad, *Philosophy for Our Times*, p. 128. Thomas Nelson and Sons, New York, 1942.

may be valued as a good in itself and also as a means to other values in art, morals, and religion. A great work of art may be enjoyed for itself or it may be viewed as an instrument for making profit or achieving distinction. The same thing is true for most other values. Those things which are sought as good in themselves are the *ends* we seek in life. The other things are the *means* we use to attain these ends.

2. *The values which are productive and relatively permanent are to be preferred to those which are less productive and less permanent.* Some values, like the economic, tend to be used up in the activities of life, whereas values like friendship tend to increase as they are used. To share the values of the mind and spirit, the more ideal values, with other persons does not lessen their value for us. The bodily and economic values, while necessary for life, are not permanently satisfying as ends in themselves. The senses are likely to become satiated and to cease to respond. The long record of human experience tends to show that the social, intellectual, aesthetic, and religious values tend to give more permanent satisfaction than do the material values. The productive and permanent values will tend to correspond with the intrinsic values.

3. *As persons we ought to select the values of life on the basis of self-chosen ends or ideals.* That is, the values we follow ought to be *our* values. Also, these values ought to be consistent with themselves and with the demands which life, in its individual and social outreach, makes upon us. Compulsion is out of place in the realm of values, and there is no agency, private or public, which is competent to maintain standards of excellence in all the realms of value. "That man is free," said T. H. Green, "who is conscious of being the author of the law he obeys." In the realm of values, personal self-discipline on the basis of a well-thought-out scale of values is the mark of a mature man.

4. *Of two values, the greater ought to be selected.* Conversely, when we are forced by some life situation to choose between two evils, one of which is unavoidable, the lesser evil ought to be chosen. We must always act so that there is some gain or advance in the total realization of life. In his *Moral Laws*, Edgar S. Brightman says: "We like health and we like overindulgence in foods and drinks which undermine health; we like educational success, social success, and economic success, yet the attainment of all three at the same time by the same person is sometimes impossible. My interests as a member of a political party or of a church or of

the economic order may conflict with my interests as an autonomous moral person; yet I value the party and the church, as well as autonomy. The Axiological Law steps into this conflict with the rule of reason and asks the person to make a rational selection of values. Since we cannot have everything that we like because our likes are mutually exclusive and even destructive, we need to decide what values we shall pursue."¹ Speaking about "the Law of the Best Possible," he says, "All persons ought to will the best possible values in every situation; hence, if possible, to improve every situation."² Our duty to improve each situation is always within the limits of what can actually be accomplished in the time given and under the conditions present.

DO WE DISCOVER VALUE OR CREATE IT?

The basic issue, the main question of controversy in the field of values, has to do with the nature of values and their place in the scheme of things. What is the relationship of values to the mind that does the evaluating? Are values "in the mind," that is, subjective in the sense that they pertain only to the imagination, the thinking, the interests, and the desires of the person? Or are values outside the mind, that is, objective in the sense that they belong to things, just as do temperature, size, and shape? Or does the truth lie between the two extreme positions, so that values are both subjective and objective?

VALUE AS SUBJECTIVE

According to this point of view, values exist as sentiments or emotions of liking or disliking. An agreeable sensation is a value; a disagreeable sensation is a disvalue. Eating, drinking, playing, listening to music, observing a gorgeous sunset are valuable because they evoke a pleasurable sense of appreciation or exhilaration. They furnish us with personal experiences in the nature of sensations that we enjoy.

From a pragmatic and instrumental point of view, any experience is valuable in so far as it leads to satisfactory results. These results may be in the nature of richer and more enjoyable conscious experience or of a more satisfactory biological adjustment

¹ Edgar S. Brightman, *Moral Laws*, p. 127. Abingdon-Cokesbury Press, Nashville, Tenn., 1933. Used by permission of the publishers.

² *Ibid.*, p. 156.

to our environment or to our fellows. An experience or a program which brings about a desirable state of affairs for the individual or for society as a whole is a value.

Professor R. B. Perry defines value in terms of interest, making anything valuable for us when it is desired. While the value, for the time, may be viewed as in the object, the object itself has no value apart from the interest of the person. The object is valuable only because it is valued. Perry says, "Any object, whatever it be, acquires value when any interest, whatever it be, is taken in it; just as anything whatsoever becomes a target when anyone who-soever aims at it."¹ We do not desire and strive for a thing because we think it is good; we think it is good because we desire and strive for it.

George Santayana, David Prall, Dewitt H. Parker, and others accept this general position. Santayana tells us that "there is no value apart from some appreciation of it." Not merely consciousness but also emotional consciousness is needed for the existence of good in any form. "Values spring from the immediate and inexplicable reaction of vital impulse, and from the irrational part of our nature."² Dewitt H. Parker says that "values belong wholly to the inner world, to the world of mind. The satisfaction of desire is the real value; the thing that serves is only an instrument. . . . A value is always an experience, never a thing or object. Things may be *valuable*, but they are not values. We project value into the external world, attributing it to the things that serve desire."³ Some men working in the special sciences have asserted that only those things are real which are visible and tangible. Thus values reside in the desires and imaginations of men.

Those who present arguments for the subjective interpretation of values are likely to stress the fact that values — whether in the fields of goodness, beauty, or truth — have varied from individual to individual, from group to group, and from one age to another. If they were wholly objective, wouldn't they be the same for all minds? Values are in some sense relative to the minds that observe them, and they depend upon experience, interests, and desires.

¹ Ralph Barton Perry, *General Theory of Value*, pp. 115–116. Longmans, Green and Company, New York, 1926.

² George Santayana, *The Sense of Beauty*, pp. 18–19. Charles Scribner's Sons, New York, 1899.

³ Dewitt H. Parker, *Human Values*, pp. 20–21. Harper and Brothers, New York, 1931. Used by permission of the publishers.

VALUES AS OBJECTIVE

From this approach we recognize and appreciate values because values are out there in our world to be discovered. There is something in the object which makes our judgment necessary and reasonable. There is some quality, some assemblage of properties that draws out our preference and appreciative response. There is something independent of the individual make-up that is satisfying to the eye, the ear, the "moral sense," the "aesthetic faculty," or to the intelligence of men. A man takes an interest in those things and experiences which appear to him to possess value.

We must make a clear distinction — according to objectivism, or value realism — between the psychological experience of judging, on the one hand, and the thing or situation about which the judgment is made, on the other hand. Professor Joad gives us an analogy from temperature.¹ People differ in their judgments about the temperature, yet we do not say that their judgments are hot or cold and merely subjective and that there is no temperature about which they judge. In this case we can check their judgments with a thermometer. In the fields of beauty and morals there are no thermometers. If I judge the landscape to be beautiful, it is not my judging that is beautiful but the colors and shapes before me. There is a quality present that is independent of my judgment. Values seem to reside in objects just as truly as do colors, smell, temperature, size, and shape. A person of good taste is one who recognizes and appreciates beauty when it is present. A person of moral sensitivity is one who recognizes goodness. A wise person is one who recognizes and appreciates truth. When men fail to recognize values, they evidence bad taste or lack of culture and intelligence.

That values are in some sense objective is generally agreed among such widely varying systems as the philosophies of Plato and Aristotle, medieval realism, Neo-Thomism, and various types of modern realism and modern idealism. For Plato the world of concepts, universals, ideas, and values is the real and permanent world. There is a hierarchy of values leading up to the Good or supreme value in terms of which all the forms and laws of the world are organized. For Aristotle the relation of a thing to its end or value is an essential part of its very nature. The objectivity

¹ Cyril E. M. Joad, *Philosophy for Our Times*, p. 193. Thomas Nelson and Sons, New York, 1942.

of value is also central to the thinking of medieval times. Roman Catholic philosophy, as a whole, holds that truth, goodness, and beauty are ontological reals.¹

Various modern realists have given attention to the status of values. For Professor E. G. Spaulding values are "subsistents" rather than existents in space and time. As subsistents they are independent of human desire and preference. They are in our world to be discovered. Such values as truth, goodness, and beauty are not subject to the misfortunes of this slowly evolving natural process.² Another realist, John Laird, speaks of values as "tertiary qualities." They are different from the primary and the secondary qualities of our experience. Tertiary qualities are recognized in our immediate experience, and they are real and permanent, even though they cannot be defined in the same way. After pointing out that there is beauty in things, such as sky, sea, sunset, and flowers, Laird says: "Nature, indeed, is infinitely beautiful, and she seems to wear her beauty as she wears color or sound. Why, then, should her beauty belong to us rather than to her?"³

Those who claim that values are objective point out that values such as beauty and goodness exist for all minds alike. There are individual and group differences, of course, but these differences in evaluation depend upon the physical, biological, and social or cultural backgrounds of these individuals or groups. A man who is color-blind will be unable to discriminate between colors. Past experience and conditioning will also explain many differences. Experience and training in the realm of values tend to bring the judgments of men more and more toward a common standard. Whether in painting, sculpture, or character traits, there is considerable agreement. Among cultured persons there is a consensus of opinion as to what things are valuable. If values were merely subjective and were figments of the imagination or of our emotions and desires, we might call anything we wished beautiful or good. As a matter of fact, whether the values to be sought are bodily, social, moral, or aesthetic, our choices are definitely limited. Furthermore, we can explain moral and artistic prog-

¹ For the Catholic philosophers, God is the ultimate ground and source of values. Their ontological status is prior to their psychological apprehension. Sense experience is only partial and contradictory. The right use of reason will lead us to the eternal values.

² See Edward G. Spaulding, *The New Rationalism*, p. 498. Henry Holt and Company, New York, 1918.

³ See John Laird, *A Study in Realism*, p. 129. The Macmillan Company, New York, 1921.

ress only if there is some standard toward which the progress points.

The media or the conditions through which these experiences of value come to us have been rather restricted in scope. There is considerable agreement the world over that for beauty the important media are nature, music, painting, sculpture, poetry, and architecture. In the realm of morals the same traits are approved and the same traits condemned the world around. There are variations or exceptions and differences. These differences, however, are less significant than the broad areas of agreement. The situation is similar for truth, except that the judgments to which such conceptions apply are less limited.

VALUE AS A RELATION BETWEEN VARIABLES

The subjectivist will have to admit that persons, in the process of evaluation, do contact and make distinctions between physical objects. An objectivist will have to admit that individuals know, desire, and experience values, or that there is a subjective element present in value judgments. The theory we are now considering asserts that both subjective and objective factors are necessary for the creation of values. Valuation is a special kind of relation which discloses to persons who are sensitive and receptive the fact that things may be good and beautiful as well as true.

Value is neither subjective in the sense that it is merely in the mind nor objective in the sense that it is entirely in the object. Value is the product of two or more variables which are in interaction. There are qualities or environmental situations which arouse in sentient organisms the peculiar responses that we call value judgments.

Two contemporary students of aesthetics make this third position clear. Professor C. J. Ducasse says: "The question whether beauty is objective or subjective is thus not answerable by saying simply 'yes' to one and 'no' to the other of the alleged alternatives. The only correct answer is that *beauty is that property of an object which consists in capacity of the object to cause pleasure in a subject who contemplates it.* Beauty, that is to say, is a character of some objects, but a *relational* character of them — the character, namely, that consists in their having to certain minds (subjects) the relation just described. The question whether beauty is objective or subjective is thus exactly parallel logically with the question whether poisonousness is objective or subjective. . .

Experiencing pleasure, like dying, is not a capacity but an *event*, which some things are capable of causing in some human beings. On the other hand, beauty, like poisonousness, is not an event or a quality, but a *capacity* — the capacity some things have of causing pleasure in *some* contemplative beholders of them.”¹

In *Aesthetic Quality*, Stephen C. Pepper sets forth a position he calls “contextualism.” He points out that in beauty “conditions both of an impersonal and of a personal nature must be fulfilled.”² The aesthetic field has to do with the “quality of events.” There is, first, a system of impersonal qualities or strands, the given event, of which there is a relational element known by analysis and a qualitative aspect known by intuition. The art object — a physical statue, let us say — must be seen under certain favorable conditions. There is, second, a “system of personal strands,” a physical organism. Certain conditions again must be met, such as a receptive mood and an adequate experience. When a system of personal relations contacts a system of impersonal relations, an act of perception takes place. In the third place, the perception is enriched and deepened by our funded interests and experiences. Symbolism, imagination, and ideas are at work, and an aesthetic experience is the result. Beauty is the “enhanced quality of texture.” Positive aesthetic value is called beauty; negative aesthetic value is called ugliness. Value is a co-operative result of an interaction between personal and impersonal elements.

VALUE AND HUMAN SOCIETY

Man lives in two worlds — in the present, physical world of sense perception and in an emerging, unseen world of ideals and values. During recent centuries man has gained great power to control the material world of “facts.” Trains, automobiles, and aeroplanes have increased his speed. The telephone and the radio carry his voice around the world. Elevators and cranes lift huge loads at man’s command. Adding machines and filing systems assist the human brain. There have been great “advances” in the special sciences and in technology. The power in the atom is beginning to furnish us with unimaginable power. Our difficulty is

¹ Curt J. Ducasse, *Art, the Critics, and You*, pp. 90–91. Oskar Piest, New York, 1944. Used by permission of the publisher.

² Stephen C. Pepper, *Aesthetic Quality*, p. 227. Charles Scribner’s Sons, New York, 1938.

that all these things are means and may be used either for good or for evil.

With marvelous means for enriching life at our disposal, we have seen unrest, maladjustment, and much barbarism in our world. Many persons live exceedingly shallow lives with few interests beyond meals, clothes, amours, bridge, and automobile trips. As men of affairs we have put wealth, power, technical efficiency, and special privilege first. These means of life, which have come to usurp the place of ends, have tended to demoralize life. Unless we are able to remove the false standards on the basis of which we have been living, there is little prospect for better days in the future.

The great task before man today is to discover anew the genuine values of life and to share them with his fellow men. "Man's chief purpose," says Lewis Mumford in his *Faith for Living*, is "the creation and preservation of values. A community whose life is not irrigated by art and science, by religion and philosophy, day by day, is a community that exists half alive."¹ The task before man is to unify and harmonize the world of facts and the world of values. Facts and means may serve the values and ends of human existence.

»» QUESTIONS AND PROJECTS ««

1. List what you consider to be the main values of life. Then see if you can arrange them in some hierarchy or order of importance. Indicate those that you think are intrinsic, those that are usually extrinsic, and those that may be either intrinsic or extrinsic.
2. State the three positions regarding the location and the nature of values. Which position do you think is most in line with the evidence or the facts of the situation?
3. Why are men willing to die on the battlefield for values for which they are so frequently unwilling to live and work in peacetime?
4. The world revealed by science tends to be a value-less world. Is this because there are no objective values, or is it because an arbitrary method has been set up which is unable to cope with the special field of values?

¹ Lewis Mumford, *Faith for Living*, pp. 208 and 213. Harcourt, Brace and Company, New York, 1940.

5. In the summer of 1938 the Art Museum Commission of St. Louis, Missouri, purchased an Egyptian bronze cat. The cat, about fifteen inches in height, cost \$14,400. The money was paid from a fund that had been raised by taxation for the operating cost of the museum and for new acquisitions. A storm of protests, including demonstrations and parades, immediately flared up, since the city's relief funds were exhausted and there was considerable unemployment and hunger in the city. The action of the commission was both defended and criticized. Here was a real conflict of value standards. For a brief discussion of this case, see Harold A. Larrabee, *Reliable Knowledge*, pp. 613-616 (Houghton Mifflin Company, Boston, 1945). Give your reaction to this controversy. Point out similar conflicts of values that have occurred in other areas of public life.
6. Comment on the following statements:
 - (1) "Lives are made by what they omit, but most of all by what they include."
 - (2) "Tell me what you like, and I'll tell you what you are."

Aesthetics: the Philosophy of Art

Aesthetics is that branch of philosophy which deals with the theories and standards of value in the realm of beauty and the arts. Just as logic deals with the principles and problems of clear and accurate thinking and ethics with the theories and standards of morality, so aesthetics deals with the theoretical problems of the nature and characteristics of beauty and the arts.

The term *art* or *the arts* in a very broad sense means *skill*. Thus any kind of activity which is skilled may be called an art. Art has been interpreted as the correct use of knowledge for the achievement of some end. It has to do with application and expression. The arts may be divided into two main branches: (1) *The useful arts*. These would include industry and technology. They would range from the primitive handicrafts to modern machine industry. This is a great area of human activity, related to human needs, with which the reader will be fairly well acquainted. We shall not attempt to describe it here. (2) *The fine arts*. These usually refer to such things as music, painting, sculpture, architecture, and poetry. They are sometimes called the aesthetic arts, as distinct from the practical arts. They invoke in us an aesthetic response which may range all the way from specific sensual delight to the more permanent intellectual pleasures. They are of value for their immediate enjoyableness. There is no reason, however, why beauty and the aesthetic impulse cannot be combined with practical usefulness. In the future, let us hope, they will be more completely integrated. This chapter deals more particularly with the fine arts, the aesthetic response, and what is more popularly called the field of art.

Aesthetics, or the philosophy of art as a branch of philosophy, is to be distinguished from two other types of interest and activity: first, from the actual creation of works of art, and second, from art criticism or the critical evaluation of particular works of art. While these interests and activities may go together, they are not necessarily combined. Few of us can be artists or even competent art critics. Yet all of us may come to understand and to appreciate this natural and important field of human interest and activity.

Human beings are constantly making judgments, favorable or unfavorable, in respect to the music they hear, the pictures, statues, and buildings they see, and the poetry they read. They give much attention to the artistic in their own lives, to the clothes and ornaments they wear, to the appearance of their face and hair — even to their finger nails. They also give time and effort to make attractive or beautiful the homes in which they live and the communities in which they reside. When we add to this the devotion and money given to those fields which are more specifically and technically called the arts, we begin to see the important place which aesthetic interests play in the lives of all men and women.

Art, especially in the form of graphic art, is a very ancient human activity. Hardly any group of people can be found either in ancient or modern times which does not have some form of art. Such art is usually closely related to the needs of living in its emotional or practical aspects. When men create objects as utensils or instruments, they usually give some attention to their artistic appeal, so that what is useful for the practical tasks of the day may be also pleasing to the senses. Some students of art and of animal life have called our attention to the functional relation between art and biology. The form and color of many animals, some say, are due in considerable part to the survival, through selective mating, of those forms and colors which have the greatest visual attractiveness.

MATERIAL, TECHNIQUE, AND FORM

In every work of art there are at least three elements.

1. Material, Matter, or Content. — The material used varies as we pass from one art to another: from painting to sculpture to music. It may also vary within any one field. A statue, for exam-

ple, may be made from many different materials. The material, or the medium, is a condition of art, and it enters into the total effect; but it does not determine what is beautiful.

2. *Technique*. — The technique involves the skill or the expert method in artistic execution or performance. It includes the ability and the mechanical skill by means of which the artist is able to organize or handle his material. Technique may make all the difference between an appealing and a mediocre or poor performance in a musical composition or a painting or a dance or other work of art. The appreciation of a work of art may be enriched by a sense of the skill involved. However, if the technique is not quite perfect or is too prominent, attention may be so directed to details that we lose a sense of the qualitative whole which is so central in aesthetic appreciation.

3. *Form*. — As distinct from the material and the technique, the form has to do with the arrangement and the order of the different parts of the whole. A melody is an arrangement of tones, whereas a dance is an arrangement of movements. Certain formal requirements need to be met if a work of art is to appeal to us as good art. While there is no general agreement, the lists usually include: unity, order, proportion, balance, symmetry, and rhythm. In speaking of unity, one author says, "There are three separate expressions of unity in most art objects: a unity of form, a unity of content, and a unity between form and content. Unless all three are brought to the greatest perfection, there will not be complete aesthetic enjoyment."¹ The parts need to be arranged in pleasing patterns so that there is no tension or lopsidedness. Rhythm may include repetition with variations. The beat or accent in music is universally recognized. In a painting the effect may be gained by means of lines, masses, and colors.

A few persons wish to concentrate their attention upon the ways and means of stimulating the aesthetic impulse. Consequently, they would give up all generalizations and theoretical explanations. For centuries, however, men have been seeking an explanation of the art impulse and have been setting forth theories of art. As Santayana has said, "The man who would emancipate art from discipline and reason is trying to elude rationality, not merely in art, but in all existence."

¹ Herbert Sidney Langfeld, *The Aesthetic Attitude*, pp. 169-170. Harcourt, Brace and Company, New York, 1920. Used by permission of the publishers.

THEORIES OR EXPLANATIONS OF ART

The theories of art which have appeared throughout human history are many and varied. There is no one method or scheme of classification that is generally accepted. Eight of the more popular interpretations are set forth briefly here. An acquaintance with them will help one to see the breadth and the richness of the field and also will help to eliminate some of the false impressions regarding the nature of art. Critical comments are reserved until the end of the section.

IS IMITATION THE EXPLANATION OF ART?

The principle of imitation as the meaning of art has been prominent since the time of the ancient Greeks, when it received support from both Plato and Aristotle. Greek thought is especially free from the subjectivism that has been characteristic of Western thought in recent centuries. Objects of beauty are not considered to be fundamentally different from other objects known through the senses. Plato, a great lover of the arts, as well as their severe critic, makes some reference to them in nearly all of his Dialogues. A central idea is that works of art imitate something. Painting and sculpture depict objects and persons. Music illustrates human moods and emotions. For Plato, however, the art object or reproduction is only an imperfect copy of what the artist intends to portray. Plato gives some support also to other explanations of art, as we shall see.

Aristotle, the pupil of Plato, finds in imitation a natural tendency which he regards as the explanation of art. Painting grows out of the desire to make likenesses of persons and things. The theater imitates men in action. Comedy grows out of the fun of mimicking people, and tragedy is an imitation of some of the events of real life. Through imitation we seek to portray the universal, or that which is common to many particular things. The form is more important than the material through which it is expressed.

This early interpretation of art, because of its simplicity and the fact that it seems to answer many questions and to solve many problems, has had a strong influence upon later thinking. In one form or another, it has persisted down to comparatively recent times. "If beauty is one, and the beauty of art follows and depends upon that of nature, we may reasonably expect to find the

greatest beauties of art to be those already found in nature, and the relation between the two to be one of imitation. Thus Leonardo said that the eye receives from beauty in painting the same pleasure which it does from natural beauty, and Kant declared that the fine arts are art in proportion as they seem at the same time to be nature. Sincerity and truthfulness in the imitation of nature are insisted upon by both the idealists and the realists."¹

IS PLEASURE THE EXPLANATION OF ART?

A popular notion is that the artist is a person who delights in beauty and spends his time in the creation of beautiful objects. Quite clearly the artist does find pleasure in his work and seeks to please others with his product. According to some persons, then, the proper function of art is to give pleasure, and this is the basis on or standard by which it should be judged. If objects of art give pleasure, they are called "good art." If they fail to please, they are likely to be neglected if not actually denounced. People go to the art galleries, to the theaters, and to places where nature reveals her splendors in order to be entertained or to gain pleasure. The purpose and meaning of art, it is said, is to give aesthetic pleasure.

Plato, while denying that pleasure is the highest good or the clue to the meaning of life, gave some support to this interpretation by combining the notion of pleasure with his principle of imitation. Art is the imitation of that which is pleasant. The aesthetic pleasures are "pure" pleasures because they are not preceded or followed by pain.

In *The Sense of Beauty*, George Santayana identifies beauty and pleasure.² Even though it is subjective and emotional in nature, beauty is "an ultimate good" and therefore a positive value that is intrinsic. "In appreciation, in preference, lies the root and essence of all excellence"; thus there is no good apart from "emotional consciousness." While beauty is really in our emotional consciousness, we tend to think that the pleasure is outside us, in some beautiful object. Another way of stating it is to say that beauty is "our pleasure regarded as the quality of a thing" out there in the world. While reflection is an important part of life, it is not the most important part. Those who express and stimu-

¹ A. Philip McMahon, *The Meaning of Art*, pp. 127-128. W. W. Norton and Company, Inc., New York, 1930. Used by permission of the publishers.

² See especially pp. 1-52.

late in us the sense of beauty do a greater service to mankind than those who discover truth.

IS PLAY THE EXPLANATION OF ART?

An explanation of the meaning of art which is related, on the one hand, to the pleasure theory that we have just considered and, on the other hand, to the notion that art is an escape from life is the theory that it is related to play and grows out of the surplus energy of the individual. Men must work because of the need to provide such things as food, clothing, and shelter for themselves and their dependents. Such labor involves stress and effort and a sustained concentration of attention for the sake of other ends. Play, in contrast to work, is a free and spontaneous discharge of the excess energy of the organism. It is begun, not because it is a means to something else, but because our abundant energy needs expression in some form. Art is of this nature; it is spiritual play and relaxation in its highest form.

The suggestion that art is a form of play appears to have originated with Immanuel Kant. In *The Critique of Judgment*, published in 1790, he makes brief reference to the contrast between art and labor, suggesting that art is more closely related to play because it is an occupation in itself agreeable. Following this suggestion, the poet Friedrich Schiller develops the theory in greater detail, showing how the energy of man is expressed by means of his creative imagination through the pursuit of the arts. Through art there is a harmonious blending of man's rational, imaginative, and sensuous natures.

The notion that art is closely related to the play impulse appealed to Herbert Spencer.¹ He pointed out that "the activities we call play are united with the aesthetic activities" in that neither promote, in any direct way, the processes conducive to life. He also stressed sight (the eye) and sound (the ear), the higher senses, as having a unique role in the recognition of beauty. When the play impulse unites the mind, the emotions, and the higher senses of sight and sound, the conditions are present for the development of aesthetic sentiments, pleasures, and activities.

Two German scholars — Konrad Lange, a teacher of art history, and Karl Gross, a psychologist — have supported the

¹ See Spencer's *Principles of Psychology*, Vol. II, Part VIII, Chapter IX, "Aesthetic Sentiments."

play theory from a slightly different point of view.¹ For Lange, man escapes from the burdens of existence into the more ideal world of play and art. Play is the art of the child, and art is the play of the adult. Since both of these writers view art as a form of escape or make-believe or self-deception, their views may form a transition to the next theory of art.

IS ART AN ESCAPE FROM LIFE OR AN OPIATE OR AN ILLUSION?

In a world in which there is skepticism and uncertainty about so many things, it is not strange that they carry over into the field of art. If there is uncertainty even about the nature of sensible qualities, then art is left in a precarious position. In his seventh book of *The Republic*, Plato sets forth his well-known myth of the cave which raises questions about the world of the senses. The real and abiding world lies beyond the fleeting world of phenomena. Since particular objects in this world are only copies of ideas or universals residing in a supersensible world, productions of art are only imitations of copies of the real. This same uncertainty regarding the beauty of nature was reinforced in the seventeenth century by the subjectivism of George Berkeley, who contended that spirit alone is real and all sensible qualities are ideas or sensations.

More recently, Schopenhauer, Nietzsche, Konrad Lange, Elie Faure, Marc Chagall, Anatole France, Hans Vaihinger, and others have given some support to the view that art is essentially a fiction or an illusion. For Schopenhauer the world is irrational Will or Striving which has its source in desire. There is no meaning in life. Yet art, especially music, offers at least a temporary escape. The other writers mentioned see art from widely varying points of view as a "useful fiction" protecting man from the deceptions and unhappiness of the external world; as a conscious self-deception by means of imaginative constructions; as an opiate which gives relief from the chaos of conflicting sensations; and as an escape to some realm where external conditions do not bind the human spirit.

IS EMPATHY THE EXPLANATION OF ART?

An explanation of the aesthetic response which has been fairly popular in recent decades is known as empathy. The word

¹ See *A Modern Book of Esthetics*, edited by Melvin M. Rader, Chapter I. Henry Holt and Company, New York, 1935.

empathy is used by a number of psychologists and students of art to refer to the "sympathetic motor attitudes" and agreeable feelings which we experience in the presence of objects of art. That these motor attitudes or muscular tensions may be present in our own bodies will be evident to anyone who has been an interested and enthusiastic spectator at a football or a baseball game. We almost literally push and hold back. Our muscles tighten and relax according to the events on the field. After such a game, we may feel a sense of physical exhaustion. When we listen to a song, we tend to move in time to the rhythm and possibly beat with our fingers or foot, or we move the muscles of our throat. If we see an acrobat, a runner, or a skater appear about to fall, our muscles become tense and we brace ourselves, so to speak. A facial expression on someone else may cause us to assume the same expression.

While these movements and attitudes are usually not recognized by us, they are nevertheless present when we perceive a picture or a statue or other work of art. "That is, when we see an object such as a column or a spiral or an arch, we realize from our previous experience how it was constructed. We have an idea of the forces, tensions, etc. involved. There are then induced in our muscles and joints sensations of strain and movement similar to those which we should have if we built such objects. . . . Further, these sensations of movement or tendencies to movement are projected into the lines and shapes. They are not felt as movements of our body, but fuse with the object as visual, auditory, or other form of perception, giving character and meaning to the object as will be shown by examples. They are also the cause of the accompanying enjoyment or affective tone."¹

According to this point of view, persons gain the sensations they would experience if they were to make the objects or to perform the actions which they perceive. This interpretation of art had its origin in the work of certain German scholars, including Lotze, Vischer, and Theodor Lipps, and in the English works of Vernon Lee and E. P. Titchener. Lipps used the term *Einfühlung*, meaning "feeling into," but Titchener, a psychologist, suggested the term *empathy*. The theory emphasizes the motor aspects of certain psychological or physiological processes. Attention is given to figures and lines that suggest certain motor

¹ Herbert Sidney Langfeld, *The Aesthetic Attitude*, pp. 115 and 122. Harcourt, Brace and Company, New York, 1920. Used by permission of the publishers.

sets. The directions of lines are said to be important. Vertical lines convey a sense of dignity and strength. The Doric column, for example, is said "to rise." The high arches of the Gothic structure are elevating; we stretch ourselves and our eyes follow the unbroken line upward. Diagonal lines are the lines of action or of strenuous exertion; for example, look at the famous pictures of wrestlers or the discus thrower. Horizontal lines suggest repose and relaxation; they can also be used to convey a notion of speed.

IS COMMUNICATION THE MEANING OF ART?

A considerable number of students of art think that communication is indispensable to art and that it is the most adequate explanation of the art impulse and the aesthetic response. These theories range all the way from the views of certain mystics for whom art reveals the ideal, the universal, or the absolute to those who think that art is the language of the emotions and who make no metaphysical claims regarding its nature.

The person who has an experience he considers to be a genuine insight into the abiding and significant elements of life or of nature usually feels a sense of compulsion to share that experience with his fellow men. "The aesthetic experience has complete authority over the person to whom it comes. Such an experience does not impose a moral obligation upon others to accept it, but art history and the succession of styles demonstrate that, as a matter of fact, beauty or the positive satisfaction of contemplation is not realized by the individual in complete isolation or solitude. It is true for him who experiences it, but it is also true for a good many others at that same period of time and afterwards; it is capable of being recorded and communicated."¹

In *What Is Art?* Leo Tolstoy gives a clear-cut presentation of art as communication. He says, "Speech transmitting the thoughts and experiences of men serves as a means of union among them, and art serves a similar purpose. The peculiarity of this latter means of intercourse, distinguishing it from intercourse by means of words, consists in this, that whereas by words a man transmits his thoughts to another, by art he transmits his feelings."²

¹ A. Philip McMahon, *The Meaning of Art*, pp. 285-296. W. W. Norton and Company, Inc., New York, 1930. Used by permission of the publishers.

² Tolstoy, *What Is Art?* translated by Aylmer Maude, p. 121. Oxford University Press, London, 1938. Used by permission of the publishers and of the representatives of the late Aylmer Maude.

Feelings and emotions are contagious. When we see or hear an expression of emotion, it tends to evoke a similar response in us. One man laughs and others laugh with him. In a similar way excitement, suffering, fear, courage, determination, respect, and love can be communicated to others.

"To evoke in oneself a feeling one has once experienced and having evoked it in oneself then by means of movements, lines, colours, sounds, or forms expressed in words, so to transmit that feeling that others experience the same feeling — this is the activity of art.

"Art is a human activity consisting in this, that one man consciously by means of certain external signs, hands on to others feelings he has lived through, and that others are infected by these feelings and also experience them."¹ . . .

"We are accustomed to understand art to be only what we hear and see in theatres, concerts, and exhibitions, together with buildings, statues, poems, and novels. . . . But all this is but the smallest part of the art by which we communicate with one another in life. All human life is filled with the works of art of every kind — from cradle-song, jest, mimicry, the ornamentation of houses, dress, and utensils, to church services, buildings, monuments, and triumphal processions. It is all artistic activity. So that by art, in the limited sense of the word, we do not mean all human activity transmitting feelings but only that part which we for some reason select from it and to which we attach special importance."²

Artists find themselves emotionally stirred or inspired, and they wish to communicate this to others by creating some object that conveys or embodies it. In speaking of art as essentially a form of language, Ducasse says that it is "the language of feeling, mood, sentiment, and emotional attitude" which is to be distinguished from "the language of assertion through which we express opinions, facts, and the like."³

IS EXPRESSION THE MEANING OF ART?

According to this point of view, the key word in art is *expression*. Art is the expression of some deep emotion, some insight, or some

¹ Italics are in the original.

² Tolstoy, *What Is Art?* translated by Aylmer Maude, pp. 123–125. Oxford University Press, London, 1938. Used by permission of the publishers and of the representatives of the late Aylmer Maude.

³ Curt J. Ducasse, *Art, the Critics, and You*, pp. 52–53. Oskar Piest, New York, 1944.

intuition which our ordinary language and gestures are unable to express in any adequate way. This creative impulse of the artist may express itself in many different ways: in personal adornment, in song, in poetry, in painting, in sculpture, or in architecture.

The art impulse expresses itself through human attitudes of interest or preference in that it selects and intensifies some things and rejects or disregards others. The artist seeks to find the forms and qualities and materials that will best express and in turn direct the attention of his audience or public to the values which he seeks to emphasize. A work of art is thus an expression of the artist's inspiration, preference, or sense of values. These values are many in variety and number, but the fact that the artist is able to discern them and to express them for us constitutes a great enrichment of our spiritual lives.

The artist wishes not only to express and to share his insights but to gain a sympathetic response from his fellow men. In this way his own feelings and insights are reinforced, and others come to participate in the creation of these same values. This desire for social sympathy, support, and active participation on the part of others has been called "the pursuit of social resonance."¹ Art is social and helps not only to extend our personalities but to unite the members of the social group. There is a yearning of the creative imagination for expression, so that it may gain physical form and social appreciation.

According to the Italian philosopher and student of art Benedetto Croce, art is intuition which is expressed. Art must be clearly distinguished from a physical fact, from a utilitarian act, from a moral action, as well as from conceptual knowledge. Theories that attempt to explain art as philosophy or religion or history or science are making the wrong approach. Intuitions, however, are fragmentary and imperfect so long as they are only in the stage of sensation. Expression is essential if intuitions are to become realities and to play a part in human affairs. Croce says, "Every true intuition or representation is also *expression*. That which does not objectify itself in expression is not intuition or representation, but sensation and mere natural fact. The spirit only intuits in making, forming, expressing. He who separates

¹ Yrjö Hirn, *The Origins of Art*. The Macmillan Company, New York, 1900. See also George T. W. Patrick, *Introduction to Philosophy*, revised edition, pp. 453-455. Houghton Mifflin Company, Boston, 1935.

intuition from expression never succeeds in reuniting them. . . . Intuitive knowledge is expressive knowledge. Independent and autonomous in respect to intellectual function; indifferent to later empirical discriminations, to reality and to unreality, to formations and apperceptions of space and time, which are also later: intuition or representation is distinguished as *form* from what is felt and suffered, from the flux or wave of sensation, or from psychic matter; and this form, this taking possession, is expression. To intuit is to express; and nothing else (nothing more, but nothing less) than *to express*."¹

IS ART A QUALITY OF EXPERIENCE?

In his book *Art as Experience*,² John Dewey criticizes the segregation of art from the common everyday experiences of men and its relegation to the museum and the art gallery. Art is too frequently identified with some painting, statue, or symphony in its existence apart from the human experience out of which it arose. Art is compartmentalized and put into a separate realm where it is cut off from other forms of human experience. Again, it may be "spiritualized" and set above the objects of everyday life.

In earlier times art was associated with the common objects: the domestic utensil, the bow and the spear, personal adornment, and mats, rugs, and jars. Art brought an enhancement of the processes of life. Our task today is to restore continuity between the forms of experience that are works of art and the common events of life.

Art, according to John Dewey, is a quality that permeates an experience, and it should "idealize qualities found in common experience." There is an artistic and aesthetic quality implied in all normal experiences. We should be able to see artistic quality in the grace of the ball-player, in the delight of the housewife in carrying out her duties with care, and in the satisfaction of the intelligent mechanic in a good piece of work. Art is rooted in the warp and woof of all experience.

By *experience* is meant the process of interaction between an organism and its environment. It is as broad and varied as life itself. Art not only reflects this experience but enriches it and draws from it a new significance. The artist contributes his

¹ From Benedetto Croce, *Aesthetic as Science of Expression and General Linguistic*, translated from the Italian by Douglas Ainslie. Used by permission of The Macmillan Company, publishers, London, 1922.

² Minton, Balch and Company, New York, 1934.

memory and imagination as well as his knowledge and insight. The environment provides the materials in the form of sound, color, and forms and relations, events, and living characters. The artist is a person who interacts with his environment in a certain kind of way. The environment gives him his materials and affects his outlook; in turn, he transforms or leaves his imprint on the environment. For the spectator the enjoyment of art consists in the enhancement of his memory, imagination, and knowledge throughout his contact and interaction with the artistic object.

The place which art occupies in the experience of a people is an indication of the life of that civilization. It is a judgment upon the quality of life and also a means of promoting its development.¹

A CRITICAL EVALUATION

Looking back over these eight interpretations of the meaning of art, what critical comments can be made? Probably most of us could agree that each of the interpretations contains some elements of truth and possibly no one of them is completely adequate unless it is applied very broadly. Most of the modern students of art would say that their theories would make allowances for the truth contained in the other approaches. In the opinion of the author, the last three are the most adequate; any one of these three can be so stated that it will assume or embrace the others.

Most contemporary students of art find the theory of imitation quite unsatisfactory, and it is not widely held today. Imitation is secondary, not primary, in art. If it were primary, then color-photography might claim to be the most perfect art. While there appears to be an imitative element in much painting, certainly many forms of art, such as music, poetry, and architecture, do not merely describe and imitate. The capacity of any art, even landscape painting, to copy natural phenomena is definitely limited. The natural scene is undergoing a continual change, and the variety of colors, shades, and movements cannot be exactly duplicated. Furthermore, any artist depicts what he sees and what interests or appeals to him, and no two artists have the same experiences.

While most works of art do give pleasure to many persons, the principle of pleasure is probably not an adequate explanation

¹ See Dewey's *Art as Experience*, p. 326.

of the meaning of art. Pleasures tend to accompany creative activity in many different fields, including those of practical affairs, scientific research, and literary production. Furthermore, some art, such as tragedy and the portrayal of ugly and brutal scenes, does not give much pleasure.

Again, the interpretation of art in terms of play is not widely supported at the present time. Even if it could be shown that art was related, in its origin, to play, that would not necessarily mean that this is a satisfactory statement of its present value. Undoubtedly art can serve, for the artist or for persons in general, as a form of escape. Some may turn to plays, pictures, poetry, and novels as an "escape." However, others might go fishing or on a voyage or even turn to drink or suicide for the same purpose.

The contention that art is an illusion will gain support or will be denied, depending upon one's general interpretation of life or of the world. Many but not all of the supporters of that interpretation have been pessimistic in their general attitude toward life and the universe and have been able to see little or no meaning in it. Certainly escape or illusion is not an adequate interpretation for architecture, sculpture, color-photography, and other such mediums.

Psychological and physiological explanations of art, like the theory of empathy, undoubtedly throw much light on the aesthetic impulse. Empathy does add to our knowledge regarding the means of communication and expression. Many, however, will question its adequacy as a philosophy of art. If accepted, it may need to be combined with other explanations. The artist may be a person who sees in certain total situations new possibilities or rich qualities which elude the rest of us. In the realm of art, as well as in the realms of truth and goodness, there is something which lures us on. The artist may be more sensitive than other people to certain values. He is trying to communicate to others this vision and insight, which, in turn, should be broad enough to include most of the experiences of life.

The various theories or explanations of art set forth above should not blind us to the large measure of common agreement which runs through these interpretations of art and the aesthetic response. They agree that there is an aesthetic experience which is separate and unique. They agree that this experience is worth while in that it has value and enriches life through the enjoyment it brings. A distinction is drawn between beauty and ugliness.

There is a sense of obligation to seek and to increase beauty and to share the aesthetic experience with others.

ART AND BEAUTY

Definitions of *beauty* are many and varied. They include such phrases as, "beauty is truth," "the expression of an ideal," "an assemblage of properties satisfying the aesthetic sense," "harmony in diversity," and "an intrinsic quality of things themselves." In a narrow sense, the term *beauty* may be used to refer only to that which is pleasing to the eye and ear. In a broad sense, it may be used to include the sublime, the tragic, and the comic, as well as all aesthetic appreciations. While definitions do not agree, there is no uncertainty concerning the fact of beauty, and most persons take beauty for granted. A formula cannot contain and explain it, but, fortunately for most of us, beauty in some form is almost continuously present. Even those who are forced to live in comparatively drab and unpleasant surroundings find frequent opportunity to experience the delights of beauty: an expression, a face, a garment or some trinket, a bit of cloud or sky, the sunset or the landscape. While men differ widely in their capacity for appreciation of beauty, the enjoyment of beauty is possible for all. Some have not had much opportunity to develop their sense of appreciation. Yet keen enjoyment appears to be possible and natural to all men and women in the presence of beauty.

In the minds of many persons today, as well as in traditional theory, art is the creation and contemplation of beauty. What is beautiful is art, and what is not beautiful is not art. From this point of view, all discords and imperfections must be resolved into harmonies, since the works of art must give pleasure and create or express beauty. The modern trend in the interpretation of art, however, is away from this traditional identification of beauty and art. There are great differences of opinion as to what is beautiful. One man finds beauty where another cannot see it. Moreover, if an artist is endeavoring to express the qualitative nature of the insights and values he feels to be important, then he must be free to express his dislikes as well as his likes.

From the latter point of view, the artist must portray things as he sees them, which means that in many instances he must express the misery and the injustices, the ugliness and brutality, which are a part of his vision of life. "The artist has two roles: to

excite to happiness and vitality, and to ~~destroy misery and dead-~~ ening oppression. He does this not didactically but by the expression of values. Although his function is often to reveal a deeper harmony, he has another function scarcely less important: to shatter the hard shell of an outworn order in which the spirit turns empty in a vacuum. Therefore he is sometimes the accuser of the world, not a guide to an imaginative haven."¹

The proper question to ask, according to this same author, is not "Does this please me?" but "Out of how deep a life does it spring?" Art is defined to include the ugly and the neutral as well as the beautiful. Some works of art are not beautiful, and some beautiful things, like landscapes, are not works of art. The possession of beauty, however, may be taken as the standard not of art but of good art or of art which is likely to appeal and to survive.

ART AND THE GOOD LIFE

What is the relation between art and morality? Are there moral lessons in works of art? Is it the aim of the artist to instruct men and to improve the world, or is art a field in which moral considerations are not applicable? Is the production and enjoyment of art subject to the principles of a scientific ethics which seeks to maintain a sound and whole society? Let us consider the contrasting answers to such questions as these.

On the one hand, there is the fairly widespread view that art is to be judged by its moral significance. From Plato to the present day, moral philosophers have looked upon art as a moral influence for good or for evil. They have pointed out the moral values as well as the possible dangers of art. Since art may be elevating and inspiring or degrading and depressing, good art is said to be that which elevates our feelings and thoughts. Plato thought that art had a profound effect upon the character of men, even though the main function of art was to disclose the nature of beauty. Since it was so powerful in its influence, he advocated censorship or public control over the artists and poets of his day. Beauty, truth, and goodness are the ultimate ends of our striving, and there is an ultimate harmony in which they participate. Tolstoy argued that art should seek to promote the Christian virtues and

¹ Melvin M. Rader, *A Modern Book of Esthetics*, p. xx. Henry Holt and Company, New York, 1935. Used by permission of the publishers.

the brotherhood of man. He strongly condemned "the filthy torrent of depraved and prostituted art" which can be found in our society. Art, he felt, should deal with the great problems of human life and should exert an influence in the direction of perfection and unity.

Those who are concerned about the possible moral dangers of art are likely to call our attention to the effect of cheap or low art which may specialize in sex plays, indecent pictures, or other pornographic art. Such presentations affect suggestible and emotionally unstable persons and may lead to antisocial behavior. Furthermore, art may be used to stimulate a jingoistic nationalism, racial hatreds, and other undesirable emotions and attitudes. Art may also be used as the instrument of other selfish special-interest groups. When art can do so much to enrich and beautify life and the world, artists should be expected to feel a sense of personal and social responsibility for their work.

On the other hand, the view widely held among artists and art critics is that aesthetic values are separate and distinct from all other values, and that art is an independent and autonomous realm. "Art for art's sake" is the modern slogan. Art aims to portray and to please, not to instruct or to reform. Artists have no responsibility for what happens outside the field of art. Artists must be free from interference and from any form of social control.

This position grows out of the artist's desire for freedom. It is in part a reaction from the narrow puritanical attitude toward art as essentially immoral. Students of art have felt a just resentment against the view that all art should teach a lesson or have some direct bearing upon religious, political, or scientific pursuits. The position is partly a defense against the standards of a commercial age which is likely to judge art products as useless except in terms of their market or exchange value; it is also partly the result of the extreme specialization and separation of functions which has taken place in modern life.

Without undertaking lengthy discussion of the above positions, we can name three considerations that should be kept in mind. The first is that neither the field of art nor the field of morals can be isolated and kept apart from the rest of life. The artist lives in society and is affected by the standards and conditions of that society. His work influences the sentiments and the conduct of men. Moral values are portrayed in pictures and in operas, and

they stir and stimulate us deeply. The field of morals is coextensive with life itself. A moral problem is never just a moral problem; it is also an economic, a political, and an international problem and, at times, a problem of art. Any human choice involving the issue of right or wrong is a moral problem.

Second, the artist is probably right when he asserts that his primary aim is to express and to share his insights and aesthetic judgments. Beauty is a value in and of itself. In so far as an artist is sincere and true to his vision, there are many issues of aesthetic value and choice where no moral problem is involved. Many forms of art do not directly affect human motivation and conduct. The aesthetic judgment is not, in the opinion of the author, merely an emotional reaction, nor is it wholly a rational process. It involves both reason and emotion, and great art needs to satisfy the demands of each.

Third, art is an important part of life, but it is not the whole of life. "Art, like other interests, can flourish only in a sound and whole society, and the law of soundness and wholeness in life is morality."¹ Great art will not continue to prosper in a society which is crude or immature or ill-balanced in any way. "Just as physical life cannot exist without the support of a physical environment, so moral life cannot go on without the support of a moral environment."²

WHAT ART MAY DO FOR US

In addition to the immediate pleasure and the intrinsic value which art brings to us through its disclosure of the nature of beauty and the aesthetic aspects of existence, art may also serve the practical needs of life in various ways. It may act as an aid to the physical life of man in relieving tired muscles and jaded nerves. In this function it is akin to play or amusement as a recreation. Music, for example, may stimulate or soothe us; it may change the rate of the heart beat, of digestion, and affect other bodily processes. It may have therapeutic value in the sickroom. Art may help to renew our spirits, giving us wholesome excitement, or giving us courage and enthusiasm for the strenuous tasks

¹ Ralph Barton Perry, *The Moral Economy*, p. 174. Charles Scribner's Sons, New York, 1909.

² John Dewey, *Art as Experience*, p. 345. Minton, Balch and Company, New York, 1934.

of life. The power of art in its different forms to create various moods, from patience to a spirit of sacrifice, is well known.

Art may help to furnish a social bond between individuals and groups by spreading sympathy, understanding, and a love for balance and harmony. Beauty tends to raise us to higher levels of living, and to do this without conscious effort on our part. Ugliness tends to warp our spirits and to depress us. Since this is the case, art needs to be carried over into our everyday thoughts and activities. For the good of art as well as of society as a whole, art needs to come out of its ivory towers and garrets and dwell in the highways and byways of our cities, towns, and villages. We need to link our art with our personal lives and our social affairs. There is no necessary conflict between art and utility. The beautiful and the useful may be more completely combined in a functional view of life. Art is a way of living, as well as an indication of the ideas and ideals of our civilization.

In *The Republic* Plato says that even ordinary human beings, if they are reared amid masterpieces of painting, sculpture, architecture, and other forms of art, "will imbibe a taste for beauty and decency: they will learn to find out what is perfect or what is deficient in nature and art, and this rectitude of judgment will gradually spread over to their souls."

»» QUESTIONS AND PROJECTS ««

1. What are the main periods in the history of art? How are these changes or periods to be explained? You will need to consult some good history of art.
2. Is there any justification for the statement that while art creates sentiments and emotions, these sentiments and emotions do not carry over into everyday life? Art cultivates the contemplative attitude toward life. The artist wants to enjoy it as it is, not to change or to reform it. For example, we go to the theater and see a murder enacted. We do nothing, and we may applaud the action. We are spectators, and we assume a passive attitude.
3. In his book *What We Live By*,¹ Abbé Dimnet raises the question as to why it is, if art is naturally elevating, that artists do not have the reputation of being overmoral. Are artists less bound by social conventions than are other members of society? (See Dimnet, p. 97.)

¹ Simon and Schuster, New York, 1932.

4. Should there be any censorship of art? Is such censorship desirable or likely to be successful? Give your opinion of the following statement: "Probably censorship should be limited to cases of (a) obscenity, and vulgarity which is not necessary to artistic effect or moral purpose; (b) the representation of crime, and vice in such ways as to teach them to the innocent, to excite morbid curiosity, or to stimulate brutality; (c) the presentation of anything that would tend to arouse fear, resentment, hatred, or ill-will towards foreign peoples, a lust for successful war, or a touchy and pugnacious spirit; (d) anything obviously libellous."¹
5. In what way or ways is the "artistic temperament" different from the scientific or the philosophical temperament? Are the feelings of the artist likely to be stirred more easily? Is he more likely to be over-sensitive or impulsive?
6. Is there any justification for the statement that while there is so much want and suffering in the world, it is "wrong to waste so much money on expensive and useless luxuries like art"?
7. One explanation of art, not discussed in the chapter, is that it is the product of genius or of extraordinary powers in a unique individual. Is this a tenable explanation? What part do heredity, environment, and perspiration (industry) play? See A. Philip McMahon, *The Meaning of Art*, Chapter IX (W. W. Norton and Company, 1930), and Richard H. Guggenheimer, *Sight and Insight*, Chapter VII (Harper and Brothers, 1945).
8. Discuss more fully the question raised in this chapter about art and practical usefulness. From book ends to automobiles, is it possible, is it not, to combine the two interests?
9. How would you go about cultivating beauty and the arts: (1) in your own life, (2) in the home, (3) in society?

¹ From Durant Drake, *The New Morality*, p. 248. By permission of The Macmillan Company, publishers, New York, 1928.

Ethics and the Moral Life

Men are continually expressing judgments regarding their own conduct and that of their fellow men. Some acts are approved and are called right or good. Other acts are condemned and are called wrong or evil. Moral judgments have to do with the voluntary actions of human beings in so far as questions of right and wrong are involved. The term *moral* comes from the Latin word *mos* (plural *mores*) which means "custom" or "way of life." The related term *ethics* comes from the Greek word *ethos* which also means "custom" or "character." Today there is a tendency to use the terms *morals* and *morality* to refer to the conduct, and *ethics* and *ethical* for the study of moral conduct or the system or code which is followed. We speak of "a moral act" and of "an ethical system or code." Ethics is the normative study of the principles underlying the desirable forms of human conduct.

SOME FACTS OF THE MORAL LIFE

In the first place, life is such that everyone has to make decisions continuously in a world where there are right and wrong ways of doing things. Some of our decisions are trivial, while others are so important that they may affect our entire lives. Our actions and decisions affect others as well as ourselves. We make claims on other persons, and they in turn make claims upon us. Some of the well-recognized claims we speak of as "rights" and "duties."

In the second place, in order to have any orderly social life, we must have agreements, understandings, principles, and rules of conduct. There is no human society which does not have well-established codes or rules of procedure. We cannot choose whether or not we shall have them; the only question we can de-

cide is whether or not they are to be reasonable and well adapted to the needs of life under present conditions. Some of these agreements are unconscious and are embedded in the customs and traditions of the group and the habits of the individual. They are simply taken for granted. Others are semiconscious or wholly conscious and may be subjects for discussion. As the conditions and needs of life undergo change, these agreements and codes may be modified or revised.

In the third place, there is a development or evolution of morals just as there is of social life and institutions in general. Throughout the history of human society, moral standards have varied, from the primitive customs followed by the partly conscious early man to the carefully reasoned theories of life of the more mature modern man. Moral practices and standards depend upon the stage of social development, upon the general level of intelligence, and upon the knowledge which is available at the time. Even today we find men living at all the stages of moral development. There are primitive survivals existing side by side with more advanced ethical standards. Morality grows out of life itself and is an attempt to discover and to live the good life — which is the healthy, the happy, the socially useful, and the rich or fully developed life.

In the fourth place, the field of morality is coextensive with life itself; it is not some separate area or sphere of life. A moral problem is not just a moral problem; it is also a personal, social, economic, political, or international problem. The pressing problems of our time concern the ideals and loyalties around which our lives are to be organized. We have discovered the secret of efficiency. We are less certain regarding the values and the goals of human living.

THREE WAYS OF GETTING INTO TROUBLE

We live in a social order marked by much personal failure, frustration, and wrongdoing and by numerous social disorders and conflicts. Human life gets into trouble and suffers under one or more of the following conditions:

First, there are times when something goes wrong inside the person. A man's life may be torn between incompatible desires. The trouble may be due to a lack of organization or integration, so that the different desires of the individual come into conflict. If man's passions are not in complete control or if there is a com-

plex or mental conflict, abnormal conduct will be the result. If a man always acts on the basis of the desire that is strongest at the moment, he may regret his action later. He cannot be at peace within himself or with the world unless his life is consistent and harmonious.

Second, men get into trouble and suffer when the persons who make up society drift apart and a clash of interests takes place. When there is fighting, bullying, stealing, and cheating, society is torn apart. There may be a clash between two individuals, between an individual and a group or an institution, or between groups and institutions. Not only the persons directly involved but society as a whole suffer.

Third, there is trouble when the general goals or purposes of human life are pointed in the wrong direction. Personal integration and social co-operation are not enough if the energies of men are organized around false or vicious ends. This is the problem known traditionally as the *summum bonum*, or the "highest good." Ethics has been especially concerned with this problem. Let us consider the answers to this problem as given by a few outstanding thinkers.

In discussing "the three parts of morality," C. S. Lewis uses the illustration of a fleet or convoy of ships sailing in formation.¹ The voyage will be successful only if three conditions are fulfilled. First, each ship must be seaworthy and have her engines in good running order. If these break down, the destination will not be reached. Again, the ships must not get in each other's way and collide. Some or even all of the ships could be lost in this way. Finally, the fleet must reach its proper destination if the voyage is to be successful. To arrive at the wrong country or at the wrong port might lead to trouble. The course for the voyage as a whole is no less important than the proper functioning of the ships.

TWO UNSATISFACTORY APPROACHES

The moral confusion of our time has been increased by two quite different approaches to the problems of morality. The first approach is the age-old tendency of men to hold blindly to some belief or line of conduct and to appeal to some authority for its support. The second and more recent tendency is represented by

¹ See Clive S. Lewis, *Christian Behaviour*, p. 2. The Macmillan Company, New York, 1943.

those who have rejected the older authorities and have discovered no basis for morality. They are likely to claim that morality is subjective and that there are no reliable moral standards which all men need to follow. The ethical relativists regard morality as a matter of personal opinion.

THE APPEAL TO AUTHORITY

Reliance upon authority has been widespread in human history. The authoritarian has been almost entirely in control in the past, and even today a majority of persons think that right conduct means obedience to some established authority. For some persons it is a matter of habit and inertia; they are glad to let others do the thinking or deciding for them, and they do not want to bear the responsibility. Other persons want the assurance of certainty that comes when they invent some accredited authority with finality and infallibility. Morality may be regarded as a set of fixed rules to be obeyed under all circumstances.

The authorities which have been followed are many and varied. They include custom and tradition, some moral code, a creedal statement, a church or other institution, a sacred literature or some portion of it, natural law, the commands of the state or of some divinely ordained rulers, and the word of some individual who is vested with authority. The items in this list are not mutually exclusive or exhaustive; they may be combined in various ways.

In the chapter on "The Sources of Knowledge," we saw that much of our knowledge is gained through the testimony of others or upon authority and that authority which is open to free and honest examination is a legitimate source of knowledge under certain circumstances. We also saw, however, that authority accepted on blind faith and in disregard of the extent to which it may harmonize with experience and reason is a dangerous thing. Today we live under rapidly changing conditions, and we face problems upon which the ancient authorities are silent. They do not tell us whether or not it is right to join a trade union or to do a score of other things. Authoritarian ethics are likely to delay progress in a changing society. They are also likely to be destructive of moral perspective, since acts are condemned because they violate the code rather than because they are injurious to human welfare. The questionable, the unimportant, and the universally recognized acts of wrongdoing are put on the same

level. Furthermore, whatever tends to discredit the authority tends to discredit all its pronouncements.

Many persons in our society accept custom as the basis of right and wrong. While many customs are beneficial and represent the past experience of the group, customary or group morality is not a mature stage of morality. To accept custom and tradition as the standard is to submerge the individual in society. In the past, progress has come mainly through some individual's challenging of the customary actions of the group. While custom and moral demands will ordinarily coincide, we need to remember that there are good customs and bad customs. To accept divine law in one of its forms does not give us as certain a standard as may appear at first. Let us admit that it is right to do the "will of God." There is, however, no hard and fast set of rules which can be entitled "God's will." The codes and commands attributed to God are most diverse, and they have changed with the development of the group and with changed conditions.¹ Many modern religious leaders say that religion inspires men to discover the right and to live according to it. They do not think of ethics as an authoritarian and fixed system.

The role of authority has been growing weaker in modern society. This is due in part to influences that have come to us from the Renaissance, the Reformation, the development of modern science, the growth of the democratic spirit which stresses the worth of the person and his right to think and to judge for himself, the growth of historical studies, and the rapid changes in our mode of living and working. The modern attitude is not "as it was in the beginning" but "prove all things" and "hold fast to that which is good" or which can stand the test of living.

ETHICAL RELATIVISM

At the opposite extreme from authoritarianism is ethical relativism. The ethical relativists claim that there are no common standards among men and that whatever an individual or a group thinks good is good — for them. The rightness of an act depends upon the opinion of some individual or group toward it; hence right and wrong vary from person to person. Ethical statements, it is said, refer to the feelings and emotions of men and not to any

¹ See John M. P. Smith, *The Moral Life of the Hebrews*. The University of Chicago Press, 1923.

objective facts or realities. There are no true principles of morality and no objective standards.

The ethical relativists do not merely say that what certain persons *think* right in one place is thought to be wrong by some other persons in another place. That is quite obvious. What they claim is that what *is* right at one place is wrong at another place because there is no standard beyond human thinking and feeling. In support of their claim, the ethical relativists are likely to appeal to the great variety of codes and practices found in the past and the present.¹ They attack absolutism and authoritarianism, and they attempt to show that morality is relative to human needs. That morality is relative to human needs appears to be true; that there is no standard or basis for a morality that is applicable to all men appears to be false.

If men come to believe that morals are merely relative and subjective, so that one action is as good as another, morality tends to break down. To appeal to a "higher" standard is meaningless. If we cannot deny to any group the right to set its own standards, it is questionable if we can deny the same right to the person. If there are no common and universal standards, it is hard to see how we can make comparison between persons and groups, hold to the notion of progress, or encourage men to strive for lofty ideals and a better world.

The rejection of authoritarianism does not prove the case for the ethical relativists. An action is not right because some person or even some community thinks it right and approves it. An act is right only if it is the kind of act that has good results. The right is based on the good. The good is that which has value for persons. If this is the case, then questions of right and wrong are not mere matters of opinion and feeling. Whether an act has good results or evil can usually be ascertained by an appeal to human experience or to the evidence at hand.

THE ETHICAL STANDARD

Since the time of the early Greeks and Hebrews, men have been reflecting upon the principles and problems of right and wrong. Ethical thought has expressed itself in many different

¹ They will probably quote William G. Sumner's *Folkways*, Edvard A. Westermarck's *Ethical Relativity*, and James G. Frazer's *The Golden Bough*.

forms and types of explanation.¹ We consider here three types which have been influential and which have persisted down to the present day. We discuss Kant as the ablest representative of formalism, John Stuart Mill as an outstanding proponent of utilitarianism or the happiness theory, and Plato and Jesus of Nazareth as representatives of the theory of the realization of the person or self.

THE MORAL LAW AS THE STANDARD

One of the great systems of ethics was set forth by Immanuel Kant (1724-1804). To appreciate Kant to the full, one needs to go directly to his ethical writings, especially his *Metaphysics of Morals* and his *Critique of Practical Reason*. Kant's moral philosophy is sometimes called formalism because he was looking for moral principles which are inherently right or wrong apart from any particular circumstances. These moral principles or laws are recognized immediately or directly as true and binding.

Kant inherited the Christian reverence for divine law and the worth of the individual self. He also was profoundly influenced by the Greek and the eighteenth century respect for reason. According to Kant, moral philosophy is concerned not with what is but with what ought to be. In man there is a sense of duty, the "I ought," or the moral law which is prior to experience and which springs from a man's innermost nature. The moral law is the will governed by reason. The moral law brings man into contact with the very order of the universe itself, since the laws of nature and the laws of reason are essentially one.

Next to the moral law or the sense of duty, Kant emphasized the good motive or the good will as central. "Nothing can possibly be conceived in the world, or even out of it, which can be called good without qualification, except a Good Will." The one thing that is important is that a man should *will* the good. Intelligence and courage are usually good, but they may be used to promote evil. Happiness may be gained in ignoble ways. A man may contribute to charity because he wants publicity or lacks the courage to refuse requests. The good will is the dutiful will which acts solely out of respect for the principle of duty. If a man acts from a good motive, the act is good regardless of the consequences. Kant does not say that consequences are not to be con-

¹ See Radoslav A. Tsanoff, *The Moral Ideals of Our Civilization*. E. P. Dutton and Company, New York, 1942.

sidered or that they are unimportant. He does say that the moral quality of the act is not determined by them.

If the will or the motive is governed by reason and not by mere desire, it is absolute and unconditional, admitting of no exceptions. It is the moral law or, to use Kant's phrase, "the categorical imperative." He gives us three tests or three formulations of the moral law.

1. *The Principle of Universality.* — "Act in conformity with that maxim, and that maxim only, which you can at the same time will to be a universal law." Actions should spring not from desire or inclination but only from principles that can be universalized. Kant uses the example of the man who, after a series of misfortunes, contemplates suicide. When he attempts to universalize such behavior, he realizes at once that it cannot be approved. If everyone were to commit suicide, it would lead to the elimination of the race. Kant, it will be observed, universalized the general type of conduct and not the particular act under particular circumstances. The latter interpretation might lead to extreme laxness; the former leads to a rigorism that admits few if any exceptions to moral principles.

2. *The Principle of Humanity as an End, Never as a Means.* — "Act so as to use humanity, whether in your own person or in the person of another, always as an end, never as merely a means." This principle has received more widespread approval than any other part of Kant's moral philosophy. Persons, as rational beings, are ends-in-themselves and should never be used merely as means to other ends. We may use physical things as means, but when we use a person as means, as in slavery, prostitution, or commercial exploitation, we degrade him and violate his being as a person.

3. *The Principle of Autonomy.* — The moral laws which a man obeys are not imposed on him from the outside. They are the "laws which he imposes upon himself." The sense of duty and the reason which man obeys come from within. They are expressions of his own higher self.

HAPPINESS AS THE GUIDE IN LIFE

The next two ethical theories we consider are teleological views; that is, they judge conduct as right or wrong, not on the basis of some inherent quality, as in formalism, but in relationship to some end or goal which is considered good. The doctrine

that pleasure or happiness is the greatest good in life was known until recently as *hedonism*. The term *Epicureanism*, from Epicurus, an early Greek exponent of the pleasure theory, has also been used. Since the time of Jeremy Bentham and John Stuart Mill in the nineteenth century, the term *utilitarianism* has been used.

According to John Stuart Mill (1806–1873), utilitarianism is “the creed which accepts as the foundation of morals, Utility or the Great Happiness Principle, holds that actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness.” Mill’s brief but brilliant treatise entitled *Utilitarianism* should be read by all students of moral philosophy. Mill accepts the general position of Jeremy Bentham (1748–1832), who uses the phrase “the greatest happiness of the great number.” Bentham asserts that nature has placed man under the guidance of two masters, pleasure and pain. Man is a “pleasure-seeking, pain-avoiding” creature. Every person seeks his own pleasure, and consequences are the important parts of actions. Bentham states his theory in quantitative terms and hopes to establish utilitarian ethics on a strictly scientific basis. In answering the criticisms directed against Bentham’s position, Mill modifies the position and adds some new elements.

The most important change which Mill makes in utilitarianism is to add a qualitative standard. Human beings with refined faculties are not satisfied with the pleasures of the body; they seek the higher pleasures of the mind, feelings, and moral sentiments. Once a man has lived on a higher level, he can never really wish to sink into a lower level of existence. This is due to the human sense of dignity. “It is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied.”

Mill vigorously defends utilitarianism against the charge that it encourages selfishness. He points out that the good of all men or the greatest happiness of the greatest number is the standard of what is right in conduct. Since we live in an unjust society, some men have to sacrifice themselves for the happiness of others. Such sacrifice is not an end-in-itself; it is a means to the greater happiness of a larger number of persons. While all men may not actually seek happiness, they ought to do so. To promote not individual pleasure but the greatest total happiness is the essence of Mill’s position.

The utilitarians stress the consequences of conduct. The moral-

ity of an act depends not on the motive from which it originates but upon the effects of the action upon society. Motives are relevant to our estimation of the characters of persons but not of actions. In some situations, however, where unforeseen conditions prevent desirable effects, we may approve the act because of its intended consequences.

THE DEVELOPMENT OF THE PERSON: SELF-REALIZATION

The third and last of the ethical theories which we consider in this brief presentation takes for its norm the development of all the normal capacities of man as a thinking, feeling, and acting person. This theory has many able representatives in ancient and in modern times. By different persons it has been called perfectionism, eudaemonism, energism, and self-realization. We select Plato as representing the Greek or classical emphasis, and Jesus of Nazareth as representative of the Christian outlook. Unfortunately, a discussion of the general view of the universe, life, and society with which these interpretations are connected must be omitted here.

Plato in his great work *The Republic* and in other writings pictures the life of man as composed of three parts. There is, first, the rational part located in the head. This is the mind, or soul, whose proper function is to rule the body. Reason alone comprehends the true nature of things. There is, second, the feeling part of man, located in the breast. Here we find the seat of the sensations and the heroic virtues. There is, third, the appetites or the desiring side of man, located in the abdomen. There is no principle of order among human passions except as this part of life is controlled by reason. Each part or function has its proper place and role in life. When these three parts operate in harmony, each carrying out its own function, there is order and peace.

Corresponding to the psychological nature of man, the well-ordered society is also made up of three parts: the rulers, who use their training and insight to rule the state; the officials and warriors, who execute the laws and protect the state; and the workers, artisans, and peasants, who provide the material necessities of life. The well-ordered society results when each group carries out its functions in harmony with the other parts of society.

The virtues grow out of the nature of man and the organization of society. Corresponding to reason in man and the rulers in the state, we have wisdom. Accompanying the feeling side of

man and the officials and warriors in the state, we get courage. The virtue related to the passions in man and the workers in society is self-control, or temperance. The all-inclusive virtue which signifies harmony of all the functions and of man's life with society is justice, or righteousness. Man's life and the organization of society should thus harmonize with the moral order of the universe. The greatest good is the harmonious development and the maximum richness of life.

Aristotle, the famous pupil of Plato, in his *Nicomachean Ethics* set forth the first really systematic treatise on ethics. He differs from the position of Plato mainly in emphasis. Reason, well-being, and moderation are the central concepts. Just as the excellence of the sculptor lies in the skill with which he applies his art, so the excellence of man lies in the fulfillment of his function. The function peculiar to man is his life of reason. He should live in the light of reason, hence by principles that are valid for all men. The highest good is *eudaemonia*, or well-being. The good life avoids the extremes of both excessive repression and excessive indulgence. The good life involves the harmonious development of the normal functions of the organism. St. Thomas Aquinas (c. 1225-1274) incorporated the views of Aristotle into the philosophy of the church, where they are influential today in Neo-Thomist thought.

The Christian ethical ideal has had a powerful influence in Western civilization. Central to all types of Christian ethics have been the teachings of Jesus as seen in the New Testament. Jesus left no writings, and he did not formulate an entirely new set of ethical principles. Practically every element of his teaching had been brought out by some prophet or teacher who preceded him. He did bring together certain central convictions of morality and religion in a simple and direct way and embodied them in his own life as no other person has done. Inheriting a rich legacy of morality from the history of Judaism, he gave it a new form. He took the rather exclusive nationalistic morality of his day and made it into a universalism that embraced all men. Christians believe that he revealed the heart of the moral problem as no one else has done.

Central in the ethical teachings of Jesus is his emphasis upon the value of the self or person. Man is of greater value than anything else. When asked a question regarding the use of the Sabbath, the most sacred of institutions at that time, Jesus

replied, "The Sabbath was made for man, not man for the Sabbath." Persons are ends in themselves; all other things are means.

A second closely related conception of Jesus is his principle of the progressive growth of personality. Men must grow or they deteriorate. "First the blade, then the ear, then the full grain in the ear." He saw in the fallen woman and the hated tax-collector the possibility of progressive growth.

For Jesus, morality was positive and inner, and love was the supreme virtue or trait of character. When asked regarding the great commandments, he said, "Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind, and with all thy strength: this is the first commandment. And the second is like, namely this, Thou shalt love thy neighbor as thyself. There is none other commandment greater than these." Each man is under obligation to promote the interests of the other persons with whom he comes into contact. Love, unselfishness, selflessness, or social-mindedness received a new emphasis in human relations.

In the teachings of Jesus, ethics and religion are in close relationship. To live the good life is obedience to God. Throughout history some Christians have thought that Christian ethics is a deposit of final and absolute truth revealed by God. For an increasingly large number of Christians, however, the Christian life is a quest for the good under the inspiration of devotion to the ideals of Jesus. Men are encouraged to discover the tasks that need to be done, then to view these tasks as a part of man's duty to God. While maintaining its connection with its founder and with its past, Christian ethics is still in the making. It absorbs any new insights and whatever is intellectually acceptable and morally sound in the society in which it expresses itself.

Whether expressed in terms of the more philosophical systems of ethics or in the more personal and religious terms of Christian ethics, the theory of self-realization has emphasized the development of all the functions of the person as the greatest good. Nothing short of the harmonious development of all sides of man's nature may be accepted as a satisfactory standard. Furthermore, the emphasis is social as well as individual in its outlook. Personal welfare is bound up with the social welfare. Not only co-operation and sharing but often sacrifice is necessary in order that the greatest good for man may be attained.

THE BASIS OF THE MORAL LIFE

We have considered the three main answers to the question, "What is the greatest good?" We have been told to follow the moral law, or the line of duty; to seek happiness; and to seek the development of the person. In spite of differences, these theories of the good life all agree that there is a higher and a lower in respect to human actions, that there is an obligation to follow the good or the higher way, and that the intelligent life is more desirable than any life devoid of intelligence. For any of these theories the majority of cases will be decided in the same way. The difference is most likely to be noticed in the exceptional or border-line cases. In the opinion of the author, the theory of self-realization, or the development of the person, is the most satisfactory statement of the goal to be sought. Let us see if we can give these general theories a little more content.

We have suggested that morality grows out of life and its needs — out of the nature of life and the nature of the world in which we live. Running through all forms of life, as we saw in Chapter V, there is an ever-present will to live. It is present in the lower species of life and also in the life of man. In every normal living creature there is an urge toward the expansion and fulfillment of its being. This will to live, this insurgency of life seems to grow out of the creative forces of the universe. It seems akin to the principle that underlies mutations and evolution in the race and growth in the individual. Call it creative synthesis, the divine purpose, or what you will.

Everywhere there are conditions which must be met if life is to go on. For example, what is good for the animal and how it ought to live are not matters of chance or caprice. The food, exercise, shelter, and temperature which the animal needs are determined by its anatomical and physiological nature and by the environmental conditions under which it lives. Most of its actions are directed toward the attainment of the better and the avoidance of the worse. The lion thrives on meat, the squirrel on nuts, the horse on hay and oats. Such rules of health depend in large part upon the nature of the organism.

When we come to man, we find that his conduct also is determined in considerable part by his physical nature. If he lives one way, he continues to live and to remain healthy. If he lives some other way, life is handicapped or may actually cease. Man

must meet certain specific conditions of air, sunshine, temperature, food and drink, exercise, and sleep if his body is to function well. Anger, fear, jealousy, and worry are said to produce poison in the body, as well as to disrupt social life. Love, good will, and contentment tend to build up the body and to promote social welfare.

In addition to many physical demands, there are equally numerous social demands that must be recognized. Man must associate with his fellows in innumerable ways. If these social relations are to be harmonious and happy, he must have regard for the desires and needs of his fellow men. Only through co-operative effort can men gain adequate food, shelter, and protection and establish such institutions as the family, school, church, and state. Out of social interaction and co-operation develop folkways, mores, and institutional practices. Regulations express themselves outwardly in customs and laws; inwardly they register themselves in a sense of duty, in expressions of approval and disapproval, and in shame and remorse. As knowledge and experience grow and expand, the requirements of individual and social welfare are taken into account more and more. Men come to criticize the customs of their day and to modify them in the light of experience and reflection. As we have already seen, a moral system under which standards and practices are determined almost exclusively by custom and tradition is not a mature stage of human development.

There are certain basic urges and desires that express themselves in similar ways wherever human beings are found. Certain traits of character, like unselfishness, friendship, honesty, courage, and self-control, are practically universally approved. Other traits and practices, like selfishness, treachery, murder, stealing, and cheating, are almost universally condemned. The desirable or approved traits are called the virtues, and the undesirable traits are called the vices. The judgment that the man who possesses the first set of traits is a good man and that the man who possesses the opposite set is a bad man is not artificial and arbitrary. Such distinctions are based on the nature of man and the demands of human society.

When we come to the level of mind and spirit — a level that cannot be sharply separated from the social — there are other demands which men must recognize. There is an almost universal conviction expressed through the religious and ethical systems of

man that the satisfactions of the mind and spirit are more desirable and lasting than the satisfactions of the body alone. The classical Greeks believed that reason ought to be in control over the appetites and desires. Only in this way can man lead a satisfactory life. This conviction, emphasized by the Greeks and accepted by Christian thinkers, though not stressed as much as love or unselfishness, is a basic belief underlying Western civilization. To be reasonable means to be consistent and to be moderate in one's thinking and living.

Intelligence alone is not enough in human affairs. Clever men are sometimes vicious. Knowledge may be used for destructive purposes. While knowledge and intelligence are essential elements in a mature morality, they are not sufficient. Man is a being with emotions and desires that must be developed and expressed or he is a warped person. Love, friendliness, fear, hatred, and anger are contagious and tend to pass from person to person. The psychological fact of sympathy is the basis for love, unselfishness, and altruism. All the great ethical systems and moral codes that have survived over long periods of time have emphasized unselfishness as the very essence of morality. Love may lead to self-sacrifice. The statement of Jesus, often called the Golden Rule — "Do unto others as you would that they should do unto you" — is the very center of Christian morality. The same principle, stated negatively, was set forth by Confucius for the Chinese.

Human attitudes and actions must conform to the needs of man and to the basic structure and processes of the universe, or life will be a miserable failure. If there exists in the universe a creative synthesis or a purpose that makes for truth, beauty, and goodness, then man must intelligently and co-operatively relate himself to this purpose if he is to realize the good life. To oppose it is to court frustration and pain. To live in harmony with it is to find satisfaction and happiness. From this point of view, morality is not a mere matter of opinion; for mature persons, value judgments are closely related to factual judgments. To be moral is to observe the laws of personal and social welfare as they are progressively discovered in human relationships.

A mature morality judges an act as right or wrong on the basis of its effect upon life or upon man. That is, an act is right if it leads to the development of persons or to a more harmonious personal and social life. An act is wrong if it leads in the opposite direction or is detrimental to life. If there is no clear-cut right

course of action, the right choice is the selection of the greater or greatest value or, negatively, the selection of the lesser evil. To a person who is morally mature, an act that is beneficial to persons is a good act. An act that is harmful is a bad act, regardless of whether other persons or the community approves or disapproves.

In judging conduct there is no part of the entire process — motive, means, or consequences — that we can disregard except at our peril. Motives, as Jesus and Kant pointed out, are basic for morality. A good motive is a prerequisite to conduct which we approve without qualification. If a good motive is present but the act, through some unforeseen factor, leads to harmful effects, we tend to disapprove less severely and to say, "Anyway, he meant well." When persons ask, "What is right in this situation?" their intentions are usually good and they are trying to find the right way of carrying them out. We are led, therefore, to examine means and consequences.

Just as there may be many motives for carrying out some act, there may be many means. A man wants to support his family (a good motive), and he sells drugs or "dope" (the wrong means) so that they may live comfortably (good effects). Here we condemn the act because of the unsocial nature and the evil results of the means chosen. We expect a man to use the best means available to carry out his purpose. Good consequences can ordinarily be achieved only by the use of good means. Once chosen, the means become part of the general effects.

We expect the general consequences of an act which we call right to be beneficial to the persons involved and to society. Ordinarily when persons ask, "What is right?" they are thinking about the consequences of the action. However, we may approve the surgical operation, even if it turns out disastrously. Conduct is right if it proceeds from a good motive, through the use of the best available means, to consequences that are beneficial. If these conditions are not fulfilled, men will condemn the action or they will approve with reservations.

When a moral problem confronts him, the mature person will examine and consider all the relevant factors involved in the selection of the various possible lines of action. In the light of this comparison of the values involved, he will make his choice. Reflective morality consists not only in forming judgments but in setting forth the reasons for one's moral judgments. The more a man knows about the world and about life and its relationships,

the more likely he is to be able to decide wisely. He will want to judge by principles and not be led simply by the impulses of the moment. He will need to consider the future and what he wants to become. This approach places a premium upon a scale of values and upon constructive or creative intelligence.

»» QUESTIONS AND PROJECTS ««

1. Give a clear statement in your own words of Kant's formalism, of utilitarianism, and of the theory of self-realization. Compare and contrast these interpretations. In your opinion, what is the greatest moral problem facing our society today? Give reasons for your answer.
2. State in your own words why you consider that right is right.
3. Is experimentation possible in the realm of morals? If so, in what areas or realms might it be wise for us to experiment? If we are to experiment, what principles should be kept clearly in mind? See Harold H. Titus, *What Is a Mature Morality?* pp. 123-129 (The Macmillan Company, 1943).
4. Discuss the following quotations:
 - (1) "Ethics can never be a fixed code; it is only a series of suggestions."
 - (2) "Ethics is useless, for we do not need theories to tell us how to act."
5. "Whosoever will save his life shall lose it, and whosoever will lose his life shall find it." Do you agree or disagree with the writer who says that this is "the greatest discovery ever made"? Does man need to lose himself in a great cause in order to find satisfaction in life?
6. Discuss the following quotation: "A rule of conduct may be a genuine expression of what people actually feel and think, or it may be an ideal bearing as little relation to common practice as the Sermon on the Mount to the code of the Stock Exchange. In other words, there is a difference between the rule to which society expects you to conform and the rule which it keeps for Sunday use only. . . . This broad distinction we must keep in mind, if we would not immensely overrate the morals of the civilized world, which, unlike the savage and barbarian world, has almost invariably a double code, one for use and the other — as a cynic would say — for ornament."¹

¹ From Leonard T. Hobhouse, *Morals in Evolution*, fifth edition, p. 23. Henry Holt and Company, New York, 1931. Used by permission of the publishers.

The Philosophy of Religion

Religion has been widespread and persistent in the human race. Consequently, a study of man and his problems would not be complete unless it included some consideration of man's religious beliefs and practices. A philosophy of religion is an attempt to discover the truth about religion and its relation to life. In common with the other experiences and interests of man, religion demands a reasonable explanation; however, it is not easy to describe or to define. That is because religion is a growing, dynamic thing, and because it is elemental and personal and inclusive in that it takes in all of life.

Religion differs from both science and philosophy in emphasizing personal adjustment and commitment. Religious persons think that their convictions are fundamentally true; they are not trying to fool themselves or other people. They believe that the forces that have produced human personality are still operating in the environment, and that persons may live in harmonious relations with such forces.

THE ORIGIN AND GROWTH OF RELIGION

What caused man to be religious? Numerous explanations have been given — fear, awe, a religious instinct, a religious faculty of some kind. Many of the answers to the question are either false or quite inadequate. From the numerous interpretations of the origin of religion, two are worthy of mention, however. Together they probably furnish us with the most adequate answer to the question.

1. Religion grew out of man's will to live or his quest for the

completion and fulfillment of life. It is part of the biological struggle for a larger life and for a more adequate adjustment to the world in which we live. Religion is part of the ever-present quest for life which expresses itself on the lower levels as self-preservation in terms of food, shelter, and safety, and on the higher levels in terms of the social, intellectual, and spiritual values of life.

2. Religion grew out of man's awareness or recognition of a more ideal world in which his life finds meaning and significance. Religion is man's response to the presence and appeal of an environing world which evokes his sense of awe, reverence, and confidence.

Primitive man, in contact with an unknown and sometimes frightening nature, found himself faced by circumstances beyond his control or the control of his group. His early reaction was one of awe and "look out" or "take care." Students of early men are fairly well agreed that the *mana* reaction or conception is the earliest known. "The simplest and therefore, probably, the earliest philosophy of nature is the belief in a widely and indefinitely diffused *power* or *influence* (*mana*). This power is believed to be operative wherever anything striking or unusual happens. It produces catastrophes, diseases, death; it is present in conception and birth; it causes plants and animals and human beings to increase and multiply; it gives prowess to the great warrior and skill to the mighty hunter; it works in the medicine man, in the good canoe, and in the deadly spear. The gods and the evil spirits wield it. It is liable to break out anywhere, especially in unusual occurrences. Mana is not evenly distributed and does not work in an orderly manner, since it is subject to the control of gods, heroes, and demons, although in its essence it is distinct from them. It is not soul or spirit but *power*."¹

A second stage in the development of religion is animism. Nature comes to be filled with innumerable spirits, or nature is alive, so to speak. Men attribute a kind of soul to the phenomena of nature. The trees, brooks, mountains, stars, and other objects are the dwelling places of spirits. All things are thought of as possessing a life somewhat like man's own, and the spirits of things may be influenced by rites of various kinds.

¹ Joseph A. Leighton, *The Field of Philosophy*, revised and enlarged edition, p. 13. D. Appleton-Century Company, New York, 1930. Used by permission of the publishers.

Out of the mana reaction and animism, and continuing into later stages, arise such conceptions and practices as taboo, magic, totemism, and fetishism, which we shall not attempt to discuss. *Taboo* means that something must not be touched because it is mysterious or dangerous. *Magic* attempts to exploit the unknown powers by way of compulsion. The *totem* is an animal thought to have some relation to the group and its welfare. A *fetish* is an object which is supposed to be endowed with power or to be the abode of a spirit.

Following animism is spiritism, at which stage the spirits become "free" and are able to move about. The spirits may be of many different kinds — the spirits of natural objects, great Nature Spirits (Sun, Moon, Stars), or the spirits of departed ancestors. The belief in many spirits or the worship of them is called *polydaemonism*. Some writers speak of animism and spiritism as connected with the tribal stage of human organization.

When the spirits are given names and personalities, we have polytheism, or "many gods." The spirits have been elevated to the status of gods and dwell above or beyond the world inhabited by men. With the development from tribal to national life, this transition from polydaemonism to polytheism is likely to take place. The gods usually come to be invested with human faculties and passions. There arise stories about the gods and their actions and stories to account for the world, for man, and for beliefs and customs. These stories, or accounts, are known as *mythology*. They are found among all early peoples. Mythology is not itself a religion; it is a primitive theology, or a pictorial attempt at a philosophy of religion.

The tendency away from polytheism and toward monotheism, or the worship of one god, may take a number of forms. One god may be elevated over the others in a heavenly hierarchy or pantheon. For example, Zeus became supreme among the Greek gods, and Jupiter among the Roman gods. This is sometimes called *monarchianism*. When the worshiper devotes his attention exclusively to one deity, though recognizing that other gods exist, it may be called *monolatry* or *henotheism*. This stage is seen among the early Hebrews — "Jehovah is our God." Baal was recognized as the god of the Philistines.

There is an interesting development of the idea of God among the early Hebrews as reflected in the writings of the Old Testament. In earlier portions of these writings, God is represented as

a local deity residing on Mount Sinai and walking in the garden in the cool of the day. During the wanderings of the Israelites in the desert, he is pictured as traveling in an ark, or holy chest. At a still later date he is thought of as residing at Jerusalem, or at most as the God of Palestine. When the Israelites passed from this land, they left the presence of their God. During the prophetic period and as a result of the Babylonian exile, the prophets assured the people that God was the God of all mankind; moreover, he loved righteousness and justice, and hated iniquity and injustice. The idea of God becomes increasingly ethical and spiritual: God is interested in sincerity, purity, mercy, and truth.

After the stage of monotheism is reached, religion and the idea of God continue to grow. The belief in one God may take any one of three forms. *Theism* is belief in a personal god who is creator of the world and immanent in its processes, and with whom we may come into intimate relations. *Deism*, popular among eighteenth century thinkers, emphasizes the transcendence of God. God is the creator and lawgiver who permits his creation to administer itself through natural law. This view has been called the watchmaker view of the universe. *Pantheism* literally means "all God." God is all, and all is God. There is one single divine substance. God is thus identical with nature, or with the universe. The term *atheism* means "denial of God." *Agnosticism* is the view that knowledge is limited or impossible and that therefore a knowledge of God is impossible. It neither affirms nor denies God's existence. Further discussion of the idea of God occurs in the next chapter.

The history of religion includes the development of the religious acts or rites through which man has sought to come into harmonious relations with God. Forms of prayer have tended to progress from simple appeals to an emphasis on fellowship, communion, and meditation. Institutions or organizations have developed to aid the individual worshiper to extend the group and to carry out a religious or a social program. Scriptures, or sacred literatures, and systems of belief have also arisen in connection with most religious groups.

Today there are three great universal or missionary religions in the world. In order of historic development they are Buddhism, Christianity, and Islam (Mohammedanism). These universal religions have many branches or subdivisions. There are

also many religions with a more nationalistic, racial, or sectional appeal, such as Judaism, Confucianism, Taoism, Hinduism, and Shintoism.

While some general stages or steps in the growth of religion in the history of the race may be pointed out, there is no single line of development through which all peoples have passed or must pass. Religion is a growing, dynamic movement which has expressed itself in many and varied forms. The stages in religious development are co-ordinate with the stages in the development of civilization and culture as a whole. The history of religion is not a record of unbroken progress. We find arrested development and at times decadence.

THE NATURE OF RELIGION

On the North American continent there are hundreds of different religious groups, each one claiming that it represents genuine religion. Some groups are divided over questions of church organization. Some, like the Roman Catholic Church, have an elaborate hierarchal organization. Others, like the Baptists and the Congregationalists, have a simple democratic form of organization. Religious bodies are divided over questions of ceremony and ritual. Groups like the Episcopalians have a fairly set ritual, whereas the Quakers (Friends) have practically eliminated all ceremony and ritual. Churches are divided over issues of theology. Some groups accept elaborate creedal statements like the Apostles, the Nicene and Athanaethus creeds, and the Westminster Confession. Other groups say that matters of belief are left to the individual conscience. Groups are divided over questions of interpretation of the sacred literatures. Shall they be interpreted literally or symbolically or be taken simply as a record of the developing moral and religious life and problems of the past?

Is religion primarily a set of beliefs? What part do knowledge and intelligence play in religion? As we look over the history of religion, it is evident that the "I believe" element has been fairly prominent. Some men have been put to death for not believing "rightly." A few men, including Hegel the philosopher and Tylor the anthropologist, have interpreted religion in terms of belief. Intellect and explanation are essential to any high religion. Religion must be intellectually respectable or it will lose

its appeal to people. Persons should be able to give a reason for the faith which they hold. Yet it is a matter of knowledge that some persons who have been able to explain the creeds and theologies have not been considered genuinely religious persons, and that others who have not been able to explain their convictions have been considered religious persons. Theology may be to religion only what botany is to plant life. Intellect, while valuable and even essential to any mature religion, is not enough. Religion is not merely believing, not just a philosophy.

Is religion largely a matter of emotion? What part do emotion and feeling play in religion? Probably the most thoroughgoing case for the interpretation of religion in terms of feeling was set forth by Schleiermacher, a German theologian of the last century. For him pure religion is pure feeling. Religion is a feeling of absolute dependence upon God. We know from history and from contemporary life that the emotional element has been prominent in religion. In religion the emphasis upon attachment, commitment, loyalty, and fellowship has been strong. There is a mystic inwardness to religion. Also, our feelings and emotions do need training. We need "drive" back of our intelligences. The religious man must develop great loyalties. Yet emotions are not enough; some men who were good in a purely emotional sense have done much harm. Emotions are in great danger of getting lost unless they are accompanied and guided by intellect.

Religion is under attack by many persons in the modern world. Many of these persons are attacking what is not the central concern of religion. In the past, men have built great organizations to aid them in extending their religious ideals and to carry out their tasks in the world. Occasionally men have forgotten about the main tasks and have centered attention in the organization. Again, religious organizations have raised up symbols to remind men of the objects of devotion, and sometimes men have centered attention upon the symbols and have neglected the main objects of devotion. Organizations and ritual may be promoted merely because they stimulate emotion.

Religion does not occupy any one part of man's life. It is the reaction of a man's whole being to his object of highest loyalty. Religion must be felt and thought. It must also be lived out, or it must translate itself into action. Religion is not a segment of life. It is not connected with any one time or place. It is not just ritual, ceremony, doctrines, or the church, even though these may all be

aids in stimulating religion. Religion is life, or it is concerned with the whole of life. It is life of a particular quality or kind. The great religious leaders of the race have spoken of religion as a vital, firsthand, personal experience. This experience grows out of real needs — the need for courage and companionship in life. Micah speaks of man's chief duty "To love mercy, to do justly, and to walk humbly with thy God." For Jesus the great commandments were love to God and love toward one's neighbor. Whether religion has been interpreted as man's co-operative quest for the values of life or as "the Spirit of God in the soul of man," it has been stressed as involving the whole of life.

TYPES OF RELIGIOUS PHILOSOPHY

A philosophy of religion, as we have pointed out, is an attempt to find the truth about religion in its relation to life, and to organize that knowledge into a systematic whole. A religious philosophy, on the other hand, is a philosophy of life set forth from the point of view of some religion or of some religious tradition. The many religious philosophies may be grouped under three headings: religious humanism, supernaturalism, and theistic naturalism.

RELIGIOUS HUMANISM

Religious humanism, or humanistic naturalism, has already been considered as a type of philosophy. On its religious side, it is a positivistic type of religion which knows of nothing beyond or behind nature. The source and end of religion are man and the promotion of human values. Man is in organic unity with the world, and religion is a quality of life based on man's activity. Religion is the integration of life around human ideals or the co-operative human quest for a more satisfactory life here and now. Humanists sometimes say that they have emancipated religion from theism.¹

SUPERNATURALISM

Supernaturalism is the religious philosophy or theological outlook accepted by a majority of persons in the United States and the British Commonwealth of Nations. For supernaturalism, God is above or beyond nature. There is thus a realm of spiritual

¹ See pp. 227-235 for a more complete discussion of humanism.

realities behind the world of ordinary sense experience. Since this is the case, the most important truths about life come from sources other than those provided by scientific method and the prevailing culture of the time. Intuition, revelation, and faith are the important sources of religious knowledge or insight.

Supernaturalism is thus dualistic and other-worldly in its outlook and approach. The natural and the supernatural stand in sharp contrast. Science deals with the natural realm, but it is incompetent to deal with the supernatural and with religious truths. There is a clear distinction between this world and the next, between the secular and the sacred. Roman Catholic and orthodox Protestant theology emphasize a divine foundation for such things as the character of Christ, the church, inspired scriptures, and certain sacraments. God enters the natural world by means of an incarnation. A "plan of salvation" from the creation through a redemptive process to the end of the world may be stressed. Emphasis is apt to be placed upon belief or the acceptance of certain doctrines as true.¹

The movement in recent decades known as neo-supernaturalism, or the Crisis Theology, must be distinguished from the older supernaturalism. Among its leaders are Karl Barth and Emil Brunner. Neo-supernaturalism places less emphasis upon the historical church, the Bible, and the historical events in the life of Jesus. Thus it has made a rather complete break with affairs of this natural world. God is "wholly other," so that reason and other human means cannot reach him. God reveals himself in a crisis to those to whom he may choose to come. No revelation of God is found in nature or in history. God "breaks in" to human life in his own way. The good is based solely on God's transcendent revelation through his "Word." His "Word" speaks to men, however, from the Bible.

THEISTIC NATURALISM

Theistic naturalism is a religious philosophy which finds God and the values of religion in the natural world. It thus shifts emphasis from the supernatural and the other-worldly to spiritual values which are continuous with the natural world. There are

¹ See J. Gresham Machen, *Christianity and Liberalism* (The Macmillan Company, New York, 1923); Cardinal Gibbons, *The Faith of Our Fathers* (John Murphy Company, Baltimore, 1917); Israel Abrahams, *Judaism* (Open Court Publishing Company, Chicago, 1907).

relationships in which life is enriched and transformed. These relationships are as natural as other aspects of human experience.

There is no rigid gulf between God and nature. God is not nature, and he is not to be identified with nature. He is immanent or operative as one aspect of the natural world, and he is found in the human heart, in history, and in nature. Theistic naturalism makes it possible for man to believe in an ever-present cosmic support for his ideals and values.

Since God is in this close relationship to man and to nature, God is knowable in the same way that nature is knowable. That is, God is discovered in human experience and by the aid of human reason. The values and truths of religion are discovered through religious experience.

There are value-making processes at work in the world. We must recognize this, even though some of the processes appear to work in the opposite direction. Men actually do experience a wide range of values in their daily lives. These values include health, friendship, and a sense of beauty. Since man is a part of nature and is to a considerable extent dependent upon nature, we cannot limit these values exclusively to the human realm. God is that tendency of the universe toward progressive integration. *Religion* is the name for man's quest and effort to attain the values of life and to integrate his own life with the personality-producing forces of the universe.

In *American Philosophies of Religion*, Wieman and Meland set forth three types of religious philosophy which are rooted in the tradition of naturalism.¹ There are, first, the "evolutionary theists" who are motivated by a concern "to discover evidence in nature for a theistic cosmology." There are, second, the cosmic theists who are guided by the experimental and mathematical sciences. Third, there are the "empirical theists" who wish to formulate a philosophy of life on the basis of the "method and findings of the sciences which guide and inspire the strivings of men."

THE CHRISTIAN OUTLOOK ON LIFE

The Christian philosophy of life has built itself into Western civilization, and every student of philosophy should be acquainted with its basic convictions. Let us state them broadly, so that they tend to be inclusive rather than exclusive.

¹ Henry N. Wieman and Bernard E. Meland, *American Philosophies of Religion*, pp. 211ff. Willett, Clark and Company, Chicago, 1936.

A central conviction in Christianity is that the world in which we live is governed neither by blind chance nor by mechanical forces alone, but by moral purpose and intelligence, or by God. Nature is neither hostile nor completely indifferent and neutral, but is to some extent friendly. God is immanent in nature and is also transcendent.

A second basic conviction is that God is personal and that men may have fellowship and communion with him. God is viewed as present and working in history and in human society. Christians see history as pulsing with creative power through which new values are being created. To believe that God is seeking the redemption of the individual and of society is not to believe that the progress of civilization is inevitable or that men and women may not play significant parts in this struggle. Perhaps the most frequently used expression in the New Testament and among Christians is that "God is love." Man realizes himself through some form of service which is an expression of love.

A third conviction has to do with the worth and dignity of man. Human beings are of intrinsic value. That which improves human life is approved as good. That which destroys human life and fellowship is condemned as evil. Man has great possibilities for good and for evil, as we have seen in earlier discussions.

The three convictions — namely, that the world is meaningful, that God is personal, and that man is of great worth — would be accepted by some non-Christian groups, such as Judaism. Peculiar to Christianity is the conviction that in the personality of Jesus men have an expression of the creative good will which is at the heart of the universe and which is needed for personal and social reconstruction. Christians accept the person and teachings of Jesus as a guide, although for different groups of Christians the place and meaning of his life and teachings are interpreted in quite different ways. For most Christians, Christianity is a dynamic, historical movement in which men are progressively attempting to discover the permanent values of life.

RELIGION AND THE BELIEF IN IMMORTALITY

Religious rites and beliefs have placed considerable emphasis upon the great experiences of life, sometimes called the "crises of life," such as birth, marriage, and death. Because of the craving for life, men shrink from death. Death clashes with our passion

for living and runs counter to many of our aspirations. There is also the fact that, as creatures who crave companionship, we die alone. From the time of Job until the present, men have asked, "If a man die, shall he live again?" This question comes with special insistence during and after periods of war when so many have died in the prime of life.¹

The term *immortality* may mean different things. There is biological immortality, or the continuance of the germ plasm generation after generation. In this sense there is no question about immortality. There is social immortality, or the inheritance of influence or of some social contribution. While few men become famous in history, one's influence or contribution does go on even after he is forgotten. There is also impersonal immortality, which means that the person or the soul is merged with the world soul, as in union with an Absolute or with Brahman. However, these are not what most persons mean by the term *immortality*. The issue has to do, as a rule, with personal immortality. Do I or do you persist as a conscious unity after the experience we call death? This is what many persons want to know. Keep this meaning in mind during our discussion.

Let us admit that immortality is an issue that cannot be definitely proved one way or another. Religious leaders are almost unanimously on the affirmative side. Scientists can be lined up on both sides of the issue.² The belief in immortality has been widespread in both ancient and modern times. Ancient peoples put food, utensils, and tools in the coffin or tomb for the use of the departed. Most men have refused to believe that death ends all.

A few persons say that personal immortality is not desirable. This may be due to moral lethargy or the fact that life is too much of a struggle or because they believe that biological and social immortality are sufficient. In the main, however, the difficulties with the belief arise because of the scientific views of the universe which have developed in recent centuries. The newer views of the physical universe leave no place for "heaven," and they describe

¹ The question may be asked why we have discussed immortality and not other central doctrines of religion. The reason is simply because students so frequently raise questions about immortality.

² In a discussion of this topic some years ago at the University of Chicago, Professor A. H. Compton, a physicist, said, "Yes." Professor A. J. Carlson, a physiologist, said, "No." See *The University of Chicago Magazine* for November, 1930. See also James H. Leuba, *Belief in God and Immortality* (Open Court Publishing Company, Chicago, 1917).

the world in terms of matter and universal law. Furthermore, biology, physiology, and psychology have left little or no place for personal immortality. Even mind and consciousness are left in doubt. When the body dies, personality must cease to exist, it is said.

The question of personal immortality centers around the issue of the nature of the universe — an issue which cannot be repeated here in detail. If one accepts materialism or mechanistic naturalism and thinks that human personality at best is a brief episode or an epiphenomenon in a non-personal world, then immortality is out of the question. If one accepts a religious interpretation, belief in God, or the view that what has produced personality is still at work in the universe, personal immortality may be accepted. In this case death, like birth, is a transition rather than the end of life.

In addition to appealing to various religious doctrines and convictions, those who defend a belief in personal immortality are likely to point to the reasonableness of the universe, the nature of man, and the objectivity of values. Science, philosophy, and religion all assume that the universe is reasonable. Science sometimes leaves persons out of this picture of the universe, because science starts with the postulate of objectivity and the elimination of the personal factor. The universe appears to be a purposeful and intelligent order. After vast periods of time it has produced persons with knowledge, beauty, goodness, love, and a desire for truth. Without persons these things do not endure. In man there seems to be an overprovision for this life. Man is not satisfied when he meets his physical needs; he has moral convictions, mental powers, and aspirations. There is that in man which is not confined to space and time. One can tell by the rigging, equipment, and cargo of a ship whether it is a coastal vessel or is bound for distant ports. Man, it is affirmed, appears to be bound for more distant seas. In a universe that is reasonable, human personality will not be cast aside lightly. Finally, it is said that immortality is a demand of man's moral life and is necessary for the conservation of values. Man's deep-seated moral optimism and his sense of moral responsibility imply immortality. This outlook is so deeply rooted in man's nature that even great tragedies do not blot it out completely. At the time of the death of his wife, Alice Freeman Palmer, Professor Palmer of Harvard wrote these words: "Though no regrets are proper for the manner

of her death, who can contemplate the fact of it and not call the world irrational, if out of deference to a few particles of disordered matter it excludes so fair a spirit?" In the main this has been the conviction of the prophets, the poets, and the seers of the race, as well as of great masses of ordinary people. Immortality is a faith and a hope held by many.

THE KIND OF RELIGION WE NEED

Partly as a summary conclusion and partly as a statement of our conviction, we here make five statements concerning the kind of religion needed in our world today. The reader may think of other points he would like to add, or he may wish to revise or even to eliminate some of these statements.

In the first place, we need a religion that is intellectually respectable to modern men and women. Men may be scientific, intelligent, and religious at the same time. Fanaticism and dogmatism are perversions in religions, just as they are in politics. If obscurantism and conservatism appear to be more prevalent in religion, it is only because religion is so vital and personal to most men and women.

Students occasionally come to college with a pre-scientific view of religion and the universe. They may take courses in science and related fields and bring that area of their thinking up to date. They may take no courses in fields which would do the same thing for their thinking in the areas of religion and perhaps in philosophy. The result is likely to be that they come to the conclusion that religion is merely a pre-scientific attitude toward the universe. Such a conclusion is the result of a one-sided specialization. Religion, as we have suggested, must be thought out and felt deeply and carried into practice. We need a religion that appeals to the best in man's entire nature.

In the second place, we need a religion that unites men in a spirit of fellowship and that makes them better rather than worse. Religion at its highest and best leads in the direction of greater unity among men and helps to break down the artificial barriers that divide them. Religion is based in part upon the desire of men for a larger, fuller life and upon the notion of the intrinsic worth of human personality. While men are often bestial and loathsome, religious faith sees a bit of divinity in every human personality. Men are what they may become as well

as what they are at present. Men are probably not morally and spiritually mature until they think of the in-group, the group they mean when they say "we," "us," and "ours," as including all members of the human race.

In the third place, we need a religion that places the emphasis upon life and its needs. Unless a thing makes a genuine difference in life, it is not very important religiously. One of the basic needs of life is to grow. A religion that is to serve men must be growing and dynamic. Such a religion may be final in the sense that it can never be outgrown. Nothing that is true and good and beautiful can ever be alien to a genuine religion.

In the fourth place, we need a religion that attempts to transform the world and to make of it a better place in which men may live. A living religion cannot be resigned to the world as it is at present. When persons are sincerely concerned about the welfare of others, they are compelled to give attention to the social, economic, and political conditions in the midst of which they live. Personal reformation and social reconstruction are two sides of the one problem of building a better world.

Finally, a mature religion must link men intellectually and emotionally, to that in the world which is "life-giving, truth-revealing, beauty-making, and personality-producing."¹ There is an upward urge that is seen wherever love conquers hate or wherever good will, justice, courage, and knowledge overcome strife, injustice, cowardice, and ignorance. It is seen wherever men co-operate in the creation of values. In a multitude of different forms, there is a power urging and beckoning human life in the direction of the higher. From a religious point of view, men may be co-workers with a creative good will, or with God. God is not a distant being. "In Him we live and move and have our being."

¹ Robert Russell Wicks, *The Reason for Living*, p. 72. Charles Scribner's Sons, New York, 1934.

»»» QUESTIONS AND PROJECTS «««

1. How do you explain the fact that most men in the world are religious?
2. State as clearly as you can why religion needs support from philosophy. Do not confine your answer to the suggestions made in this chapter.
3. In your opinion, what part do the following play in religion: the church, scriptures, ritual, prayer, worship?
4. What is the relation between ethics and religion? Can they develop separately without loss? See *Essays in Philosophy*, edited by Thomas V. Smith and William K. Wright, "The Relation between Morality and Religion," pp. 61-82 (Open Court Publishing Company, Chicago, 1929); Harold H. Titus, *Ethics for Today*, pp. 451-455 (American Book Company, 1936).
5. State clearly the main points of emphasis in the Roman Catholic philosophy of religion, in Protestant Fundamentalism, in Protestant Liberalism, or Modernism, and in Judaism. See Edwin A. Burt, *Types of Religious Philosophy*, Chapters III, IV, VII, VIII (Harper and Brothers, 1939); Horace T. Houf, *What Religion Is and Does*, revised edition, Chapter XV, "The Religion of the Jews" (Harper and Brothers, 1945).
6. What are some of the current trends in the interpretation of religion? See Edwin A. Burt, *Types of Religious Philosophy*, pp. 433ff.; Henry N. Wieman and Bernard E. Meland, *American Philosophies of Religion*, pp. 309ff. (Willett, Clark and Company, Chicago, 1936); Henry Sloan Coffin, *Religion Yesterday and Today* (Abingdon-Cokesbury Press, Nashville, Tenn., 1940).

Belief in God

Belief in God has been widespread and persistent in the human race. In some form it has occupied a central place in religious faith and practice. Man feels a sense of dependence upon that which is beyond him. He feels that out of the creative depths of life and the world there is a voice which speaks and a heart which cares. William James speaks of a "More" which man feels about him and to which he responds in worship and in prayer. The sense of dependence may take many forms, depending upon the stage of intellectual and cultural development of the individual or the group. In the practice of the illiterate hill man who smears a stone with butter in order to appease his god, of the woman who asks the forest god to heal her sick child, of the Moham-medan who kneels and prays at the sunset hour, and of the sincere worshipers who offer their prayers in churches and cathedrals — in all these there is a similar faith and response. Beyond the noises of rival creeds and the differences of forms, ideals, and racial backgrounds, men gain a sense of companionship and an assurance that there is "that which" hears and responds.¹

In considering the problem of belief in God three things should be kept in mind. First, there is a difference between God and the idea of God. If a God exists, he would be God the reality, the sustainer and intelligence of the universe. Then there are the numerous ideas that men hold of him. These ideas vary and change and are often inconsistent. Men deal in symbols in every field. Symbols are bound to change as men grow in intelligence and knowledge and alter their outlook. Second, men were worshipping a God long before doctrines and problems of God arose.

¹ See Henry Fielding, *The Hearts of Men*, third edition revised, pp. 310-311. Hurst and Blackett, Ltd., London, 1904.

When man discovered other groups with different ideas of God, the question arose as to which ideas, if any, were right. Also, with the growth of knowledge the older conceptions became inadequate. Thinking men were forced to defend the older views, to modify them, or to give them up. Third, no view of God is either final or adequate. Our knowledge is growing and partial. We cannot adequately explain or define life or man. Man finds it difficult to express satisfactorily some of his deepest convictions.

OBSTACLES TO BELIEF IN GOD

1. The prevalence of evil and pain in our world has been a great obstacle to religious faith. Evil has been called "the atheistic fact." "How," some persons ask, "can we hold to the existence of a good and loving God who is all-powerful and available for human need when there is so much evil and suffering in the world?" Nature is cruel, it is said, or at best neutral. There is much physical pain and suffering due especially to sickness and disease. There is mental agony due to such things as fear and worry and the mental disorders. There is suffering due to human ignorance, selfishness, and perversity. There are the social evils — poverty, depressions, wars, and the like. Finally, there are the natural evils — cyclones, earthquakes, floods, pestilences, and so on.¹ The world seems immoral because the innocent frequently suffer for the deeds of evil men.

We must admit that pain, suffering, and evil are not imaginary or trivial or a hidden form of good. They are real and serious. There is no neat and easy answer to the problem of evil. However, a number of things may be pointed out for consideration. Much suffering is caused directly by man and is due in part to his freedom of choice. Given a person with some freedom in a world of natural law, the possibility of evil is always present, with its dire consequences. Education and training in self-discipline may eliminate some of these evils. We are making some progress in eliminating human diseases. The fact that we are bound up with other persons in human society brings some disadvantages and suffering, as well as many advantages. We are slowly discovering nature's ways, and we can avoid or guard against some

¹ See W. Macneile Dixon, *The Human Situation*, The Gifford Lectures 1935-1937, Part I. Longmans, Green and Company, New York, 1937.

of her evils, like earthquakes and floods. Some evils are the price we pay for being free men in a world of natural law.

Professor G. T. W. Patrick tells us that there are grounds for believing that the presence of evil does not justify any indictment of nature or of God.¹ After calling our attention to the large demands we make upon life, he says that if we think of the world in terms of growth our difficulties begin to disappear. In the process of the realization of values, as higher levels are reached, the lower levels become evils. Whenever men discover some better ways of doing things, the older or earlier ways become evils. The virtues of one age may be the vices of the next. Evil is something to be overcome, eliminated, or transformed. A good world seems to require some human freedom, some struggle or obstacles to be overcome, and dependable laws. Some resistance — rather than a life of ease — is conducive to growth and progress; but these conditions permit evil as well as good.

2. Belief in God is said by some persons to be “unscientific” and merely the result of “wishful thinking.” They say, “Get rid of the illusion that there is any reality of this kind and face the facts.” Such persons may point to the rise of the mechanistic interpretations of the physical universe and their application to the area of life and the realm of mind and the self. When the religious person protests and says that these views are false because belief in God is functioning in his life and in the lives of others, the critic replies that the belief is comforting and encouraging and that this is why it persists. The belief survives, the critic insists, not because it is true but because it is false. It is wishful thinking, or a defense mechanism.

Let us analyze this argument. We may admit at once that religion is sometimes used as an escape, but many other things are used as a means of escape — art, poetry, novels, alcohol, and even science. All achievements, in fact, are due to some extent to human wishes. A thing is neither true nor false because persons wish it to be true. Where wishful thinking leads a person to “read in” what is not there, it is a dangerous thing. “Reading out” is equally dangerous. This argument against belief in God is as strong or as weak as the world view of materialism or mechanistic naturalism upon which it is based. Since we have already discussed these views, we shall not elaborate upon them at this point.

¹ See George T. W. Patrick, *Introduction to Philosophy*, revised edition, pp. 403–405. Houghton Mifflin Company, Boston, 1935.

Man's wishes and aspirations may be illusions or they may be man's realization of his own possibilities. Man's belief in God may be a response to stimuli or to a reality in the universe with which man may come into fellowship, and through which man's highest possibilities are achieved.

WHAT IS THE NATURE OF GOD?

Conceptions of God have been many and varied. In the last chapter we saw how the idea of God has changed with the development of human knowledge and civilization. This development is still going on. God may be "the same yesterday, today, and forever" but ideas of him in the minds of men certainly do change. Leaving out of consideration the ideas of God set forth by various theologians, by the numerous religious sects, and by some scientists, we are left with scores of ideas of God set forth by various philosophers. There is the God of the various schools of idealism. The monistic idealists have thought of him as universal Mind or Spirit or as the Absolute. He is the perfect all-inclusive Reality.¹ There are the views of the personal idealists who may think of God as personal and finite. Then there are the conceptions set forth by such pragmatists as William James and by various realists. There are numerous ideas of God centering around the notion of emergent evolution.² Some of these conceptions of God have been mentioned in our consideration of the various types of philosophy.

The ideas of God prevalent in Western civilization have been influenced by three main sources and points of view. The first is the Hebrew, or Jewish, conception of God. God is the creator of the universe, the king and judge, the lawgiver, the superperson who orders persons and things by his personal will. He is a sovereign who dwells apart. He demands righteousness and justice, and he rewards or punishes his subjects according to their deeds. This conception of God is anthropomorphic in that it pictures God as a great person.

The second source of our conception of God is Jesus of Nazareth and the New Testament writers. Jesus carries on the Hebrew outlook but sets forth a view of God that is more personal and intimate. Jesus and the New Testament writers assume God.

¹ See the views of Hegel, F. H. Bradley, B. Bosanquet, and Josiah Royce.

² See the views of L. Morgan, S. Alexander, E. G. Spaulding, and J. E. Boodin.

They say much about his nature, but they do not give arguments for their belief. God is a personal being with whom men may have fellowship and communion. The names most frequently used to describe him are "Father," "Spirit," and "Love": God is our Father; God is a Spirit; God is Love. God has established a moral order in the universe: "For whatsoever a man soweth, that shall he also reap."

The third source is the Greek conception of God. The Greeks asked, "What is the ultimate and abiding reality?" For them God is the substance or essence of things. He is the immutable absolute. For Aristotle, who profoundly influenced the Christian conception of God, God is "pure form." God is the uncreated creator of the universe. God is the intelligent, perfect, and transcendent Being.

The God of the Hebrews and of Jesus — the Bible of the Old and New Testaments — came into contact and then into union with the Greek ideas of substance. The resulting synthesis is the God of Christian theology and of the historic creedal statements. During the medieval period there was a tendency to think of the nature of God (his qualities or "attributes") as standing in contrast to the qualities and characters of human beings. Consequently, men thought of God in terms of his eternity, unity, omnipotence (all-powerfulness), omniscience (infinite knowledge), and omnipresence (presence in all places). Today, however, religious philosophy is likely to begin with an analysis of human nature and experience. There is an increasing tendency to think of God's nature and activity as being blended with the nature and activities of men rather than as standing outside in a realm beyond experience. God's activity and purpose include the co-operation of men as part of that purpose.

Today men recognize in human nature and in nature in general certain kinds of activity that make for health and happiness and for more and better life. They tend to say, "That is what we mean by the presence and nature of God." That is, men tend to transfer to a higher power, called God, those qualities which they feel are permanent and of real worth and upon which man is dependent. God is thus identified with whatever is producing the greatest good in life or in our world. From this point of view the nature of God may be stated in terms like the following:

1. God is immanent. Modern men find it difficult to think of God as apart from the universe. He is in the structure of the

universe, taking a vital part in its processes and in the lives of men. This view is to be distinguished from the older supernaturalism, which viewed God as operating from outside the natural order, as well as from pantheism, in which God and the universe are one. According to the doctrine of immanence, God is conceived as the principle of intelligence, purpose, and causation operating within the creative processes of the world.

2. *God is lawful and orderly.* As we study our world, we find an orderliness that is universal and dependable. We see an orderly development in the physical universe and in the realm of life. Some principle of organization or law appears to be present. Our view of God must be in harmony with the processes which we discover in our world.

3. *God is intelligent and purposeful.* The world lends itself to intelligent analysis and comprehension. Consequently, we may assume that mind plays a prominent part in its processes. While God may be more than personal, intelligent, and purposeful, we cannot assume that he is less.

4. *God is good and beneficent.* Belief in God represents the conviction on the part of men that there is an "eternal goodness." Whenever men have been confronted with what appeared to be a choice between God's goodness and power, they have been willing to limit his power rather than his goodness. God is felt to be struggling with us and for us. Furthermore, the character which man has attributed to God has always tended to represent the highest moral standards of the age. As men develop to higher stages of morality, earlier conceptions of the deity need to be revised.

WHY DO MEN BELIEVE IN GOD?

Belief in God is a conviction and a faith held by many people. There can be no final proof either of theism or of atheism. Many persons are anxious to know, however, whether such a belief is intellectually respectable in the light of modern knowledge. Let us indicate some of the reasons why many persons do hold such a belief.

In the first place, the belief in God has been part of the age-old tradition of the race. That, of course, does not prove it to be true. There has been a long line of testimony from the seers and the common folk of all nations and climes. The belief has been

set forth in prose and poetry, hymn and prayer, and especially in the lives of men and women. This belief in God has been subject to attacks both from individuals and from small groups, in ancient and in modern times. Atheism, however, has had little staying power. It has tended to take some of the morale and drive out of life and to lead to pessimism, cynicism, and a sense of futility. We might call this the historic or the pragmatic argument for a belief in God.

In the second place, men continue to believe in God, or come to that belief, because of inference or deduction from certain facts. The "arguments" or "reasons" for belief in God have come relatively late in the history of the race. There are four classical or historic arguments which can be presented briefly.

The cosmological argument is based on the principle of sufficient cause. The world is an effect; therefore it must have had a cause, outside itself, sufficient to account for its existence. There must be a cause of the series of causes which we experience. Thus we come to a First Cause or to a self-existent Being. The First Cause could not be material, since this would involve the qualitatively less being able to produce the qualitatively greater — an absurd notion. We are led then to a self-dependent entity or Spirit or God.

In the Aristotelian-Thomistic tradition, as represented by Catholic theologians, the cosmological argument for the existence of God has been given considerable emphasis. We must, it is affirmed, differentiate between the accidental and the essential features of reality, or between the temporary objects of experience and those that are permanent. Change presupposes a cause, and logically we must go back to an uncaused, self-existent cause or to self-existent Being. God is thus immanent in the universe of which he is the constitutive principle. God is the condition of the orderly development of the universe, as well as its permanent source or ground. "There exist in the world motion or change; beings and events newly brought into being; things which are and are capable of not being; things graded in degrees of perfection, whose perfection, which consists in being, is more or less limited, obscured, mingled with imperfection; irrational natures disposed towards an object or end, as is proved, not only by the complex system of the universe or the structure of living organisms, but even by the simple aptitude of every agent to produce its specific operation. To account for these various facts we are

compelled — for under pain of absurdity we are obliged to stop at an ultimate explanation of existence — to admit a cause which moves without being moved, causes without being caused, cannot lack existence, contains in its purity the perfection of which things partake in greater or less degree, possesses an intellect which is the final ground of all natures and the first principle of all things. Such a cause we term *God*; it is pure act, deriving its existence from itself (*a se*).”¹

David Hume and others have directed criticisms against this argument for belief in God. They ask, “What was the cause of the First Cause?” and they suggest that the series of causes may have had no beginning. This argument, however, is not just a temporal argument from effect to cause but an argument in the order of being.

The ontological argument for God was first set forth by Anselm in the Middle Ages. This argument attempts to prove the existence of God from the idea of God entertained by the human mind. We have, said Anselm, the idea of an absolutely perfect being. But existence is an attribute of perfection. If God were only in thought, then we could think of something greater than God. We could add existence to the idea and conceive of a being that was not merely thinkable but real. The ontological argument is considered weak and is given little emphasis today. We can think of all sorts of things — centaurs and Utopias, for example — that do not exist except in our imaginations.

The teleological argument, or the argument from design or purpose in the world, has been given more attention than the two preceding ones. The order and the progress in the universe disclose an immanent intelligence and purpose. Take, for example, the long process of development leading to the human brain and the mind of man. The process has produced minds which begin to understand the world, and it has produced thought and understanding. This is unintelligible unless the course of evolution is directed. The term *emergence* by itself is a good description but is no adequate explanation.

In discussing modern forms of the teleological argument, W. R. Matthews says: “The whole controversy between a religious and an atheistic theory of the universe might be summed up in the question, What is the environment? On the one hand, it is

¹ Jacques Maritain, *An Introduction to Philosophy*, translated by E. I. Watkin, p. 258. Sheed and Ward, London, 1932. Used by permission of the publishers.

possible to conceive the environment as merely 'nature,' a complex of elements of a non-mental kind; but if we do so, as we have seen, we can find no help from it in explaining the ideals by which man finds himself challenged and inspired. On the other hand, we may conceive the environment to be not only natural but spiritual and believe that we exist not simply as animals who are environed by a neutral 'nature' but as spirits who live and move in God. If we adopt this deeper conception of the environment we have an intelligible solution of our problem concerning ideals and values. Man's apprehension of his 'affinity with truth, goodness, and beauty' is indeed his response to the environment; and his struggle for spiritual life is, as he has always felt it to be, an effort to escape from shadows to the truth, to apprehend behind and within the lower environment which appears and passes that higher environment which is and abides."¹ . . . "When we dwell upon one aspect of the universe alone — the physical in abstraction from the mental and spiritual — man may appear dwarfed and insignificant in comparison with the stupendous frame of things; but when we refuse to be deceived by this abstraction and unite the two aspects, we are compelled, as I believe, to form a different estimate. Man, who knows and values and appreciates, is no alien in the universe. He is the revelation of its nature. In him the universe discloses itself in its real inner being — not as dead system but as living Spirit."²

The moral argument for belief in God is based on man's moral nature and his sense of values. The argument has been stated from a number of points of view. Two approaches may be mentioned very briefly, with a little more attention given to a third.

The first approach is based upon man's conscience, sense of obligation, or sense of duty. If man were merely an aspect of nature, a command to obey nature's ways or to depart from them would be meaningless. The sense of duty at times may even lead man to deny the will to live. Man's sense of duty implies a God as its source and guarantor.

Again, it is said that moral goodness and happiness ought to go together in a reasonable and just world. That is, the man who is morally good should be happy, and the evil man should be

¹ Walter R. Matthews, *The Purpose of God*, pp. 118–119. Charles Scribner's Sons, New York, 1936. Used by permission of the publishers.

² *Ibid.*, p. 127.

unhappy. Yet there is no just balancing, we observe. Therefore there must be a God who will eventually uphold intelligence, justice, and purity of motives.

A third form of the moral argument is based on the objectivity of values. Man and his values are part of the process of nature. Man and his moral standards come from the process of evolution, are an expression of it, and are an aid to survival and enrichment. In arguing for the objectivity of values and that our activities of appreciation are responses to an order of intrinsic meaning and value which is no less real than the order of physical events, H. W. Wright says, "The attributes of value, the permanent correlation of diverse qualities, the capacities for reorganization and adaptation, the intrinsic and expressive harmonies are features of existence no less actual and important than its strictly physical attributes."¹ He protests against the assumption that the earlier stages of evolution proceeded within the space-time frame only and not within the organizing unity of intelligence and value as well.

We have seen, first, that belief in God has been a part of the age-old tradition of the race; second, that there are a number of historic or classical arguments for such a belief. In the third place, men believe in God and feel that they know him by way of personal experience. While some men may believe in God because of arguments or intellectual evidence, it is hard to convince persons by that avenue alone. Many persons are aware of a sense of "lift" or "pull" in various experiences of life. For others it may appear as a sense of dependence or of companionship. When knowledge comes by description or by argument, men are likely to say, "I think." When knowledge comes by acquaintance or experience, they are more likely to have conviction and to say, "I know."

For some persons the sense of "lift" or "pull" or companionship comes most definitely when they are in contact with the order and beauty of nature. The poetry of the race, especially, abounds in testimony to this effect. Poems like Bliss Carman's "Vestigia" and Helen Hoyt's "Discovery" will make this clear. Persons have felt that they saw evidence of God in "His footprint in the sod" or in the sunset, the stars, the growing life, and the autumn leaves.

For others the "more" or the plus in life's experiences may

¹ Henry Wilkes Wright, *The Religious Response*. Harper and Brothers, New York, 1929.

come through contact and experiences with other persons or groups. Here is one of thousands of examples of similar experiences which appear in print: "One of the most impressive religious experiences I have ever had came to me . . . in a New York theater, where John Drinkwater's *Abraham Lincoln* was then playing. As scene succeeded scene, and the soul of Lincoln was more and more completely revealed — triumphing over his own misgivings, forsaking ease for the sake of the well-being of all, unflinching in his opposition to evil, but overcoming evil with compassion, giving his life at length as a ransom for many — I found myself at last looking upon the stage with the eyes of a worshiper, and I said to myself: '*This, this is God.*' Nor was I a solitary worshiper. Consciously or unconsciously, each person there worshiped God that evening. I felt it in the applause, and in the still more significant silences; and the fellowship of adoration added greatly to the depth of it for all of us; for it helped us to feel that this was not merely *my* God but *our* God — yes, the God of all mankind.

"Now what do I mean by saying I met God in Drinkwater's *Lincoln*? Well, what did I mean at the time? . . . I got a double impression of moral nobility in the highest degree, and of irresistible power. In the first place, Lincoln humbled me as the ideal always humbles the actual; . . . 'This is the spirit that is bound to win,' I said to myself. I saw it triumphing before my eyes. . . . I saw it hushing a miscellaneous New York audience into reverence. . . . I thought of the triumphs of many folk, ordinary and extraordinary, missionaries, reformers, plain people, in whom this spirit finds more or less imperfect embodiment, and I said to myself: 'It's irresistible; it's almighty. No one can stop it. Nail it to a cross and it smiles at you and continues. Sooner or later, it is going to capture the last redoubt, and rule in the hearts of *all*.'

"I pressed on — rashly, perhaps — and it began to rain metaphysics, thick and fast. 'The spirit of Lincoln,' I said in my haste, '*must* triumph. The nature of things is such — *human* nature, of course, but nature in general, too. The universe is built that way; that's why the universe is on his side.'"¹

For still others or even for the same persons the sense of the reality of God comes through meditation and prayer. Prayer

¹ Walter Marshall Horton, *A Psychological Approach to Theology*, pp. 209–212. Harper and Brothers, New York, 1932. Used by permission of the publishers.

arises from felt needs on the part of the person. It has been persistent and central throughout the history of religions, although prayer has taken a great many forms. With the development of religion there has been less emphasis upon petition and more upon confession, communion, and meditation. Prayer may be private or public, as in group worship.

While it is possible for the critic to say that all "religious experiences" are imaginary or illusionary, another explanation is to affirm that men live in the kind of universe that calls forth such responses. All development, we are told, takes place in response to stimuli. The eye is the response of sensitive protoplasm to light waves; the ear, to sound waves. The mental, moral, and religious development of man is likewise a response. From this point of view, men are religious because of the nature of human nature and the nature of the universe in which they live. Men live in a person-producing universe. If men use the term *God* for that in the universe which is producing life, health, good will, goodness, beauty, truth, and personality, then there seems to be little doubt about the existence of God.

WHAT DIFFERENCE DOES IT MAKE?

Does belief in God make any real difference in human affairs — in man's personal life or in social relationships? In the first place, belief in God enables man to explain what otherwise is unexplained or is explained in a less satisfactory manner. From this point of view it satisfies an intellectual demand. Man wants to know whether he lives in a world that is composed of material substances and mechanical forces alone or in a world in which the characteristics of personality, intelligence, moral purpose, or creative good will are structurally present. He wants to know whether he is an "infant crying in the night" with "no language but a cry" or whether what is "highest in spirit" is also "deepest in nature." This is one of the most momentous questions man can face.

The idea of God or the sense of the divine presence in human affairs not only has been persistent and widespread in history but has gripped men and compelled them at times to follow a course of action counter to powerful natural passions and desires. It has sometimes been more compelling than fear, hunger, sex, and the will to live. Tyrants have not been able to stamp it out.

Every craving, desire, or outreach has its fulfillment or possibility of realization. This is true in the case of thirst, hunger, love, and sex. Is this feeling of dependence alone deceptive? Most persons cannot think so. In the crises of life, few persons give a negative answer. While there are problems growing out of a belief in God, there appear to be more problems involved in a denial of such belief.

In the second place, persons have to have something great beyond themselves for which to live or there is a lowered enthusiasm about life. If they do not worship something high — the great values of life or God — they are going to worship something of lesser value. Recent history seems to indicate that the “something less” is likely to be money, machines, the state, race or blood, or even themselves. A great loyalty can give life meaning and a sense of direction or integration.

Lack of belief in God and in a meaningful universe is likely to express itself in a lowered enthusiasm for life. “Atheism,” says W. P. Montague, “leads not to badness but only to an incurable sadness and loneliness.”¹ It tends to take morale and drive from life and to lead to pessimism and a sense of futility. If the cosmos is not concerned about loyalty, truth, and goodness, why should we be too much concerned?

In the third place, belief in God has had a steadying effect upon life and has contributed to mental health and personal stability. In this connection the famous statement by Psychiatrist C. Jung is opportune: “Among all my patients in the second half of life — that is to say, over thirty-five — there has not been one whose problem in the last resort was not that of finding a religious outlook on life.” His patients had become mentally ill because they had lost that integration “which the living religions of every age have given to their followers.”

In the fourth place, belief in God has implications for our personal lives as well as for society. It gives us a point of reference beyond ourselves on the basis of which we are able to judge our own lives and such social institutions as the state. Belief in God gives significance and worth to personal life. It also tends to check the natural desire of man toward pride or egotism, in which he tends to set himself up as God.

¹ William Pepperell Montague, *Belief Unbound*, p. 67. Yale University Press, 1930.

»» QUESTIONS AND PROJECTS ««

1. Do you agree or disagree with Professor Montague when he says that the question of the existence of God and of religious truth or falsity is one of the most momentous issues we face because it is the issue whether the things we care for most are at the mercy of the things we care for least? (See *Belief Unbound*, pp. 6-7.)
2. Are naturalism (of the nontheistic types) and optimism "steeds galloping in opposite directions"? What is the effect of a rejection of cosmic support or belief in God upon morale? Mr. Chesterton is reported to have remarked that if we are to be truly gay, we must believe that there is some eternal gaiety in the nature of things. Another person asks, "Why be brave in a stupid cause? Why, then, be brave in a cosmic cause that is utterly without significance?" How would you answer these questions?
3. In the play *R.U.R.*, Karel Capek pictures a manufacturer making mechanical men or robots who do the work of the world. The robots do all sorts of things, and they are very efficient. However, they get into all kinds of trouble and destroy their creators and themselves. The play ends with the manufacturer trying to discover the secret of life and to make creatures that will feel pain. Is it true that the possibility of pain and suffering play an essential part in life?
4. Do you agree with the statement sometimes made that the big question is not why there is suffering and trouble but how we are going to meet it or use it when it comes? Some persons become bitter and are crushed, others become bigger and grow to be stronger persons.
5. Is it possible for men to think of God as both transcendent and immanent and be consistent in their views? Explain why you think this is or is not possible.
6. Comment on the following statements and tell to what extent you think that they can be accepted:
 - (1) "The man who refuses to face facts doesn't believe in God."
 - (2) "A little philosophy inclineth man's mind to atheism, but depth in philosophy bringeth man's mind about to religion." (Francis Bacon)
 - (3) "Originally God made man in his image, and man has ever since returned the compliment." (Voltaire)
 - (4) "The God of any group of people is the object of their highest loyalty, adoration, allegiance, awe, reverence, devotion." (Durant Drake)

»» PART FIVE ««

THE SOCIAL SCENE

The Philosophy of History

Change is one of the characteristic facts of our age. All human society is subject to growth and to change, but Western civilization has been especially fluid or dynamic. The world-shaking events of recent decades seem to indicate that "mankind is now in one of its rare moods of shifting its outlook" and is again on the march.

CHANGES — IN WHAT DIRECTION?

Recently changes have come with a rush. Men are fearful because they are not certain in what direction these changes are leading us. Past generations have assumed that each generation would live amid conditions similar to those which surrounded the lives of their ancestors. Professor A. N. Whitehead tells us that we are living in the "first period of human history for which this assumption is false."¹ He calls our attention to the shortening of the time-span of significant changes. Once these changes were hardly perceptible and covered long periods of time. Once they depended largely upon some slow development of physical nature, such as a gradual change of climate, which might take thousands of years. They might have been the result of some slowly developing population pressure or the effect of some infrequent invention. Recently, however, significant changes have been taking place within the life span of single individuals. This creates new problems and difficulties and calls for new insight and understanding.

¹ Alfred N. Whitehead, *Adventures of Ideas*, p. 117. The Macmillan Company, New York, 1933.

Granted the fact of change, certain questions arise: In what direction is the change pointing? Are we moving backward or forward? Is it decline or renaissance? Since the pages of history are strewn with the wrecks of past civilizations, it is appropriate for us to ask questions concerning the meaning of history and the relation between specific events and the course of history. How are we to interpret the development of man as an historical and social being? Are there ends which are being achieved and values which are being built up? Is there progress in the direction of rationality, liberty, individuality, justice, and human welfare? Is there pattern, order, a plot, a theme, or development which we can discern? Books on the philosophy of history and of civilization have been appearing with surprising frequency, especially in recent decades. Let us examine a few of the historical interpretations and then outline a few of the contemporary philosophies of history.

THE DENIAL OF MEANING IN HISTORY

Perhaps human history is a meaningless and accidental venture — “a tale told by an idiot, full of sound and fury, signifying nothing.” Those who deny that there is any meaning, pattern, or purpose in history are the *historical nihilists*. Those who assert that we do not know whether or not there is pattern or purpose in history are the *historical skeptics*. Those who claim that any pattern which seems to be present in historical development is not actually present in history but is merely a creation of human minds or imaginations are the *historical subjectivists*.

In his essay “A Free Man’s Worship,” written some years ago, Bertrand Russell said that “man is the product of causes which had no prevision of the end they were achieving.”¹ The human venture, he said, is the outcome of “accidental collocations of atoms.” Consequently the whole edifice of man’s achievement must eventually be “buried beneath the debris of a universe in ruins.” This, however, is not the prevalent view of history and civilization, among either philosophers or other students of human society.²

¹ Bertrand Russell, *Mysticism and Logic, and Other Essays*, p. 47. Longmans, Green and Company, New York, 1918.

² For other illustrations of pessimistic interpretations, see John Herman Randall, Jr., *The Making of the Modern Mind*, revised edition, pp. 580ff. Houghton Mifflin Company, Boston, 1940.

PHILOSOPHIES OF HISTORY BEFORE 1900

If there is some meaning or pattern in history, what is it? Is there one factor or are there many causative factors at work? Five interpretations of history and the course of civilization have been selected for presentation in this section. The first two represent the characteristic viewpoints of the ancient world and the medieval world. The following three represent interpretations of individuals in the eighteenth and the nineteenth century whose views have been influential. The succeeding section examines some recent or contemporary philosophies of history.

THE THEORY OF WORLD-CYCLES

A theory of history quite widely held in ancient times, especially among the Greeks and the Romans, was the theory of world-cycles. A veneration of antiquity, a "golden age" of heroes, seemed natural to early man. Many Greek thinkers believed that they were living in one of the periods of decline, a period of degeneration and decay following a glorious Golden Age. The Stoics accepted the theory of cycles, and they appear to have been responsible for passing it on to the Romans, where it is reflected in the writings of Marcus Aurelius and Seneca. Seneca believed that human life is periodically destroyed and that each new cycle begins with a golden age of innocence and simplicity. The arts, inventions, and later the luxuries lead to vice and deterioration. Fate, or "Moirá" — the fixed order of the universe — must be accepted with resignation.

The theory of world-cycles with its periodic degeneration may explain in part why Greek science did so little to transform the conditions of the world of that time. The theory of cycles was revived in the nineteenth century by Nietzsche and early in the twentieth century by Oswald Spengler. Spengler's view is considered later as a modern example of the theory of cycles.

THE PROVIDENTIAL VIEW OF HISTORY

According to this approach, history and civilization are viewed as under the control of a divine purpose. The providential view was held by the early Hebrews and by the Christians. It was re-emphasized by Augustine and the Medieval Church leaders, and in one form or another it is held by numerous persons today. In the beginning God, who had existed from all eternity, created

the heavens and the earth and the first man and woman. They were placed in a garden where they could occasionally see and talk with God. Through the disobedience of the first pair, evil entered the race, and it was transmitted to all members of humanity to affect the course of history. Though God and man co-operated in the development of civilization, the world and man's life became the scene of a constant struggle between the powers of good and of evil. Man through his own strength alone was unable to overcome the power of sin and death. When man seemed about to succumb, God saved Noah from the flood, called Moses to help deliver the children of Israel from their captivity in Egypt, and sent numerous prophets and leaders to call them to righteousness.

As time went on and disappointments increased, the Jews envisaged help by God either directly or through one whom God would anoint. At least two types of Messianic hope arose. One view thought of an earthly kingdom ruled over by a descendant of David. The other view conceived of an angelic deliverer from above who would bring this world order to an end and usher in a new age of righteousness. While public worship and private devotions continued and were important, the present was thought to be a kind of interim in preparation for a glorious age to come.

The early Christians accepted the Hebrew conception of history in its relation to God. They had become separated from the Jewish community through their acceptance of Jesus of Nazareth as the Messiah. The sonship of the crucified and risen Lord was, for them, an event of cosmic significance in the history of the world. Since the new order of society was at hand, through the imminent coming of the Lord, there was little interest in the affairs of the present world. Why marry or why raise questions about slavery? Deliverance was thought to be at hand.

As time went on, however, the church introduced standards and controls. Creeds and doctrines arose and were elaborated. To the Jewish scriptures were added the distinctively Christian gospels and letters. The church grew in organization and authority and came to be regarded as a permanent institution. The church passed from being a persecuted institution to being a recognized one. Expectation of the end of the world diminished, and more attention was directed toward society and world affairs. Christians became interested in permeating the various callings and institutions of society with the spirit and ideals of the

Christian life. Christians took a new interest in history, and before long Christian bishops were bold enough to dictate the policies of secular rulers. Leaders of church and of state thought of themselves as instruments of a divine purpose.

In his *City of God*, Augustine sets forth in comprehensive fashion the providential view of history as the revelation of God's purpose. He explains the drama of salvation from the creation through the fall and the redemptive process to the end of the world and eternal punishment or man's destiny in heaven. There are two cities existing side by side in the world. The City of God, the "Divine City," includes all the souls predestined to be saved — those saintly men of old, as well as the faithful individuals of today, who live close to God. The church is the visible representation of the City of God on earth. The City of Satan, the "Earthly City," includes those who are devoted to purely worldly pursuits and who are impious and corrupt. History is the scene of the conflict between the two cities, these two moralities, these two orders of life, which are diametrically opposed. On the day of reckoning, when the Lord appears, the blessed will enter to their just reward and the wicked will go to their just punishment.

Augustine thought that God was at work in human affairs and that society was moving in the direction of righteousness and peace. He could not think that God would be defeated.¹ Many thinkers during the Middle Ages, however, thought of the course of history as existing only for the purpose of attaining the salvation and happiness of a part of mankind in another world. They were not especially concerned about gradual betterment in this world. Instead of a belief in progress, they thought in terms of degeneration from an original state of perfection.

This providential view of history has remained the prevalent view of Western Christendom down to the present. In some form it is the orthodox view found among Roman Catholics and Protestants. While it is pre-eminently God who has made history, there has been a tendency to give man a larger share of responsibility for shaping the events of the world. God may be thought of as expressing himself through occasional and unique manifestations of his presence or as being constantly present in history and in nature. God may manifest himself through the spiritual geniuses of the race, within the soul of the responsive

¹ See Kenneth Scott Latourette, *The First Five Centuries*, Vol. I of *History of the Expansion of Christianity*, pp. 254-255. Harper and Brothers, New York, 1937.

individual, or through the processes of the human mind and physical nature.

ROUSSEAU — THE CORRUPTING INFLUENCE OF CIVILIZATION

In 1750 the Academy at Dijon, France, gave a prize for the best essay on the question whether the development of the sciences and the arts had contributed to the improvement of the morals. The prize went to Jean Jacques Rousseau (1712-1778) who attempted to show that mankind deteriorates as civilization advances. The soul of man is corrupted as the sciences and the arts become more perfect. Misery has increased as man has departed from the simpler primitive conditions.

Rousseau felt that human nature is good, yet men and human society are evil. While he stressed the corrupting influence of civilization on the masses, he did not, as is so often asserted, advocate a return to primitive conditions. He did propose a new type of education and a new social environment that would develop the natural capacities of men into something admirable. He stressed equality, democracy, and a fundamental change in education and social institutions.¹

HISTORY AS THE EXPRESSION OF REASON OR SPIRIT

By the eighteenth century reason was beginning to replace *faith* as the central idea in human explanations. This is seen in Kant's *Idea of Universal History*, published in 1784, and in many of Kant's successors, especially Hegel, whose *Philosophy of History* was published posthumously in 1837, six years after Hegel's death. The latter work, an elaborate metaphysics of history in terms of monistic idealism, will serve as an example of this point of view.

Hegel's general thesis is that reality is spirit manifesting itself in nature, in human history, and in the actions of man. History is the development of spirit which expresses itself through successive stages. When spirit reaches the stage of rational freedom, it is fully conscious. World history does not belong to the realm of matter but to the realm of spirit. Whereas the essence of matter is gravity, the essence of spirit is rational freedom. Reason in history, rather than providential interventions, marks the transition from Augustine and the Middle Ages to Hegel.

¹ Among Rousseau's more important works are *Émile*, 1762, which gives his theory of education; *Social Contract*, 1762; and his *Confessions*, published posthumously.

A note regarding Hegel's logical and historical method is necessary. The historical process proceeds from level to level through the dialectic movement from thesis to antithesis to synthesis. All change, all thinking, and all life proceed from affirmation to denial, or from claim and counterclaim to a new integration which later develops a new opposition; and so the movement continues. Development takes place in "waltz-time," so to speak, with its beat of "one, two, three; one, two, three," instead of in one straight or smooth line. Each finite thing or event tends to generate its opposite; then the opposites tend to be absorbed into some higher unity.

Hegel views the great men of history as the spirit's vehicles. Individuals and groups find their fulfillment in society as expressed in the state. The state is society organized so as to make law possible. Without physical law or law in nature, we would be reduced to mere guesswork and would be unable to act consistently. When we pass from nature to society, we pass from the realm of law to that of freedom. Statutory law and morality are both self-imposed limitations which make action and freedom possible. Spirit, as the capacity to act, requires freedom under law. History thus begins and ends with the state, which is an expression of the Divine Idea on earth. Progress consists in successive transformations of the state, as the World Spirit is more and more completely embodied in its activity and organization.

Human history, according to Hegel, begins in Asia and has been moving westward with the sun. In the early Oriental kingdoms there was no individual freedom. Authority and obedience to the will of the ruler was enforced. The second or intermediate epoch in history is represented by Greece and Rome. In this stage there is some recognition of the rights and duties of the person. Some men are free and others are slaves. Concepts of justice, equity, and law are emerging slowly. The third and final stage of history begins with Christianity and is seen in Western Europe. There is a tension between the inner and the outer, between the particular and the universal. The individual resists the pressure of the objective and external and often seeks escape in some subjective world of his own creation. The universal and the particular unite: religiously, in the Incarnation, where the divine and the human meet; socially and politically, in a social organization based on reason and morality, that is, in the modern state. The individual voluntarily identifies his own will

with that of a supreme individual, the monarch. There is, then, no further conflict between the inner and the outer, the particular and the universal, the individual and society, for a synthesis has taken place. The synthesis which begins with the rise of Christianity is completed in Germanic culture. Hegel's nationalism rather than the demands of reason led him to many of these conclusions regarding the place of his own nation in history.

THE ECONOMIC INTERPRETATION OF HISTORY

During the nineteenth century and the first half of the twentieth century, various explanations of history were set forth. Many of them were monistic in the sense that they stressed some one aspect or factor as the cause of historical changes. Most of them were naturalistic in that they explained these changes in terms of resident forces observed in the world about us. Among the factors selected are: the physical environment (Buckle), the climatic hypothesis (Huntington), intellectual causes (Auguste Comte), the biological struggle for existence (Darwin), and psychical forces (Wundt). The economic interpretation of history has had the most widespread influence during the last one hundred years.

In 1848 Karl Marx and Friedrich Engels published *The Communist Manifesto*, a document which has been the inspiration of many revolutionary movements. Later Marx published his great work *Capital*, the first volume of which appeared in 1867 and the second volume some years later. The philosophy of Marx and Engels is usually called dialectical materialism. In Chapter XV, page 226, we pointed out that it is a philosophy of social change. For Marx, economic factors are central in determining man's historical development. History is interpreted as a record of class conflict in which the means of production, distribution, and exchange exert a determining influence upon social progress. Changes in the economic structure of society cause changes in class relations, and these in turn influence the political, social, moral, and religious customs and traditions. Let us consider briefly the stages of history according to this point of view.

Five types of productive system can be distinguished. Four of them have appeared in succession in human society. The fifth is forecast for the immediate future or is now taking form. The first is the system of primitive communism. It is the first

stage of man characterized by the communal ownership of property, by peaceful relations, and by a lack of technology. The second stage is the ancient or slave system of production. It is marked by the rise of private property which comes into existence when agriculture and cattle raising tend to surpass hunting as a means of livelihood. Soon aristocratic, upper-class groups stand over against a larger body of slaves. Conflict of interest appears as the minority groups gain control of the means of support. The third stage is characterized by military feudal groups in control over a large number of serfs. The feudal nobles appropriate the surplus products from the serfs, who eke out a bare living.

The bourgeois or capitalist system of production comes in with the increase of commerce and inventions and the division of labor. This is the fourth stage. The factory system creates the industrial capitalist who owns and controls the instruments of production. The worker has only his labor power. He is forced to offer himself for hire. Just as the hand mill creates a society with a feudal structure, the steam engine creates a society with the capitalist employer.

The history of society since the breakup of primitive communal society is a history of class struggle. During the last one hundred years industrial capitalism has played a revolutionary role. With its doctrine of self-interest, it has split society into two opposed groups: the bourgeois or owning group, and the proletarian workers. Since the owning class controls the key institutions of society and will permit no thoroughgoing changes by peaceful means, violence is the only way out.

After the revolution, according to dialectical materialism or communist philosophy, there are two stages of society. There is, first, a transitional stage, the period of the dictatorship of the proletariat or working class. During this interval, revolutionary social changes are made and classes are abolished through the elimination of private ownership of the means of production, of distribution, and of exchange. The second stage after the revolution is the fifth and final stage of society. It is the "classless society," or pure communism. In this era, conflicts and exploitation will end, according to the theory, and all men and women will be assured of the means to a good life. The state will cease to be a class instrument. The dialectic will cease to operate in society with the elimination of classes. There is sup-

posed to be freedom, equality, peace, and abundance. Society will realize the formula: "From each according to his ability, to each according to his need." Dialectical materialism is both a theory of nature and a revolutionary social program.

RECENT PHILOSOPHIES OF HISTORY

At the beginning of the twentieth century, Western civilization seemed to most persons to be secure and dominant. There was great faith in science, in democracy, and in human progress. Two wars in a generation, however, have done much to undermine that confidence. For some decades a number of students of history have been telling us that we are in a period of decline in civilization. The first of four philosophies of history, which we are now to consider, is the outstanding representative of that point of view. The other three present a more hopeful view of the future.

SPENGLER AND THE DECLINE OF THE WEST

Oswald Spengler was an unknown teacher of mathematics in Munich, Germany, until he startled the intellectual world with his *Decline of the West*, a two-volume work completed in 1917 and published after the close of World War I.¹ Recently there has been a renewed interest in Spengler and a growing fear that he may be right. After examining many past cultures — Egyptian, Chinese, Hindu, classical Greek and Roman, and Arabian — he turns to contemporary Western culture which, he says, is now in a period of decline from its great creative heights.

For Spengler the term *culture* is used to include the institutions and productions of a people in their entire historical development. The term *civilization* is reserved for the declining stage of that culture. This declining stage is a period of decay, senility, and skepticism. A culture is an organism like a flower or an animal, in that it grows and decays. It has physiological limits; it is born, lives, and dies. Like any organism, it is subject to a natural term of years. There is no continuous and universal world culture. History is pluralistic, or made up of many cultures. There is no single straight line of development.

¹ See Oswald Spengler, *The Decline of the West* (Alfred A. Knopf, New York, 1939); *Today and Destiny: Vital Excerpts from The Decline of the West*, arranged with an Introduction and Commentary by Edwin F. Dakin (Alfred A. Knopf, 1940).

Each culture passes through four fairly distinct stages. We may think of these stages as analogous to the seasons or to the stages in the life of a person. There is, first, spring or childhood, the time of the germination of life and early growth. In the culture this may be the time of settlement and conquest. People live close to the soil. There is, second, summer blossoming or youth. It is the prime of life and a time of ripening consciousness. In the West it appears with the period of the Renaissance. There is, third, autumnal fading, the time of ripest maturity, which is soon to lead into decline. It is marked by the rise of cities and commerce. Science and philosophy, Spengler says, begin to overshadow religion and to sow the seeds of skepticism and revolution. Then, finally, comes winter's freeze, or old age and death, when quality is replaced by quantity, beauty by utility, and the war lords come to inherit the earth.

In the critical stage of decline, we witness the following trends and characteristics: (1) There rise great cities in which life becomes artificial, fast, and shallow. The cities whirl with machines and are crowded with workers devoid of property and middle-class business groups devoid of culture. (2) There develops the dictatorship of money, which is another sign of decay. Distinction tends to pass to the men of wealth. They do not create; they merely accumulate and exchange. Money destroys first the intellect and then democracy. The body prospers, but the soul decays. (3) Man becomes the slave of the machine and the industrial system. After creating "the entrepreneur, the engineer, and the factory-worker," the machine "forces the entrepreneur not less than the workman to obedience. Both become slaves, and not masters, of the machine, that now for the first time develops its devilish and occult power."¹ (4) The growth of imperialism, Caesarism, and war are characteristic of civilization, or the decline in culture. Imperial dictators attempt to seize the citadels of power. (5) There is a tendency toward race suicide. The population, especially in the cities, become sterile, or childless. The propagation of ignorance outruns the propagation of intelligence. (6) Skepticism develops in the realm of thought. Religion, philosophy, and science tend to crystallize into fixed forms. New mythologies arise.

These, then, are some of the evidences of decline, according

¹ *The Decline of the West*, Vol. II, p. 504.

to Spengler. He thought that the decline was inevitable, and that we could not do anything about it.

Before we turn to the next approach, let us raise a few critical questions. Does Spengler place too great emphasis on analogies? Is it safe to compare human cultures to physical organisms? While analogy can be fruitful in suggesting hypotheses, it is not a safe method of reasoning when used alone. Does he ignore the large degree of borrowing and the diffusion of cultures? Societies are not isolated organisms. Does he ignore the fact that now, for the first time in history, men are able to discover the trends of history and to do something about them?

In the opinion of the author, neither the method of Spengler nor his world view can be accepted. His chief contribution has been in calling our attention to the possibility of decline and in stirring Western society out of the smug complacency and superficial optimism which existed in the early decades of this century but which recent events have tended to undermine.

SCHWEITZER AND THE NEED FOR AN ETHICAL WORLD VIEW

Albert Schweitzer is one of the great figures of our age. Working at his hospital in Africa, he has written two volumes and has promised to produce two more volumes of his *Philosophy of Civilization*.¹ He sees civilization in an actual process of decay. The "suicide of civilization is in process," and the parts that are left are no longer safe. Human progress does not go on constantly or automatically; it depends on human effort. Until the middle of the nineteenth century, the material and moral forces of society developed side by side. More recently, moral and ethical energy have declined while the application of intelligence in the material sphere has moved ahead rapidly. Our age has come to place emphasis upon scientific, technical, and artistic achievement. Schweitzer tells us that "material achievements . . . are not civilization, but become civilization only so far as the mental habit of civilized peoples is capable of allowing them to work towards the perfecting of the individual and the community."² Whether there is more or less material development is

¹ Albert Schweitzer, *The Philosophy of Civilization*, translated by C. T. Champion, Part 1: *The Decay and the Restoration of Civilization*; Part 2: *Civilization and Ethics*, published by A. and C. Black, Ltd., London, 1932. See also Schweitzer's *Out of My Life and Thought: An Autobiography*, translated by C. T. Champion (Henry Holt and Company, New York, 1933).

² *Civilization and Ethics*, p. 5.

not the important thing. What is essential is that thought should keep control over facts and material conditions.

Among the signs of intellectual and spiritual fatigue he includes: the decline in respect for thinking and for an ethical world view; the decline of optimistic and ethical convictions regarding the meaning of life and of the universe; our superficial and narrow specialization, with its misplaced confidence in facts; increasing racialism and nationalism; the growth of inhumane ideas and actions and their failure to arouse popular indignation; and the recrudescence of superstition.

The reconstruction of our age will come only with recovery of a theory of the universe which is both optimistic and ethical. "Civilization is founded on some sort of theory of the universe, and can be restored only through a spiritual awakening and a will for ethical good in the mass of mankind."¹ An ethical foundation is the basis for civilization. Our age, Schweitzer says, must recover its reverence for life. There is in man and in all life a will to live. The only adequate standard for a civilization is the value it places on life.

Progress will come not through material accumulation but through the spiritual perfecting of the individual. Progress is an internal process which comes in and through personalities. "If men can be found who revolt against the spirit of thoughtlessness, and who are personalities sound enough and profound enough to let the ideals of ethical progress radiate from them as a force, there will start an activity of the spirit which will be strong enough to evoke a new mental and spiritual disposition in mankind."²

SOROKIN AND OUR SENSATE CULTURE

In a four-volume work entitled *Social and Cultural Dynamics*,³ P. A. Sorokin of Harvard tells us that we face a crisis that is more serious than any other in recent times. The whole of civilization

¹ *The Decay and the Restoration of Civilization*, p. 78.

² Albert Schweitzer, *Out of My Life and Thought: An Autobiography*, translated by C. T. Campion, p. 281. Henry Holt and Company, New York, 1933. Used by permission of the publishers.

³ P. A. Sorokin, *Social and Cultural Dynamics*: Vol. I, *Fluctuation of Forms of Art*; Vol. II, *Fluctuation of Systems of Truth, Ethics, and Law*; Vol. III, *Fluctuation of Social Relationships, War, and Revolution*; Vol. IV, *Basic Problems, Principles, and Methods*. American Book Company, New York, 1937-1941. See also Sorokin's *The Crisis of Our Age* (E. P. Dutton and Company, 1941) and *Man and Society in Calamity* (E. P. Dutton and Company, 1942).

is involved in it. According to Sorokin, there are three essentially different types of culture. First, there is the Sensate whose major principle is that "the true reality and value is sensory." The real is that which we see, hear, smell, touch, or otherwise perceive through the sense organs. This culture is the materialistic, empirical, utilitarian society of today in which men seek sensual enjoyment primarily. Second and standing in contrast to this Sensate type of culture is the Ideational culture, which avoids the sensual and the frivolous and stresses the religious and the ascetic. Such a culture founds its unity upon the principle of a supersensory and superrational God. Third and intermediary between the above types of culture is the Idealistic, which is partly sensory and partly supersensory.

The crisis of our society, according to Sorokin, is nothing less than the collapse of the dominant Sensate culture of our Western civilization. This culture has given man tremendous power over nature and the social and cultural world. However, it has left man devoid of self-control and lacking in the power to control his emotions and his appetites. "The Sensate culture did its best in the way of degrading man to the level of a mere reflex mechanism, a mere organ motivated by sex, a mere semi-mechanical, semi-physiological organism, devoid of any divine spark, of any absolute value, of anything noble and sacred. Such a debasement now becomes increasingly dangerous for the Sensate man himself. Hence the urgency of the shift from Sensatism to Ideationalism, from the subjugation and control of nature by man to the control of man by himself."¹

We are passing through a "grim transition" from the Sensate to a different stage of the cultural cycle. The crisis is accompanied by an unusual number of social, economic, political, intellectual, and moral problems, including delinquency and crime, family disintegration, poverty, the mental diseases, suicide, charlatanism in religion, revolutions, and wars. While sensate values lead to an abundance of material things, their creative and constructive possibilities are soon exhausted. We have reached this stage in Western society. According to Sorokin, we cannot stop the transition from taking place; we can only hasten the change and make it less violent or we can attempt to stop it, slow it up, and make it more violent.

¹ Sorokin, *Fluctuation of Social Relationships, War, and Revolution*, p. 539. Used by permission of American Book Company, publishers.

The victory of the United Nations over the Axis has not seriously affected the crisis, which will continue until our Sensate culture is replaced by one based on a more adequate foundation. Only a change in social values and a transfer of loyalties, based on a recognition of a new sense of duty, justice, love, sacrifice, and God, will release the creative forces needed for the new society. "Let us hope that the grace of understanding may be vouchsafed us and that we may choose, before it is too late, the right road — the road that leads not to death but to the further realization of man's unique creative mission on this planet!"¹

TOYNBEE ON THE BREAKDOWN OF CIVILIZATIONS

One of the most monumental studies is that being made by an English scholar, Arnold Toynbee, who is working under the auspices of the Royal Institute of International Affairs. Six volumes of what has been planned as a twelve-volume work, entitled *A Study of History*, have already appeared.² This author believes that we need to study societies — the larger wholes, not just states or nations — since it is difficult to understand the parts separately. We need to feel and to comprehend life as a whole. Hence Toynbee deals not only with the factual history of these epochs but also with the aspirations and ideals expressed in their literature. After studying twenty-six civilizations which have appeared in history, he says that Western civilization itself is in danger of losing its vitality and creative power.

Mankind appears once more to be in a period of rapid change. Evolution shows persistent trends. There are two alternating forces or phases in the rhythm of the universe.³ These in turn are affected by various "challenges and responses." The challenges vary all the way from climatic factors to elements of the human environment. Ease is inimical to civilization. A challenge, a crisis, or a time of trouble has had widely differing effects. Some societies have been crushed or have passed into oblivion; others, in going down, have given rise to vigorous new societies; still others have summoned latent energy to meet the challenge and, in the very act of struggle, have achieved a renaissance.

The causes of the breakdown of civilizations are neither cosmic

¹ P. A. Sorokin, *The Crisis of Our Age*, p. 326. E. P. Dutton and Company, New York, 1941.

² Oxford University Press, London, Vol. I, II, III, 1934; second edition, 1935; Vol. IV, V, VI, 1939.

³ See Vol. I, p. 201.

forces outside human control nor acts of God. The causes are not racial degeneration, loss of command over the physical environment, or mainly blows or pressures from the outside. "The chief danger to man is man."¹ Among the important causes are militarism, "the commonest cause of the breakdown of civilization during the four or five millennia,"² and the loss of self-determination, which is spoken of as "the ultimate criterion of breakdown." Most civilizations in the past have broken down "through their own acts" before any outside or "alien human force succeeded in dealing them a potentially mortal blow." The "idolatry of institutions" and of techniques may lead to a loss of creativity. This may take the form of worship of the past, of some ephemeral institution or technique, or the attitude of "resting on one's oars." Our Western society has a bent or bias toward machinery. Its main interest and effort at present seems to be to apply the discoveries of the special sciences to our material purposes.

Personality is a growing factor in the universe. The growth of civilizations is the work of creative individuals or of creative minorities. However, when a creative minority degenerates into a mere dominant minority which endeavors to keep by force a position which it no longer merits, society begins to disintegrate. "The nature of the breakdowns of civilizations can be summed up in three points: a failure of creative power in the minority, an answering withdrawal of mimesis on the part of the majority, and a consequent loss of social unity in the society as a whole."³

While he believes that Western civilization is in danger of losing its vitality and creative power, Toynbee maintains, in contrast to Spengler, that the decline can be stopped. Civilization needs a profound moral and spiritual transformation, however, if it is to continue to progress. Our destiny depends on our response to the challenge of our time.

THE IDEA OF PROGRESS

The idea of progress has developed in Western society during the last few centuries. The seventeenth century witnessed great discoveries in the material and scientific realms, as well as significant constitutional achievements in the political realm. The eighteenth century was the period of the Enlightenment, or a period of intellectual emancipation, as well as the century of the

¹ Vol. IV, p. 121.

² Vol. III, p. 150.

³ Vol. IV, p. 6.

beginnings of the Industrial Revolution. During the nineteenth century the theory of evolution and the application of the methods of the natural sciences to the study of life and of man led men to take the concept of progress for granted. Some thought that progress was a cosmic law. Herbert Spencer said that "Progress is not an accident, but a necessity." Tennyson had faith that "the thoughts of men are widen'd with the process of the suns," and that the laws of nature and scientific method made the future secure for the progress of mankind.

The events of the first half of the twentieth century have led to much disillusionment and to many questions regarding the concept of progress. The older view of the inevitable perfectibility of man and human society has been shattered. There is less confidence today than formerly in the ability of science, of general education, and of our financial and business institutions to bring us human welfare and progress. A more reasonable view appears to be that progress is possible but not inevitable at any one period of history. This is the position held by Schweitzer and Toynbee. Western man does not seem to have mastered the machine, the industrial system, and the science which he has created. Whether they will make him or break him is still a debatable question.

An adequate philosophy of history, in the opinion of the author, must be pluralistic in the sense that it recognizes a plurality of factors in the shaping of history, since it is doubtful if there is any single cause of individual and social change. Geographical, biological, racial, political, legal, economic, technological, psychological, ethical, philosophical, and religious factors have all played some part. At certain times one element may be dominant, but no one factor has been dominant at all times. The theories of historical development which attempt to reduce the course of history to some one causative factor or to some one simple pattern or formula appear to neglect the great variety and richness of human life and society.

Furthermore, there is apparently no single line of social development through which all people must pass. While there has been progress, there have also been periods of stagnation, diversion, and retrogression. Certain broad lines of progress or change in definite, desirable directions can be discerned, but these lines are irregular.

History is made, in considerable part, by persons who make up their minds and who act with courage and intelligence.

Climatic, political, and economic conditions may provide a stimulus for human beings, but these conditions do not wholly determine the response made to them. The response is determined largely by the inherited pattern of ideas and ideals which is embedded in the conduct and customs of the social group. The attitudes toward life and toward the universe are crucial. An important question is whether the attitude is one of resignation or of self-direction and determination.

Progress is not primarily concerned with material things or with scientific inventions. The conquest of nature does not necessarily mean either moral improvement or greater happiness. Progress has to do mainly with the achievement of human values. It takes place "inside people." If right is based on the good and good is that which has value for persons, then progress must be thought of in terms of personal and social welfare. Progress includes the development of those qualities which are distinctive of persons. On the social plane it includes the transference of social relations from the realm of force to a realm of co-operation and sharing. The personal realm and the social realm are interrelated and cannot be completely separated except for purposes of analysis and study. There may, of course, be greater progress in some one phase or aspect of life than in another. Among the indications of progress might be included material well-being, science and the control over nature, knowledge and the prestige of the intellect, respect for law and justice — including the security of one's person and property — opportunity and freedom of self-direction or self-determination, artistic creativity, the personal and social virtues, happiness, sympathy and tolerance, a deepened self-consciousness, a respect for life and personality, and a growing appreciation of the place of man in the general scheme of things.

In the concluding chapter there is further consideration of the concept of progress and the task of building a higher civilization. We there consider some particular trends or changes which appear to be taking place in our society. First, however, let us turn to the urgent problem of freedom and social control.

»» QUESTIONS AND PROJECTS ««

1. Spengler and some other students of history have severely criticized the city and city life as tending to produce materialism, skepticism, selfishness, and other undesirable traits and attitudes. Is there any justification for such an indictment? If so, what is it? If not, why have there been so many critics of the city?
2. The charge has been made that, as a result of our amazing scientific advances of the last century, science is trivializing life by leading men to think and to live in terms of material things and gadgets. Is there any justification for this charge? Have we tended to place too much confidence in the ability of science alone to save our civilization from decline?
3. Is there danger in North America of a decline, temporary or more permanent, from such causative factors as: (1) climatic and geographical conditions, including soil erosion; (2) biological or racial factors; (3) economic or industrial conditions; (4) psychological, moral, or religious factors? See Will Durant, "The Crisis in American Civilization," in *Vital Speeches* for Dec. 15, 1939.
4. In some parts of the world, a flood or a famine is accepted with resignation. In other places, men believe that they are destined for better things or for prosperity and happiness; consequently, they refuse to accept these blows or defeats as inevitable. What factors cause the difference? Discuss the part which a philosophy of life plays in everyday affairs.
5. Look up and report upon the philosophies of history as set forth by Auguste Comte and Nicholas Berdyaev.
6. Critically review the following books: Shirley J. Case, *The Christian Philosophy of History* (The University of Chicago Press, 1943); Ralph T. Flewelling, *The Survival of Western Culture* (Harper and Brothers, 1943); John Macmurray, *The Clue to History* (Harper and Brothers, 1939); Walter T. Stace, *The Destiny of Western Man* (Reynal and Hitchcock, New York, 1942).

Freedom and Social Control

Some of the great pages of history tell of man's struggle for freedom. The struggle goes back until it is lost in the dim past. Many peoples have taken part in it. The ancient Greeks and Hebrews played a significant part. Englishmen have prized freedom and have discovered that eternal vigilance is the price of liberty. In 1215 they forced King John at Runnymede to sign the Magna Charta. The Petition of Rights in 1628 and the Bill of Rights in 1689 are other milestones. Among Frenchman the Declaration of the Rights of Man and of the Citizen breathes the spirit of the eighteenth century movement toward Liberty, Equality, and Fraternity. In the United States the Declaration of Independence and the Bill of Rights of the Federal Constitution put in immortal form the spirit of the Pilgrims and of men like Patrick Henry and Thomas Jefferson.

Today the fight for freedom continues in the Americas, in Europe, and around the world. It is by no means won.

There are four kinds of freedom that need to be distinguished. There is, first, freedom of choice, or moral freedom. This issue was dealt with in Chapter XI. There is, second, freedom from external restraint, or physical freedom. Since the abolition of slavery, this has not been an important issue except where fascism or nazism has held sway. There is, third, civil liberty, or political liberty. This includes freedom of speech (thought and conscience), freedom of the press, freedom of assembly or organization, and a share in the control of the conditions of life. There is, fourth, social and economic freedom. Should there be social control or legislative regulation of man's business, professional, or other activities or should these be free from all social interference? This is the issue of individualism versus collectivism.

CIVIL LIBERTIES

There is a strong Anglo-Saxon tradition in favor of the civil liberties. This tradition is based upon English common law and practice and upon American constitutional law and practice. In addition to freedom of conscience, thought, speech, press, and assembly, the principles involved include religious toleration, equality before the law, trial before an impartial tribunal, and the right to vote and be elected. We may sum up all these freedoms in the expression "freedom of speech." This is partly in the interest of simplification and partly because of the fact that many of these freedoms — such as freedom of the press and of assembly — are really means of expressing our thoughts or of communicating with other persons.

In democratic countries today there are two general positions regarding freedom of speech. The advocates of one position claim that there should be complete freedom of speech, with no limitations except the usual laws against slander, libel, and indecency in public places. Opposing these are those who claim that there should be additional limitations. Since no significant group proposes a complete denial of these liberties, that theoretical alternative need not be considered.

COMPLETE FREEDOM OF SPEECH

The advocates of complete freedom of speech believe that opinions on matters of public concern should be freely expressed without interference. No one should be restrained for merely talking or for expressing a point of view. This appears to be the position which the first amendment to the United States Constitution seeks to protect: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances." The clause "without due process of law" which appears in the fifth amendment does not apply here. It applies apparently to the social and economic controls that are discussed later in this chapter. The first amendment merely says "no law."

Thomas Jefferson and the American Civil Liberties Union both support this position. Jefferson says, "It is time enough for the rightful purposes of civil government for its officers to inter-

ferre when principles break out into overt acts against peace and good order." In discussing freedom of speech, the American Civil Liberties Union says: "There should be no control whatever in advance over what any person may say. The right to meet on private property and to speak freely should be unquestioned. Meetings in public places may properly be regulated by permit but without any discrimination whatever on account of the political program or views expressed. The fullest freedom of speech should be encouraged by setting aside places in streets or parks for use without permits, and in the use of public buildings for public meetings of any sort."¹

Freedom of speech should not be curtailed. The spoken word, it is claimed, differs in its legal and moral nature from other behavior. Any possible harm from such freedom is more than balanced by the harm resulting from restraint.

THE LIMITATION OF FREEDOM OF SPEECH

Those who hold that limitations of freedom of speech are necessary under certain conditions may be divided into at least three groups. The difference between them is largely a matter of emphasis. There are those who hold what has been called the "public-utility test" or the "danger test." Freedom of speech is protected, it is said, as a means to the public welfare. If there is a "clear and present danger" to public welfare, which may be increased by the expression of opinions, society has a right to interfere and to protect itself. A good illustration of this is the Supreme Court decision in the case "Schenck versus United States," an appeal from conviction under the Espionage Act in World War I. The defendants had mailed circulars urging opposition to the draft. The Court's opinion, written by Mr. Justice Holmes, said in part: "We admit that in many places and in ordinary times the defendants in saying all that was said in the circular would have been within their constitutional rights. But the character of every act depends upon the circumstances in which it is done. . . . *The question in every case is whether the words used are used in such circumstances and are of such a nature as to create a clear and present danger that they will bring about the substantive evils that Congress has a right to prevent.* It is a question of proximity and degree. When a nation is at war many things that might be said

¹ From p. 2 of the pamphlet "Civil Liberty," published by American Civil Liberties Union, 170 Fifth Avenue, New York, August, 1943.

in time of peace are such a hindrance to its effort that their utterance will not be endured so long as men fight and that no Court could regard them as protected by any constitutional right."

A second form of limitation is to deny freedom to individuals or groups who would eliminate freedom if they were in control. Some writers have expressed opposition to the policy of granting freedom of speech and assembly to anti-democratic groups that have vowed to eliminate freedom and democratic institutions if and when they gain power. Lewis Mumford would keep "every fascist group or pro-fascist speaker off the air, denying the use of the United States mails to every fascist publication. . . . To be too virtuous to live is the characteristic moral perversion of liberalism in our generation."¹

A third and slightly different position is "the standard of rational discussion." It is said to be a positive theory to promote civil liberty. The test of rational discussion would protect the presentation of all grievances, even permitting suggestions of violent resistance to government. It would guarantee free speech for fascists or communists or any other group provided there was an opportunity for rational discussion. It would not, however, shield violent activity or protect the fascist meeting where any expression of opposition would be met by violent abuse or physical force.

WHY FREEDOM OF SPEECH IS IMPORTANT

Freedom of speech is important, in the first place, because it is a basic condition for the development of a well-rounded personality. If persons cannot express themselves, they feel stifled and stunted and are likely to rebel. If they cannot think freely and express their thoughts, it will not be long before they cease to have thoughts worthy of expression. They become something less than well-developed persons. They tend either to develop slave minds and slave habits or to become rebellious. Personal self-consciousness, intelligence, and creativity develop best in a free atmosphere where men can think together and talk freely.

In the second place, freedom of speech is the basis of democracy. We cannot have a democracy except on the basis of the right of the minority to become the majority, if it is able to do

¹ Lewis Mumford, *Faith for Living*, pp. 106 and 107. Harcourt, Brace and Company, New York, 1940. See also "Germany Puts the Clock Back" by E. A. M. Mowrer in *Survey Graphic* for February, 1939, p. 189.

so, by peaceful methods of persuasion. If we are to have an alert, intelligent electorate seeking peaceful solutions to present conflicts, free discussion, criticism, and even opposition are essential. Each man knows more about his desires and needs than does someone else who may be removed from his way of life and problems. Consequently, a man ought to have the right to discuss policies and to criticize them. When rulers are cut off from criticism, they are likely to rule in their own interests or at least to fail to see things from the point of view of the average citizen. Irresponsible power tends to be used in the interest of the group that possesses the power.

In the third place, repression tends to drive opinion underground where it may become dangerous. "Repression," said Woodrow Wilson, "is the seed of revolution." If an idea is false, the best way to destroy it is to expose it. Repression may keep alive and intensify the antagonisms which exist. Revolutions occur when reactionaries get in control of society and attempt to stifle all change and progress; they occur when there are grave injustices which men are unable to remedy by the peaceful processes of change.

In the fourth place, freedom of speech is a condition for the development of new ideas. Some of our most prized ideals and institutions arose only a short time ago as a protest against some previous way of life. A hundred and fifty years ago the idea of free or tax-supported schools was considered radical and dangerous. For progress we need new ideas. None of our institutions is perfect. Each needs the free play of criticism in order that the process of healthy growth may continue. Critics tend to break up the hard cake of custom and to make progress possible. If the institution suppresses the critic, it may seem to strengthen itself for a time, but it does so only at the price of the new life which it needs. Stagnation and decay are likely to follow. Critics are often those who are most sensitive to injustices which more conventional persons are apt to take for granted. Frequently critics are also the creative minds who see new and better ways of doing things.

AN EVALUATION OF THE CIVIL LIBERTIES

For the reasons given above, the civil liberties are among our most important rights. For a considerable portion of the population, especially for minority groups, they exist only in a very limited form. The civil liberties need to be extended and strength-

ened. Where freedom of speech seems to be in conflict with the right of self-preservation, we shall probably choose self-preservation. In the opinion of the author, the limitations or restrictions ought to be few. These few might include laws against slander, libel, indecency in public places, utterances that excite or terrify (*e.g.*, shouting "Fire!" in a crowded theater), and immediate and passionate incitement to riot. Restrictions beyond these should be limited to periods of crisis, such as a period of great danger or a time of war.

There should be no restrictions on the presentation of opinion on social, political, economic, scientific, or religious issues. Private groups — clubs, churches, and schools — may have the right to say what is or is not done in their group; but society or the state should proceed cautiously if at all in restricting the expression of opinions. Law-enforcement officers find it difficult to distinguish between "preserving the peace" and "preserving the *status quo*." From "maintaining law and order" they easily move to "defense of the established order." This is likely to mean that there shall be no criticism or agitation or tampering with things as they are — that is, no progress.

The public-utility or danger test sounds reasonable, but it is easy to see a danger in anything that is a little different. The lower courts have stretched the danger idea to what has been called "remote bad tendency."¹ If fascists and communists are to be prevented from exercising freedom of speech, where can you draw the line? Many people tend to call anyone whom they dislike by names such as these. A few years ago the advocates of social insurance were called communistic; now such measures are taken for granted by practically all parties in democratic countries. The standard of rational discussion appears to be a sane test. But who is rational and sane? Some persons think that only the people who agree with them are really intelligent. Chief Justice Hughes gives us this word of caution: "The greater the importance of safeguarding the community from incitements to the overthrow of our institutions by force and violence, the more imperative is the need to preserve inviolate the constitutional rights of free speech, free press, and free assembly, to the end that government may be responsive to the will of the people and that

¹ In the *Abrams* case, a prison sentence was given for distributing pamphlets which were not shown to have lowered morale or to have hindered war work. It was felt that the pamphlets might do so.

changes, if desired, may be obtained by peaceful means. Therein lies the security of the republic, the very foundation of constitutional government."¹

INDIVIDUALISM VERSUS COLLECTIVISM

In addition to the civil liberties, man wants many other things, including a high standard of living, health, security, knowledge, and happiness. How can these things most adequately be obtained? Can a man gain them by living independently and seeking his own self-interests, or must he obtain them through group action and social legislation?

A basic issue in the world in which we live is that between personal demands and group regulation. It expresses itself under many terms and slogans: individualism versus collectivism; free competition versus a planned economy; free enterprise versus governmental regulation; private property versus public ownership.² The consumers' co-operative movement, communism, and fascism in its various forms are related to this basic issue. We shall confine our discussion to individualism and collectivism in general and not attempt to discuss all the different ideologies through which they may be expressed.

THE RISE OF INDIVIDUALISM

Since the fourteenth century there has been a change from a society dominated by the church and a moral and religious ideal to a society dominated by commerce and industry and interested primarily in production and profits. It would be interesting to trace the development of the doctrine of sovereignty and the rise of the modern independent state, as well as the early growth of the new commercial classes. We shall need to confine our attention, however, to the period since the beginning of the Industrial Revolution.

When the Industrial Revolution began in England in the eighteenth century, there were in existence numerous antiquated laws and regulations. Some of these restrictions had originated under an agrarian feudalism, and they were defended by the

¹ Quoted in *The Columbus Citizen* for Jan. 8, 1937.

² In the Anglo-Saxon countries this issue expresses itself in the rise of such movements as the New Deal in the United States, the Labor Party and programs of social security in Great Britain, and similar movements elsewhere.

landed interests. The archaic legislative restrictions prevented the free movement of labor and merchandise. The merchant and manufacturing classes demanded freedom for the acquisition of markets and raw material and for the hiring and firing of labor and the free movement of labor from one area to another.

Because law was the voice of government, government was taken to be the great enemy of freedom. The new cry from business came to be: "Let us alone," "Hands off," "*Laissez faire*." This cry or slogan in some of its many forms has been heard from the eighteenth century to the present. "Business is business," and business must be operated by business considerations alone. Men must be free to express their self-interest. There must be free enterprise. The "economic man" must have freedom from interference. There must be no form of social control.

In other areas of life the same independence and separation was taking place. Art, demanding freedom from moral and religious ends, was proclaiming "art for art's sake." Education in the nineteenth and twentieth centuries was also becoming secularized, specialized, and independent. Objective and disinterested inquiry, bound by no social obligation or purpose, became the order of the day.

This tendency towards the independence and separation of functions in society was reinforced by the doctrines which arose in the eighteenth and nineteenth centuries in connection with the rise of the new industrial system. These doctrines are known variously as individualism, *laissez faire individualism*, and economic liberalism. The founders of this social philosophy were a group of writers in France in the eighteenth century known as the physiocrats, and a group of writers in Great Britain among whom were Adam Smith (1723-1790), Thomas Robert Malthus (1766-1834), and David Ricardo (1772-1823). The physiocrats argued that social, political, and economic phenomena are governed by natural laws which are the same or similar to those Newton disclosed in the physical order of the universe. There is a "natural harmony of interest," therefore any attempt to control or to regulate society is not only useless but harmful. The British writers took a similar stand. Adam Smith shared the faith of the physiocrats in a simple system of natural order and liberty, in enlightened self-interest, in free competition, and in reducing the functions of government. In this way men might attain the maximum satisfaction of their desires with a minimum outlay of

sacrifice. Malthus thought that remedial legislation did no permanent good, since population tends to press on the food supply and, therefore, misery and poverty tend to continue. Ricardo pointed out that wages tend to seek the level of the minimum of subsistence. If wages were increased, then the population would increase and force wages down to the subsistence level again. A few persons even called economics "the dismal science."

In addition to the desire on the part of the business classes to be free from restrictions which limited their ability to make money, the doctrine of individualism was thus a reflection of the doctrine of natural law and of natural rights held so strongly in the eighteenth century. Natural laws, it was argued, would regulate prices, wages, and hours in a most equitable way and would lead to human welfare. Consequently, there must be no interference with the laws of competition and of supply and demand.

During the nineteenth century the theory of individualism gained some support from the English utilitarians (Bentham and Mill). It also received support from the theory of evolution, with its emphasis on natural selection in terms of the struggle for existence and the survival of the fittest. Herbert Spencer, at the end of the nineteenth century, held that man should let nature take its course and should not interfere. He regarded education, the postal service, and the making of roads as outside the proper jurisdiction of government. Apart from protecting the nation from foreign aggression and preventing crime, the state has few duties. The strongest members of society will succeed and will propagate their kind, and the race will be strengthened.

On its personal or individual side, the philosophy of individualism expresses itself as the doctrine of self-interest. The individual, it is said, should be free to pursue his own self-interests so long as he keeps the peace and does not interfere with the rights of others. He should be free to make as much money as he can and to spend it as he sees fit. The need is for men who have industry, initiative, resourcefulness, thrift, self-reliance, and a spirit of adventure.

Writing on *The Spirit of Enterprise*, Edgar M. Queeny says that "individualists owe nothing to any man, they expect nothing from any man; they acquire the habit of always considering themselves as standing alone, and they are apt to imagine that their whole destiny is in their own hands." After making a vigorous attack on practically all governmental functions and upon

planning, he goes on to say that "to realize the four freedoms, we need only one freedom — Freedom."¹

On its economic side, individualism expresses itself as the doctrine of the "economic man." He is the person who consults his own self-interests and who is guided in his business activities solely by the motive of profit. Such a man is free to produce, to buy and to sell, or to refrain from such activities, under conditions set by himself. He regards his property as something that can bring him profit. The slogans of the economic man are likely to be: "Business is business" and "We are not in business for our health." In actual practice, however, this attitude is usually less extreme, since ethical and humanitarian considerations enter to a greater or lesser degree.

On its political side, individualism expresses itself as the doctrine of non-interference. The government should confine itself to the suppression of fraud and violence, to the protection of property, and to the enforcement of contracts. If some restrictions are necessary, as most individualists realize they are, they should be kept at a minimum. The governmental policy is *laissez faire*, or "let alone."

The statement made in 1932 by Merle Thorpe, the editor of *Nation's Business*, is typical of statements heard in nearly every election campaign. He said: "Candidates will promise relief from this and that through law, or regulation, or outright dole. . . . To all such the voter should reply as did the French philosopher: 'That government is best which paves the way for its own resignation.' In other words, the candidate who promises 'to govern least' will get my vote."²

The philosophy of individualism finds ethical justification in the assumption that the policies stated above will bring the best results in the long run. If a man seeks his own interest through free competition, the result will be registered in both material and social progress. Any form of governmental ownership or control will tend toward the creation of individual indolence and laziness, lack of technical progress and creativity, inefficiency, bureaucracy, and possibly totalitarianism.

A Congress of American Industry meeting in 1943 stressed three themes: opportunity, jobs, and freedom. The Congress re-

¹ Edgar M. Queeny, *The Spirit of Enterprise*, pp. 17-18, 242. Charles Scribner's Sons, New York, 1943.

² Quoted in the pamphlet "Capitalism and Its Rivals" by Kirby Page, Industry Series, No. 15, pp. 11-12.

affirmed its faith in free enterprise and in individualism. Such a system will bring the greatest long-range benefits. One speaker said that we can be selfish and still find that we cannot get something for ourselves without giving something to society in return.

During the nineteen forties numerous appeals were being made in behalf of individual self-interest, competition, free enterprise, and non-interference with business by the community, state, or federal government. A few authors were warning us that the logical outcome of the drift away from individualism was a totalitarian regime in which the individual would be told what he could do and what he could not do.¹

THE RISE OF COLLECTIVISM

Whereas individualism stresses the freedom and the rights of the single person left to his own initiative in society, collectivism stresses social rights and represents a tendency away from *laissez faire* individualism. A century ago a man could find relative independence and security by shouldering his ax and gun and pressing out into the wilderness. This is not so today. Let us see what has been happening during the last century and why at least a degree of collectivism is being forced upon us.

In the first place, there is the pressure from advancing science and technical progress. Our life has probably changed more in the last century or two than in the previous five thousand years. A worker from ancient Egypt would have known how to use the simple tools used by our forefathers in the eighteenth century. Those same forefathers would be completely mystified by the elaborate mechanisms of today. Even one hundred years ago on this continent each village, even each homestead, was practically self-sufficient. With a few exceptions, all necessities were produced locally. Even where a few men worked together in a little shop, there was intimate personal relationship. The men had ready access to raw material, they owned their own simple tools, they controlled the conditions of their labor, and they owned the finished product, which they used or sold to someone whom they knew. Under these conditions few regulations were needed.

With the coming of the Industrial Revolution, all this was changed. The new machines were expensive, and it required large amounts of capital to operate them. The new factories had

¹ See Friedrich A. von Hayek, *The Road to Serfdom*. The University of Chicago Press, 1944. See also Ludwig von Mises, *Bureaucracy*. Yale University Press, 1944.

to be situated near water power or coal supplies. The story is familiar: the hand workers could not compete with the new machines, and the workers lost control of the tools and the means of gaining a living. At first the Industrial Revolution affected chiefly textile industries, but during the latter part of the nineteenth century there took place what is sometimes called the Second Industrial Revolution, affecting especially the basic industries of iron and steel. The evolving industrial system became more highly specialized and more impersonal. There was a separation of ownership from management and of both from labor. New business and new financial classes were coming into power. Great vertical and horizontal mergers and combinations were taking place. Competition tended to beget combination. Along with the development of large-scale industry and mass production went such legal or technical devices as the limited liability of shareholders in great corporations, the trust or the trusteeship, the holding company, the interlocking directorate, and, more recently, cartels with their international connections. Yet the law continued to apply the concept *individual* to these organizations.

In the second place, as these large business organizations came to take a dominating position in society, the business leaders discovered that they could control or regulate the process from the inside. The early supporters of *laissez faire* individualism never contemplated the possibility of manipulation or concerted action on the part of business executives. Control from the inside, however, enabled industrial leaders to control supply and demand, prices, and wages. The earlier economy was dominated by small, individually owned business units, by relatively free competition, by flexible or fluctuating prices, and by a large degree of equality in bargaining power. The modern economy, on the other hand, is dominated by huge business units, by agreements and understandings, by inflexible or fixed prices, and by inequality in bargaining power. Business has not remained individualistic. Automatic adjustments have been largely eliminated by various collective devices.

As the workers have come to realize that economic freedom apart from economic power was putting them at a disadvantage, they combined in labor unions for the purpose of collective bargaining. Consumers, much later, saw the need for protecting themselves, and consumers' organizations were formed. In the

realm of industry, collective action is the order of the day, although men continue to talk about individual initiative, free competition, and free enterprise.

In the third place, from the beginning of the Industrial Revolution until the present, business and manufacturing interests have actively sought governmental favors and support. The holders of economic power have engaged in politics for the definite purpose of securing economic benefits for themselves. Among these benefits we find the following: (1) *Grants of land and mineral resources*. A public domain of about 2,186,862 square miles has been reduced by grants or by sales at nominal prices to about 300,000 square miles, most of which is arid soil, forests, or mountain land.¹ (2) *Subsidies*. Cash subsidies, tariff rebates, and cash loans have been especially prevalent in connection with the development of the railroads, the waterways, and shipping. (3) *Tariffs*. Manufacturing groups have sought and have obtained high protective tariffs which have enabled them to secure millions of extra profits through higher prices to consumers. (4) *Franchises*. By means of franchises some companies have gained the sole right to operate tramways and subways and to sell gas or electricity. (5) *Diplomatic aid abroad*. The consular officers are in part the agents for the promotion of business enterprise. Governmental aid has included exhibitions of military force and armed intervention.

In the fourth place, conditions which grew out of the Industrial Revolution led the public to demand new forms of protection. Within a short time the factory system produced evils so serious that protective legislation was necessary. Factory laws passed in the nineteenth century were concerned with such things as safety, sanitary conditions, and hours of work. Laws of this type have been maintained and extended until today they deal with numerous things, such as the conditions of labor, the grading and inspecting of products, the safeguarding of food supplies and drugs, the regulation of corporations, and the conservation of natural resources. Unable to protect their own interests, individuals have asked for legislative protection against infected milk, impure water, polluted streams, and obnoxious fumes. Legislation and control are part of the price we pay for more knowledge,

¹ The states and the federal government have given to the railroads, in land grants, a territory nearly four times the size of New England. See William Z. Ripley, *Railroads; Rates and Regulation*, p. 36. Longmans, Green and Company, New York, 1912.

technical and scientific advance, wealth, and a growing population. Few persons would be willing to give up these controls.

In the fifth place, during the last century a score or more of our most important social and economic functions have been taken from the realm of private ownership and control and are now being operated as public services. Society now owns and operates, in whole or in part, such services or functions as the army; the navy; police (once private); post office and parcel post; the making, lighting, and repairing of streets, roads, and bridges; schools and colleges; museums; parks; art galleries; libraries; auditoriums; fire departments; health centers; hospitals; waterworks; gasworks; tramways; wharves; harbors; coinage; weights and measures; water-power sites; irrigation projects. Services which tended to be monopolistic and which were essential to the welfare of nearly all persons have been almost completely socialized. Certain functions are too important from the point of view of social welfare to be left in individual hands. Will social ownership and control be extended in the near future to take in the great natural resources, the main systems of communication and transportation, and the power to issue credit and currency?¹

The above facts seem to indicate that we have departed from an individualistic society. This is especially true when we realize that practically all economic activities and services not included in the above list are now very carefully regulated, inspected, or controlled. This regulation includes the amount of air, light, and space that must be provided for workers, when and how wages are to be paid, the way packages are to be wrapped and labeled, and how wares may be advertised. More and more persons are demanding an intelligent control of resources for the common welfare.

After some years of study, the Commission on the Social Studies in the Schools of the American Historical Association reported its conviction that "American civilization, in common with Western civilization, is passing through one of the great critical ages of history, is modifying its traditional faith in economic individualism, and is embarking upon vast experiments in social planning and control which call for large-scale co-operation on the part of the people."²

¹ The Labor Party in Great Britain is now (1946) proceeding in this direction.

² *Conclusions and Recommendations of the Commission*, pp. 1-2. Charles Scribner's Sons, New York, 1934.

EVALUATIONS AND CONCLUSIONS

We have outlined the development of two social attitudes or social philosophies — individualism and collectivism. They are alike in stressing personal development and human welfare as the goal. Which position is more likely to achieve that goal in the modern world?

Both individualism and collectivism, carried to extremes, lead to serious abuses. For example, the old individualism was too frequently a cloak for greed and indifference to human welfare. It tolerated conditions that crushed individuals and permitted the few to control the means by which the many had to live. No longer can society tolerate the unlimited exploitation of persons and the principle of “every man for himself.” Liberty must not mean the freedom to live in misery or perhaps to starve. Self-interest has led to waste and economic chaos. It is inadequate to serve as the main motivating force in human affairs. Where ills are socially created, they must be borne and remedied by society.

Collectivism, like individualism, can go to extremes, run wild, and become destructive. We see this in race riots, mob hysteria, and totalitarianism. The fascist principle of “the individual for society” is an immoral and destructive formula. There is danger in too rigid and too complete control over life.

There are values which both the individualist and the collectivist wish to conserve. The individualist wishes to protect individuality, personal freedom, initiative, and self-reliance. There are genuine values in these traits of character. The collectivist wishes to emphasize the values which come through sharing, co-operation, group action, and public property. How are these differences in attitude and emphasis to be reconciled?

The test of any regulation, program, or institution is what it does to persons, to men and women. Persons have intrinsic worth. Great individuals are the glory of the race. The goal of enlightened action ought to be the development of persons. No regulation or institution — not even the state — ought to be considered an end-in-itself. When regulations, restraints, and institutions serve the interests of man, they are good. When they fail to promote human welfare, they are evil. To object to a law and call it “regimentation” because it restrains the individual or limits his freedom is a mere platitude undeserving of serious attention. We want the regimentation that gives us health and life; we do not

want the regimentation that stultifies and gives us death. If restraints and collective measures make for liberty in the larger sense and serve human needs, they are to be approved.

In a simple society characterized by intimate and personal relations, the principles of self-interest, free enterprise, and *laissez faire* worked fairly well. In a highly complex, interdependent, machine civilization, these same principles may lead to domestic confusion and conflict and to international anarchy and war. Our forefathers lived in a world in which each individual could get on fairly well if everyone left everyone else alone. That condition is not true in the highly specialized society in which we live. Men have never had complete freedom in any society. The lessening of freedom in one area may mean more of it in another area. When there is one train on a track, few regulations are necessary. When there are two or more trains, some regulations become imperative.

Collectivism in the form of group action, social control, and social planning has been growing everywhere in modern societies. There is much in modern life that demands collective action. This trend is likely to continue. We need considerable "external collectivization." In many material, economic, and social affairs, like those mentioned previously, collectivism can be a great boon. We do not want or need and we must resist "internal collectivism," or the standardization of our thinking and inner life. We must be free to think, to speak, to criticize, and to work for a fuller life. Society and the state have the responsibility for seeing that every individual has at least the opportunity to become a whole person. Good government merely asks the surrender of some "personal liberties" in the interest of the common good of all. At its best our culture has stressed a social-mindedness and a love that goes beyond mere individual self-interest.

»» QUESTIONS AND PROJECTS ««

1. What are the threats to the civil liberties in society today? Take into consideration the fields of industry and economic affairs, race relations and minority groups, and the suppression of opinion.
2. Do you agree with the following statement made by Abraham Lincoln? "This country with its institutions belongs to the people who inhabit it. Whenever they shall grow weary of the existing govern-

ment, they can exercise their constitutional right of amending it, or their revolutionary right to dismember or overthrow it.”

3. Make a list of events — including elections, court decisions, industrial changes, and significant declarations — which indicate a trend toward: (1) individualism; (2) collectivism. This list might include events that have occurred in recent years in the United States, Canada, Great Britain, other parts of the British Commonwealth of Nations, on the continent of Europe, and elsewhere in the world. What over-all conclusions are to be drawn from this list?
4. Are there principles which limit or ought to limit the right of the community to interfere with the individual? What should be the test of every law or regulation in society? State the principles you accept, and defend them.
5. In 1911 a majority of the citizens in one state in the United States developed a strong “personal-liberty complex” which was directed against compulsory vaccination. At that time there were very few cases of smallpox in the state. The law was repealed. In 1915 the number of cases of smallpox registered with the State Health Department was 336; in 1918 it was 1106; in 1919, 2002; in 1920, 4492; in 1921, 5579; and in 1924, 9445. By this time many persons were wondering if they really wanted this kind of personal liberty. What kind of liberty do you want?
6. Some men criticize social-security legislation as tending to take away men’s initiative and sense of personal responsibility. Others criticize the older individualism as weakening the moral fiber of men when it permits men who have lost all sense of responsibility and sense of trusteeship to seize places of power over the economic and political life of the nation. Discuss the relative merits of these positions.

Tensions and Trends in Our Society

The United Nations have won a great military victory. Are they going to be able to win, for themselves and for the world, the battle for civilization? We have seen that Western civilization, which seemed so secure and so dominant at the beginning of the century, is now very badly disintegrated. Mankind appears to be engaged in one of its rare moods of shifting its outlook, its basic assumptions, and its ways of acting. Great decisions are being made, and more will be made in the years ahead. We may live in a much better world than any race of men and women have yet known. That, I think, is possible; but it is also possible that we may live in a much more dangerous and cruel world than we have recently known. The new "atomic age" calls for greater moral stamina and understanding than we have possessed in the past. The atomic bomb can destroy civilization or atomic power can make life more livable for everyone.

EXPLANATIONS OF THE TURMOIL OF OUR TIME

What is the explanation of the unrest, the confusion, the bewilderment, the social and economic and political disorders, the revolutions, and the wars of our time? Are they merely the result of the efforts of a few evil men, a group of political gangsters who were able to deceive the unsuspecting masses and to gain control in certain countries? Are they the result of some temporary maladjustment in the machinery or organization of society which can be simply and speedily changed? These ex-

planations and others like them are too superficial and do not go to the roots of the problem. A more adequate answer is that we are in the midst of a world revolution, a revolution which is intellectual and moral as well as political and economic. The crisis of our time involves man's loyalty and faith. We have been witnessing and are still witnessing the breakdown of a culture and civilization that have been dominant since the eighteenth century. Earlier revolutions, like the American, French, and Russian ones, were local or national because contacts were limited. Now comes the first world revolution because contacts are world-wide. We live in an interdependent world.

Great masses of people are frustrated and dissatisfied and are looking for something different. They are frustrated in part by economic institutions which lead to so much poverty in the midst of potential plenty; by political institutions which have led to conflict and to war; by interpretations of life which take all meaning and significance from it; and by the gap between their moral and religious ideals and their everyday life which so frequently seems to deny those ideals. War is caused by the world anarchy in the midst of which we live, not the anarchy by the war. Revolutions and wars are likely to continue to mar the twentieth century until we face the anarchy of our age. Much of what we have had should not be restored. In a world of injustice, to attempt the preservation of things as they are is as immoral as it is impossible.

Basic shifts or basic trends that express the revolutionary nature of our age are taking place or, should we say, are struggling to take place. They are in large part responsible for the tensions and conflicts in our world. Whether the shifts are to take place through violence, revolutions, and wars or by means of the peaceful processes of persuasion and evolutionary change is to be decided in the decades ahead. Around these trends the forces of reaction and selfish special interests, as well as the forces of human progress and co-operation, are marshaling their strength. The military defeat of fascism has not eliminated the attitude or the type of mind which it represents.

SOME DISCERNIBLE TRENDS

What are some of the trends and tensions characteristic of the middle decades of the twentieth century? In the following

sections certain trends are suggested for consideration. These trends are political, economic, cultural, and educational. They are also among the central moral issues of our day. These trends will be the center of discussion and controversy for years to come. Persons interested in building a better world cannot neglect them, since they are affecting man's faith, his loyalty, and his conduct.

1. *The Trend Toward World Organization.* — The peoples and the nations of the world are groping their way toward a greater degree of unity. They want peace, and they realize the values and the need of peace. They are resolved that the chaos and anarchy of the recent past must end. During the first half of the century their efforts proved in vain. Will they be more successful during the second half of the twentieth century? Let us hope that the experiences of recent decades have taught us something and that we shall not have to go through a third world war before we achieve an effective organization to maintain peace.

Certain things seem fairly clear. The first is that we are in intimate contact with the other peoples of the world. We are going to fight them, control them (or be controlled by them), or co-operate with them. We cannot ignore and avoid them. The world is too interdependent to make isolation possible. There has been a marked swing of opinion from a narrow nationalism to an acceptance of the ideal of world co-operation. Second, there is a growing conviction on the part of the peoples of the world that war can be eliminated. War is a phenomenon like slavery, duelling, and political and religious persecution. Just as these evils have been eliminated from civilized societies without any change in the genetic basis of human nature, so war also can be eliminated. Peaceful methods of settling disputes have already been successful over large areas of the earth's surface; for example, among the forty-eight states in the United States, and among the nations comprising the British Commonwealth of Nations. Will these same attitudes and methods be established among the United Nations of the World? The United Nations organization has raised our hopes; it has not allayed all our fears.

There is no one cause or explanation of conflict and war. Any adequate discussion of causes would lead to a consideration of many things. Perhaps a basic cause of the world anarchy and conflict is the fact that individuals, social groups, and nations have rejected the most elemental of all the moral truths upon

which society is based — the right to live, the right to be protected against torture and death, a right which can be secure only as it is defended by the group.¹ If a man will not defend the vital rights of other men, he will soon find it difficult to defend his own rights. Unless a community is prepared to use its combined power for the defense of its weaker members who are victims of lawless violence, there can be neither law nor justice nor peace. The same principle applies to the community of nations. Men collectively must defend their right to live and to live well or that right cannot be defended. Consequently, we must put collective power behind law and justice. We must organize law against violence and aggression in support of human decency and moral standards. If we fail in this endeavor, the future will be dark indeed.

Our age is struggling to break down our narrow conceptions and practices of political nationalism and our outworn theories of sovereignty. A world of competing and unrestrained national sovereignties is a world of international anarchy and periodic wars. National self-determination and the insistence that each nation be its own judge where its national interests are involved lead inevitably to rivalry and war. The nation is not the last and highest expression of social development. Social evolution is in the direction of some form of world community and government. The nation-state is not destined to pass away; it has its contribution to make. Just as the nation-state was superimposed on the family and clan, trans-national or international institutions need to be superimposed on present political communities. The present United Nations organization is a step in this direction. We must eliminate war, the great scourge of modern civilization, and in its place we must support world legislative, executive, and judicial organizations for the maintenance of peace. The coming of atomic power makes the old game of national power-politics more dangerous than ever.

When men of intelligence and good will fail to see and to do the things that are necessary and to do them in moral ways, some "rabble rousers" are likely to try to organize the world in their violent ways. The answer to Hitler's futile and tragic attempt to unite Europe and to Japan's "East Asia Co-Prosperity Sphere" is not merely to defeat those plans, as we have done. The positive

¹ See Norman Angell, *Let the People Know*, Chapter III. The Viking Press, New York, 1943.

answer is to move forward in support of reasonable movements toward international organization and a world society. While machinery for peace is important, the spirit, the attitude, and the living faith which men and women hold are of even more importance.

2. *The Trend to Extend Democracy.* — On the domestic social and political front, changes are in the offing. There is a trend to extend democracy and to eliminate some of the inconsistencies in its application. If we are living in a revolutionary period, when great changes are taking place, it is inconceivable that the democratic nations can play a leading part in the reconstruction of the world and leave the structures of their own societies unchanged. There is a struggle between the free democratic spirit and the autocratic and plutocratic forces entrenched in various key positions in society. One cannot read widely or move about in society without feeling some of the pressures.

The trend toward a more consistent democracy is seen in at least four movements: First, there is emerging a new conception of the attitude of government towards its distressed and less privileged citizens. This expresses itself, in part, in the trend from *laissez faire*, or the theory of non-interference on the part of government, to the view that government ought to promote the general welfare. In contrast to the theory of rugged individualism, which has been increasingly denied both in theory and in practice, there is emerging the social-service view of the modern state.

While standing in contrast to rugged individualism, the social-service view of the state stands in even sharper contrast to the fascist or totalitarian view of the state. Under totalitarianism the state is superior to all individuals and groups, regardless of their nature. Totalitarianism is a denial of the claims of personality, of intelligence, and of democracy.

Second, there is a growing restlessness on the part of great masses of our citizens. The "forgotten man," rootless and restless in a machine age, has almost been led to destroy a civilization which, he thinks, has ignored and betrayed him. If considerable sections of the population have only a meager share in the products of the social and economic order and have little to lose by sweeping social changes, they provide fertile soil for the growth of social and economic panaceas. Many persons have been ready to accept almost any faith or program, however irrational, if it

promised to enrich their lives and give them some goals in life. Genuine advances in civilization have affected a comparatively small group. We cannot move forward with confidence until the cultural level of the masses is raised. We must share civilization, at home and abroad, or see it destroyed.

Democracy is based on a faith that the basic qualities of selfhood, which all persons possess in common, are more important than the superficial distinctions of class, economic standing, sex, color, or race. Democracy is based upon confidence in the capacities and potentialities of the common man.

Third, we are becoming increasingly aware of our racial problems. Issues centering around race are endangering our aims for a better world. The problem today centers in the white man's unwillingness to give up his sense of and position of superiority and the colored man's unwillingness to endure any longer his position of inferiority. Unless we can get together and share civilization with the people of other races, there is little hope for an enduring peace and a secure or happy future.

Scientific evidence supports democratic demands that we treat persons on the basis of personal worth without regard to race. There are no pure races and no superior races. Each race includes a mixture of advanced and primitive characteristics and great individual variations. Speaking before the Conference on the Alien in America, Earnest A. Hooton of Harvard said: "The 'white man's burden' has been mainly one of hypocrisy. With no more savage worlds left to conquer, . . . the white man has turned this same vicious argument to use against his own kind."¹ The democracies have been caught unprepared in their social, economic, political, and racial policies; consequently, they have had difficulty in withstanding the onslaught of fascism.

Fourth, there is a growing demand for a greater degree of economic democracy. It is a real question whether or not political democracy can survive for long without a greater degree of economic democracy. Political democracy and economic autocracy do not go along together very well. This is especially true at a time when we are asking our former enemies to become truly democratic. The rise of the labor unions, the co-operative movement, and consumers' organizations are only a few of many attempts to find a more adequate solution to this problem. We

¹ Earnest A. Hooton, "Plain Statements about Race" in *Journal of the American Association of University Women* for June, 1936, p. 196.

are going to have to extend democracy or run the risk of seeing it repudiated.

3. *From Self-interest to Planning in Terms of Human Welfare.* — One of the central trends of our time is the attempt on the part of society to shift from an emphasis on self-interest in terms of money to planning in terms of human welfare. This problem or trend has urgency in our society due to two developments in recent centuries. The first is the separation between morals, on the one hand, and economic and political affairs, on the other hand. During the medieval period all human interests and activities were guided by moral and religious ends, and life was comparatively unified. To have suggested that economics or political or educational affairs could be separate and independent of all other human interests would have been rank heresy. Due to the trend of human affairs in recent centuries, these areas have asserted their independence, so that there has been individualism in politics, "business is business" in economic affairs, independent secular schools, and "art for art's sake."

The second development is the Industrial or Technological Revolution, which is one of the most revolutionary occurrences in human history. The story is so well known that little more is necessary than to mention it. The first stage changed the simple form of production under the domestic or handicraft system to the factory system. Instead of the worker's owning his simple tools and controlling the conditions of labor, the new employer-manufacturer came to own the factory, the machinery, and the raw material, and he was interested primarily in production and in greater profits for himself.

During the last one hundred years a second stage, equally significant, has been taking place. Industry has passed from *man-to-man capitalism* to what is called *corporation or finance capitalism*. We have now huge concentrations of power, the separation of ownership from management, the absentee owner who knows his property only in the form of paper certificates, and the loss of a sense of direct personal responsibility. This type of business has pyramided power so high that the common man tends to be lost. It creates "multiple men," and it has been a source of great danger to our free institutions.

During the last two centuries the main purpose of our economic system has been to provide money income for producers and owners. Men have even claimed that this was right and moral.

Today, however, there is a muffled roar from the voices of the people demanding a greater degree of security and an end to involuntary poverty in the midst of potential plenty.

Is our society to be dominated by self-interest in terms of profit or is there to be planning in terms of human welfare? This issue is being fought over, consciously or unconsciously, in legislative halls, in executive orders, in court decisions, in speeches, articles, and books, and in the daily press. The shift may be made in a few decades or it may take a hundred years. Until we make the shift we are likely to have periodic unemployment, poverty, depressions, revolutions, and wars.

Another way of stating this trend is to say that our age is *trying to subordinate economic to non-economic motives*. We are struggling to move from an acquisitive to a functional society. The demands of both the technical situation and the moral situation call for work to be for consumption or for the satisfying of basic human needs. While we shall need to enlist the self-regarding motives, we must not overstress them or put them in first place. The more constructive side of human nature — loyalty, creativeness, public recognition, and love — needs to be cultivated.

The events of recent decades have furnished many examples of subordination of the economic motive. Your author resists the temptation to discuss the rise of fascism, modern war, the Soviet Union, the rise of socialism, and the growing co-operative movement. In one way or another, all of these movements reject the economic motive or reduce it to second or third place. This is also true of the professional groups in so far as they remain true to the professional ideal.

Have you noticed the new appeals that are being made in our society? Today we hear much — and we shall hear more in the future — about health, housing, recreation, social security, education, culture, and freedom from fear and from want. The idea of the general welfare is coming more and more to the fore. We need to move from self-interest to social welfare — possibly even to an economy of sacrifice.

4. *A Trend Toward a More Conscious Social Purpose.* — There is a trend toward a greater degree of unity and integration, or toward a more conscious social purpose. We have discovered the secret of efficiency, production, and power. We have the technology and the “know how.” But with scientific instruments and power in abundance, many persons are afraid of the future. With great

riches, we feel insecure. We have had no great goals and purposes toward which we can direct our efficiency — at least no great peacetime goals which have captured our loyalties. We are now struggling to achieve some great social purposes.

During World War II we achieved a considerable degree of unity and a social purpose. We wanted to win the war, and we did win it. In 1939, for example, we produced \$61,000,000,000 worth of civilian goods. In 1943 we produced \$91,000,000,000 worth of civilian goods and another \$83,000,000,000 worth of military supplies. With sufficient motivation we can do almost anything. But we do not want another war just to achieve a social purpose. Patriotism is a peacetime virtue, too.

The crises through which we have passed in recent decades — depressions, threats from fascism, and war — are due in considerable part to the fact that modern culture has lost its bond of unity, its common standards and convictions which alone give a basis for life. Life has been broken into fragments or compartments. This is caused in part by our retreat from the use of creative intelligence in social affairs, in part by a false method of knowing — a method which emphasizes only what the sense organs reveal — and in considerable part by the isolation of highly specialized fields and studies. As a nation of specialists we have applied our technical knowledge and skill to our separate fields, but we have been unwilling to assume any responsibility for human affairs and our social relationships. As specialists we tend to see life in fragments and to lose a sense of its unity, meaning, and wholeness. Assuming that progress was inevitable, we thought that any additional “facts” would accelerate the rate of progress. We see now the folly of that approach. Progress is possible but not inevitable at any one time.

Dissatisfaction with this situation is heard on every hand. Many books are attempting to point the way toward unity. In the colleges there is a movement toward general courses and integrated programs of study. Most vital problems cannot be isolated in narrow fields. In the churches the movement toward federation is discernible. In the international field we are endeavoring to achieve an effective world organization.

As a part of the social purposes mentioned above, we need to gain a new sense of the value and dignity of human personality. The belief that persons are of worth, regardless of age, sex, rank, color, or circumstance, is a basic conviction underlying Western

civilization. This conviction — central in all great ethical systems, in the assumptions of democracy, and in all high civilizations — has been weakened if not lost in our society. The sciences are likely to be taught as something external to man and as portraying a mechanistic system in which human personality has no part. The social studies are often set forth as a structure of laws and forces which are superior to man and which determine his conduct. Everything is stressed except man's freedom and responsibility. His power of discrimination and control are minimized.

Until science is taught as one of the great achievements of the human spirit, until industry and machines are viewed as instruments to serve human welfare, and until the controlling principle in education is belief in the worth and dignity of man, we shall have to wait for the arrival of a better society. Archibald MacLeish sees this issue of the concept of man which is to shape and control our society as the chief issue of our time. He says, "If the world can be taught to believe in the worth of man, in the dignity of man, in the characteristic perfection of man, it can be taught not only to survive but to live. If the world can be governed in belief in the worth of man, in the dignity of man, it can be governed in peace."¹

BUILDING A HIGHER CIVILIZATION

The task of building and of maintaining a high civilization in which man may develop his latent potentialities is our one all-inclusive social purpose. It is a continuous task. If we relax our efforts, even for a short period, the work of centuries may be lost. If we take our civilization for granted, our own futures may be endangered. If our ideals have become vague, it may be because we have failed to reinterpret them in the light of new conditions and to show their modern applications. It is not because those ideals are entirely inadequate.

To believe in progress and in the possibility of progress at any specific period in history is a reasonable view, in the opinion of the author. We live not only in an orderly universe, as we have seen, but in one that is dynamic and creative rather than static and fixed. Men live in an evolving universe that appears to be

¹ Archibald MacLeish, "Humanism and the Belief in Man" in *The Atlantic Monthly* for November, 1944, p. 76. Used by permission of the author.

moving in the direction of life, self-consciousness, intelligence, freedom, and values. If this is true, there is meaning and moral purpose in the universe as well as in man's life. There is in man a creative urge that is related to the creative forces of the universe. Man lives on a physical level which conditions his behavior and limits the scope of his freedom. He lives also in an emerging realm of ideals and values. He is free, within limits, to choose between alternative courses of action. Evil is that which destroys life and which needs to be eliminated. As we discover better ways of doing things, the older ways become evil. Good is that which makes for larger personal and social values, for integration, and for wholeness. Progress comes through improving or in out-doing what has been done before.

Nothing is worse for a man or for a people than to lose aim or sense of direction. Loss of worthy goals is more serious than a reduction of national income. We need to recover the thrill and the sense of mission which our forefathers had when they were building a new civilization. The intellectual framework for man's life and culture may be provided by a study of philosophy. The task of philosophy is in part to furnish a life view and a world view. It should also contribute to man's understanding of many of his major problems. The organizations and institutions of society can be aided by the social studies. The creation of efficient means, or the implementation of our social purposes, is the work of the special sciences. Unless efficient means are available, we shall meet frustration in striving toward our cherished objectives. Religion can furnish the motivation and the great loyalties which enable men to feel that the tasks before them are pre-eminently worth while. We need to take the great new inventions and the marvelous powers that are now available to man and use them so that they will create not destitution, suffering, and war, but human welfare, happiness, and lasting peace.

»» QUESTIONS AND PROJECTS ««

1. What trends, not discussed in the chapter, are discernible in the modern world?
2. In his *Declaration of Interdependence*,¹ Harry A. Overstreet suggests that there are "two Americas." The first is the land of the Founding Fathers, of independence of spirit, of free speech and human rights. The second is the land of absentee ownership, of industrial and financial barons, as well as of tenant farming, sharecroppers, migrant workers, and other victims of the various forms of economic domination. Is there any justification for this distinction?
3. Speaking at the closing session of the San Francisco Conference on the day of the signing of the United Nations Charter (June 26, 1945), President Truman began with the statement, "What a great day in history this can be!" He might have said, "What a great day in history this is!" What is the significance of his wise choice of the words *can be*?
4. Commenting upon the atomic bomb and the release of atomic energy, the weekly news magazine *Time* for August 20, 1945, said: "Each in its turn, steel and gunpowder and aircraft had gradually changed war and society. In a single day the atomic bomb made a bigger change than any of them. Its blast hit every war office and chancellery on earth. Treaties, boundaries, alliances, the charter of the new United Nations, the foreign and domestic policies of states — all are affected by estimates of the relative strengths of the nations. Now, all the estimates had to be recalculated."² In the time since this statement was made, what have been the effects of this discovery? What are likely to be the changes in the future?
5. Give your reaction to the following statements:
 - (1) "Man has been more successful in making engines than in achieving the will and wisdom to use his engines for humane purposes. This is the predicament of Western Man." (From David E. Trueblood, *The Predicament of Modern Man*, p. 16. Harper and Brothers, 1944.)
 - (2) "Many problems of our time are due to the fact that people insist upon going on living and thinking in terms of 1918 or 1939 or even of 1944 instead of in terms of the present."
 - (3) "To have a positive policy is to make history instead of letting history happen to us or trying to fend it off."
 - (4) "If the phrase 'one hundred per cent American' means that each of us should be willing to subordinate his personal welfare to the wel-

¹ W. W. Norton and Company, New York, 1937.

² Used by permission of Time Incorporated, publishers of *Time*.

fare of our people as a whole, not occasionally, in times of crisis, but all his life long, then we cannot too enthusiastically repeat it. But if it means that we should be a hundred per cent satisfied with our country as it is now, with the people who are now in positions of leadership, with our legislators and executives, our courts, and our constitutions, in their present state of efficiency, it is the worst slogan we could find." (From Durant Drake, *The New Morality*, p. 203. By permission of The Macmillan Company, publishers, 1929.)

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