

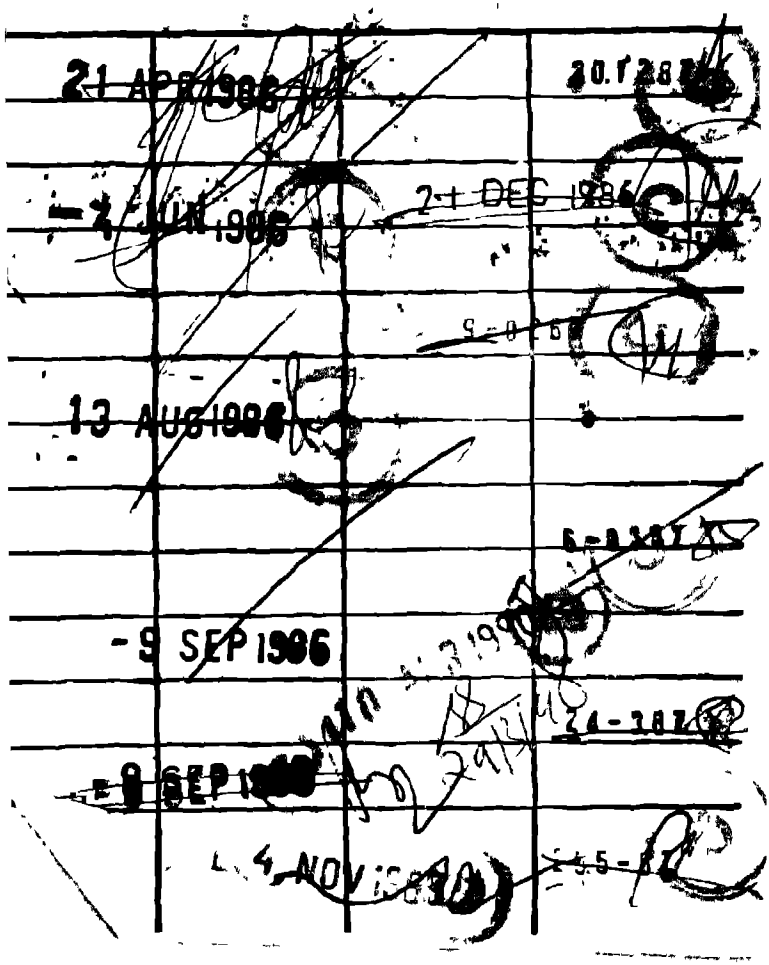

DELHI UNIVERSITY
LIBRARY

## DUE DATE SLIP

Cl No R3U:N 69

Ac No. 18679

This book should be returned on or before the date last stamped below. An overdue charge of 25 Paise per day will be charged for the first two days and 50 Paise from the third day the book is kept overtime



# INTRODUCTION

*to the*

# HISTORY OF PHILOSOPHY

# INTRODUCTION
## *to the*
# HISTORY OF PHILOSOPHY

BY

Joseph B. Burgess, M. A.

*Department of Philosophy, Los Angeles City College*

McGRAW-HILL BOOK COMPANY, INC.

*New York London*

1919

COPYRIGHT, 1939, BY THE
MCGRAW-HILL BOOK COMPANY, INC.

PRINTED IN THE UNITED STATES OF AMERICA

*All rights reserved. This book, or parts thereof, may not be reproduced in any form without permission of the publishers*

# Preface

Doubtless there have been those more competent than the present author who have thought of writing a "history" but have refrained through humbleness induced by reading the scholarly treatises of many who have spent years of intensive research into the original documents of the philosophic great. This effort of mine may therefore be taken to illustrate the very old and not untrue aphorism about fools and angels The work stands convicted of making no original addition to the sum total of philosophic beliefs Its claim to consideration may best spring from the possibility of its presenting an old story in a slightly different manner, a manner which, it is hoped, may help to increase the number of those who possess some understanding of the greater philosophers of our Western world If such an objective is worthy, then it is hoped that the audacity that must go with presenting yet another restatement of what philosophers have said may be taken with that calm which has long been believed the special mark of seasoned philosophers

It has been the intention of this author to bring the philosopher a little more closely into touch with his age and with our own. In some instances and in a general way this has been possible, while in others the effort has fallen short of the goal and the philosopher still remains very much out on his particular limb. Possibly in some instances he belongs there rightfully, and to remove him from his perch would be to distort our portrait of him. The claim is not new that the true visionary belongs in a sphere apart from the run of common mortals Certainly in some instances his utterances can be properly interpreted only upon this hypothesis. However, if by preference the philosopher has withdrawn from the common touch, his thoughts can be important for us only if they shed some light upon life as perforce it must be lived. If in some way his work has not been significant in the historical march of mankind, [illegible] no warrant is given for heeding his words It is safe to say [illegible]

great men are great because they have been forces in the shaping of human affairs, and in this is the justification for preserving their memories in the records of human achievement For this reason earnest effort has been made to show, in a small way at least, something of the importance of philosophers in mankind's adventures in the realm of ideas

In gathering materials for this volume the author incurred a great debt to the many masters of research within the field of original sources To mention all of them would be a long chronicle, and to mention some but not all would be unjust Perhaps to acknowledge none would be best, leaving it to the realization of every student of philosophy that no historical work is possible but for myriad sources of data. It is, however, becoming to express my thanks to a number of publishing houses for their kind permission to quote from their publications D Appleton-Century Company, Inc , Albert & Charles Boni, Cambridge University Press, J M Dent & Sons, Ltd , Doubleday, Doran & Company, Inc , E. P. Dutton & Company, Inc., Fordham University Press, Grosset & Dunlap, Harcourt, Brace & Company, Harper & Brothers, Henry Holt & Company, Houghton Mifflin Company, Longmans, Green & Company, The Macmillan Company, Oxford, Clarendon Press, Open Court Publishing Company, G P Putnam's Sons, The Science Press, Charles Scribner's Sons, D Van Nostrand Company, Inc , and Yale University Press

The author also acknowledges the generous and helpful criticism of the faculty of the department of philosophy at Los Angeles City College while the manuscript was being written Special mention should be made of the valuable assistance rendered by Edward G Chester and Morris R Gaynor in collecting the materials for parts of the manuscript, and for the excellent work of Miss Nihla Stowe in the preparation of the final copy.

JOSEPH B BURGESS

LOS ANGELES, CALIF ,
*May*, 1939

# Contents


PAGE

PREFACE . v

*Chapter* I

INTRODUCTION THE FUNCTION OF PHILOSOPHY . 1

*Chapter* II

THE RISE OF GREEK SPECULATION . . 14

1 Why We Start with a Study of Greek Thought 14
2 The Coming of the Achaeans 17
3 The Rise of Science and Its Separation from Religion 18
4 The Philosophers of Miletus . . 22
5 Emergence of Principles . 26
6 Pythagoras and the Pythagoreans 27

*Chapter* III

IS REALITY DYNAMIC OR STATIC? 35

1 Reanalysis of Milesian Thought 35
2 Heraclitus Philosopher of Flux 35
3 Xenophanes Commentator and Critic 40
4 The Eleatics Repudiation of Flux 41

*Chapter* IV

ATOMIC INTERPRETATIONS MEDIATING EFFORTS 49

1 The Problem of Reconciliation 49
2 The Pluralistic Solution of Empedocles 50
3 Anaxagoras Qualitative Pluralism 53
4 Leucippus and Democritus Quantitative Atomism 56

*Chapter* V

THE SOPHISTS AND SOCRATES . 64

1 The Rise of the Sophists Anthropocentric Emphasis . 64
2 Socrates . 74
3 Socratic Schools Cynic, Cyrenaic, and Megaran. . . 82

PAGE

*Chapter* VI

PLATO 89
1. Plato and His Predecessors 89
2. Theory of Reality 93
3. Ethics of Self-realization 100
4. Theory of State 103

*Chapter* VII

ARISTOTLE 111
1. Life and Works 111
2. Development of Aristotelian Philosophy 113
3. Contributions to Logic 114
4. Theory of Development 118
5. Practical Ethics 124
6. Theory of State 128
7. Aesthetics 131

*Chapter* VIII

PHILOSOPHERS FOLLOWING ARISTOTLE 134
1. General Characteristics of the Period 134
2. Epicureanism 136
3. Stoicism 143
4. Skepticism 155
5. Eclecticism 157

*Chapter* IX

PHILOSOPHY AND RELIGION 160
1. Religious to Natural Interests 160
2. Neoplatonism 162
3. The Rise of Christianity 166
4. Development of Christian Dogma 169
5. Philosophy of Augustine 178

*Chapter* X

MEDIEVAL PHILOSOPHY 186
1. General Characteristics 186
2. The Problem of Universals: Realism and Nominalism 188
3. The Problem of God's Existence 193
4. The Problem of Faith and Reason 196

*Chapter* XI

NEW IDEAS FOR OLD 202
1. Symptoms of Disruption 202
2. Revival of Ancient Authority 207
3. Rise of the New Science 209
4. Giordano Bruno 217

PAGE

*Chapter* XII

THE MODERN PERIOD EMERGES 222

A Francis Bacon 222

1 Life and Work 222
2 Objections to Traditional Learning 223
3. The New Method 226

B Thomas Hobbes 228

1 Philosophical Status 228
2 Life and Work 229
3 Method and Materialism 230
4 Politics, Ethics, and Religion 233

*Chapter* XIII

RATIONALISTIC APPROACH TO PHILOSOPHY Rene Descartes 238

1 Life and Significance 238
2 Method of Approach to Philosophy 240
3 Philosophical Results 242
4 Developments from the System of Descartes 252

*Chapter* XIV

RATIONALISTIC APPROACH TO PHILOSOPHY Baruch Spinoza 256

1 Character and General Viewpoint 256
2 Speculative Development 258
3 Metaphysical System 261
4 Theory of Knowledge 265
5 The Way of Life 268

*Chapter* XV

RATIONALISTIC APPROACH TO PHILOSOPHY Gottfried Wilhelm Leibnitz 274

1 Place in Philosophy 274
2 Metaphysics The Monadology 276
3 Theology The Best of Possible Worlds 278
4 Epistemology All Knowledge Is Innate 282
5 Leibnitzian Influence Enlightenment and Romanticism 284

*Chapter* XVI

KNOWLEDGE AND REALITY SYSTEMS OF EMPIRICISM John Locke 289

1. Life and Interests 289
2 Theory of Knowledge 291
3 Metaphysics 300
4 Political Philosophy 302
5 Ethics, Religion, and Education 305

PAGE

*Chapter* XVII

KNOWLEDGE AND REALITY SYSTEMS OF EMPIRICISM

George Berkeley 311

1 His Era and His Life 311
2 Arguments against Materialism 313
3 The Real as Spirit and Idea 318
4 Contemporary Deism 323

*Chapter* XVIII

KNOWLEDGE AND REALITY SYSTEMS OF EMPIRICISM

David Hume 329

1 The Man 329
2 Theory of Knowledge 332
3 Substance and the External World 340
4 Social Philosophy Ethics and Politics 346
5 Philosophy of Religion 352

*Chapter* XIX

BRITISH MORAL THEORY 359

1 The Cambridge Platonists 359
2 Moral Sense Theory The Earl of Shaftesbury 361
3 Private Vices Are Public Benefits Bernard Mandeville 362
4 Self-love and Conscience Joseph Butler 364
5 Doctrine of the Inner Man Adam Smith 366
6 The Most Pleasure for Most People Utilitarianism 370

*Chapter* XX

CURRENTS OF THE FRENCH ENLIGHTENMENT 383

1 Meaning of the Enlightenment 383
2 Absolute Sensationalism Condillac 385
3 Voice of the Second Estate Voltaire 387
4 Diderot and the Encyclopedists 391
5 Prophet of the Revolution Rousseau 395

*Chapter* XXI

PHILOSOPHY OF IDEALISM Immanuel Kant 403

1 Personal Characteristics 403
2 Influence of Rationalism and Empiricism 403
3 Epistemology and Metaphysics 406
4 Morality, Freedom, Immortality, and God 419
5 Immediate Successors Fichte and Schelling 426

*Chapter* XXII

PHILOSOPHY OF IDEALISM George Wilhelm Hegel 434

1 Life and Place in Idealistic Tradition 434
2 General Position and Method 436
3 The Natural Order 442

PAGE

4 The Social Order 445
5 The Absolute Order 453
6. Hegelian Influences 457

*Chapter* XXIII

PHILOSOPHY OF PESSIMISM Arthur Schopenhauer 461
1 Background of Pessimism 461
2 Appearance and Reality 465
3 The Will to Live 467
4 Salvation 468
5 Later Pessimism 473

*Chapter* XXIV

POSITIVISM AND PRAGMATISM 480
A The Positivistic Tradition 480
1 Founding of Positivism Comte 480
2 Empirical Positivism Mill 487
3 Economic Positivism Lange, Mach, Poincaré 493
4 The School of Sociological Positivism 495
B Pragmatism 496

*Chapter* XXV

PHILOSOPHY OF EVOLUTION 505
1 Hypothetical Evolution 505
2 Darwinian Evolution 510
3 Cosmic Evolution Spencer 517
4 Superman Evolution Nietzsche 523
5 Later Evolutionary Theory 528

*Chapter* XXVI

NATURAL RIGHTS AND SOCIAL CHANGE 534
1 Ancient Concepts of Law and Right 534
2 Modern Background of Natural Rights 539
3 Reaction against Natural Rights Theory and Extreme Individualism 561
4 Modern Trends 575

*Chapter* XXVII

SOME POSSIBLE IMPLICATIONS OF RECENT SCIENCE 586
1. The Newtonian "Classical" Tradition 586
2 Revolutions in Science and Thought 591
3. The Universe Grows Larger 592
4. The Smallest Things Are Quanta 600

REFERENCE TITLES 615

GLOSSARY OF PHILOSOPHICAL TERMS 619

INDEX. 625

# INTRODUCTION TO THE HISTORY OF PHILOSOPHY

## Chapter I

## INTRODUCTION: THE FUNCTION OF PHILOSOPHY

In the modern era the philosopher is apt to be regarded as something of a recluse, removed from the world of affairs and protected from it by a web of ideas he spins for himself out of the gossamer of his own thoughts He is the calm, somewhat cynical onlooker who, on his lofty intellectual pedestal, remains divorced from reality and superior to the travail of everyday living He speaks a language only others of his breed can understand, and the average man looks upon him with mingled awe and pity. He is admitted to have more than ordinary brains but his knowledge is mostly of a sort that has little significance for the real issues of life His wisdom is abundant but inconsequential He theorizes while others must be practical His ideas, while interesting if one has time for them or can understand them, are of no assistance when real problems arise to be faced and solved He appears to say nothing that is definite. He avoids direct answers by hiding behind a screen of many words and fine phrases He speaks most authoritatively about dead issues, about questions that have the accumulated dust of ages upon them.

This thought is dramatically expressed on one of the murals in the library at Dartmouth College José Clemente Orozco, its creator, depicts dead things giving birth to other dead things The mother skeleton, upon a couch of dead books, gives birth to a baby skeleton, while the skeleton obstetrician with his skeleton colleagues assists at the ritual It is not a pretty sight, but from it philosophy may have a lesson to learn However, it is not with philosophers and their ideas that Orozco is particularly concerned.

His is a warning to the whole of formal education, though the admonition might, with particular point, be made against philosophers and philosophy as compared with some of the other departments of learning The mural warns against allowing ideas to stray too far from touch with living people and human problems Philosophy and philosophers both are accused, and in part justly so, of this

Yet the world of action cannot go on divorced from the world of ideas and ideals Thought must precede action if it is not to be blind Thoughts are the eyes of action and reason its counselor Nor is the world of ideas a pale and lifeless realm Many of the decisive battles of mankind have been fought within its precincts In the pages of books is the record of human wisdom, human ideals, and human hopes There, too, are found the graves of human error and folly We cannot pass this heritage by, thinking to lift ourselves by bootstraps of the present There can be no future dividends except from wise investments directed by experience of the past Humanity always has its problems to cope with, and success depends more than is ordinarily supposed upon conclusions reached with respect to the values to be sought, the objectives to be realized The whole point of existence may be lost if these aspects of life are neglected And it is in this kingdom of ends that philosophy has its home All the technique of science, all the store of material goods, are of small consequence if not illuminated by vision and insight A pointless existence is one that is undirected, one that sets no goal of values to be fought for and won Philosophy is the story of those who have reflected upon life and the world that supports it It is a record of human estimates of those things most worthy of human effort, a record of human opinion about the nature and kind of world in which we live and have our being

Though we may feel that we have penetrated deeply into nature's secrets, though we think of ourselves as living in an age of wisdom and sophistication, it requires but little thought to reveal that we know only a few small things about the world which is our home In a few thousand years we have been able to achieve but a paltry number of adjustments that make for more successful living It is true that we have given up some of the ancient fears and superstitions but we have created new ones to take their places, and all the while beneath the familiar surface features of nature

there beats a cosmic pulse about as unknown as ever. We have learned some of nature's ways, and some of the older uncertainties and mysteries have faded Yet we are still little more than strangers in a world not of our making. Though this be granted, most of us believe that there are some ways of life that are better than others even though no final way of life may ever, to the very end of man, be found Philosophers of the ages past and present have suggested ways of life for their personal satisfaction and for that of others who may follow them Philosophy is a record of man's effort to understand his world and to determine what is appropriate for him to do while living in it Hence, though one may not be alive to its values, philosophy itself is not constituted of dead issues It will never die unless it becomes more important merely to exist than to live fully Perhaps mankind needs most of all today a perspective with broader horizons Man appears more in greater need of a way of living abundantly than of more skill and worldly goods We have learned reasonably well to live with nature Our biggest task is to learn how to live with one another In this undertaking wisdom accumulated through the centuries cannot be superfluous. The thoughts of the wisest of men cannot be dead for us today

Philosophy being nothing else but the study of wisdom and truth, it may with reason be expected that those who have spent most time and pains in it should enjoy a greater calm and serenity of mind, a greater clearness and evidence of knowledge, and be less disturbed with doubts and difficulties than other men Yet so it is, we see the illiterate bulk of mankind that walk the highroad of plain common sense, and are governed by the dictates of nature, for the most part easy and undisturbed To them nothing that is familiar appears unaccountable or difficult to comprehend They complain not of any want of evidence in their senses, and are out of all danger of becoming skeptics But no sooner do we depart from sense and instinct to follow the light of a superior principle, to reason, to meditate, and reflect on the nature of things, but a thousand scruples spring up in our minds concerning those things which we seemed fully to comprehend Prejudices and errors of sense do from all parts discover themselves to our view, and, endeavoring to correct these by reason, we are insensibly drawn into uncouth paradoxes, difficulties, and inconsistencies, which multiply and grow upon us as we advance in speculation, till at length, having wandered through many intricate mazes, we find ourselves just where we were, or which is worse, sit down in a forlorn skepticism [1]

In this way the famous Bishop of Cloyne contrasted the philosopher with the man of common sense Of the two, the philoso-

[1] Berkeley, George, *Principles of Human Knowledge*, Introduction By permission of J B Lippincott Company, publishers

pher is held either to travel in an intellectual circle or to end in a state of perpetual doubt, while the uncritical follower of "the dictates of nature" continues unconcerned and untroubled by philosophical perplexities That the philosopher finally faces the *Scylla of constant doubt* or *the Charybdis of circular reasoning* may be open to doubt More truth would appear to attend Berkeley's analysis of the attitude of common sense and the consequences following upon it. There are none so smug in the business of living as those who take all things for granted or who never feel impelled to doubt, to question, or to investigate The problems which arise for the curious minded either do not occur to them at all, or, if they do, there are ready and conclusive answers at hand. For the uncritical, life holds few perplexities that long remain to disturb the routine of day-to-day existence Uncertainties, misgivings, doubts do not assail the beliefs of such as these, and they live complacently entrenched behind the bulwarks of dogmatic conviction, prejudice, and superstition, all loosely intermingled with a store of practical precepts and workaday knowledge There is little doubt that such people are for the most part contented, and, if personal contentment were the ultimate end of living, there might be little ground for objecting to uncritical beliefs such as prejudices and superstitions, for these are the foundation stones of contentment But progress in the arts and sciences and in social betterment cannot evolve from a state of contentment To be satisfied with things as they are, with values today pursued, with human society as it is, is to stagnate It is the mark of disintegration in a personality or a society if such an attitude becomes characteristic

What of those who seek better to understand themselves and the world? Berkeley points out that "prejudices and errors of sense do from all parts discover themselves to our view" Contentment, then, will not be the mark by which the student of the world is recognized But shall we "find ourselves just where we were, or which is worse, sit down in a forlorn skepticism"? There have been but few instances in the history of human thought of the "worse" alternative, and none, it is safe to say, of the other Though we may seek a better understanding of ourselves and the world we inhabit but fail to obtain complete understanding, the very activity involved in the search makes it impossible for us, at last, to "find ourselves just where we were" Nor is skepticism any

real danger Living demands acting and judging, and neither of these is possible without beliefs of some sort One cannot be a complete skeptic and live

There can, however, be vast differences of attitude toward the beliefs we come to accept, and this is the crucial point to note There is a significant difference between *belief* and *disbelief*, and between the two extremes are manifold degrees of doubt and uncertainty. Either extreme tends toward dogmatism. The bulk of mankind is inclined in the direction of belief. The philosopher is apt to be discovered somewhere in the middle ground, for in seeking truth or wisdom he finds few things so certain as to merit absolute belief and few things so palpably absurd and unfounded as to be relegated to the category of the absolutely false From this it might be inferred that the critical thinker is one whose mind has been so long suspended from making final judgments about debatable issues that it has no positive content This would be to overlook the possibility of simultaneously doubting the complete validity of a judgment while at the same time accepting it as the best product of intellectual effort available to date It is quite possible and, in fact, necessary to act upon evidence while at the same time recognizing that it is incomplete or subject to change with the advance of investigation

There are many possible degrees of probability that may attach to a judgment or belief This factor of probability in the search for knowledge is one clearly recognized by science, that branch of human activity capable of giving us what is probably the most reliable and certain of all knowledge The dogmatist or firm believer, as the man of common sense is apt to be, is one who refuses to permit an element of probability to attach itself to the store of his beliefs He thereby automatically sets obstacles in the way of his intellectual growth and prepares for himself those logic-tight compartments of thought which are the despair of all who seek to alter the views of fellow beings to the end of keeping them in touch with the changes which inevitably arise in the course of life on the human level In the search for wisdom or clearer understanding it is well to bear in mind that it is preferable to doubt than to believe blindly, for belief does not nourish the curiosity and, therefore, renders the speculative imagination helpless The intelligent person will exercise caution in the accumulation of his beliefs

The function of philosophy is basically critical, and philosophy itself is the product of human curiosity Philosophical speculation has emerged as an inevitable consequent of man's restless nature. Since he is endowed as no other creature is with the capacity for imagining himself other than he is, for visualizing things otherwise arranged than they are, it necessarily follows that his speculations should take him into the realms of things as they are, as they were, as they will be, and as they ought to be And superimposed on all these issues is the problem of what is man's place in the total organization of events Speculation upon these matters caused the sciences to emerge one by one as the probable truth of their answers became increasingly evident The sciences have investigated chiefly the realm of the past and present, but at the same time they have considerable to say about things as they probably will be However, the past remains largely unfathomed and the future uncertain Philosophy is more at home and on its own ground when dealing with questions of what ought to be and with the problem of man's place in nature It has many answers to these problems All of them cannot be ultimately correct and all of them may be mistaken Most of them are interesting, all are instructive, most of them are, in measure, of practical usefulness The history of philosophy would present these answers for the instruction and use of those who have an interest in human problems, in things and ideals—in short, in life as it *is* lived and as it *might* be lived

It appears evident that philosophies arise out of the conditions and demands of life History indicates that they tend to vary and change with those conditions and demands Civilizations are overtaken by periods of confidence and periods of doubt, differing in duration and intensity A world that seems friendly, that offers an abundance of food and freedom from danger, is apt to call forth a very different attitude in men than a world where life has a precarious foothold and struggle predominates The former lends to courage, pride in success, content, and optimism, the latter inculcates fear, a feeling of incompetence, and pessimism On the one hand is a world that is indifferent, even hostile, on the other, the best of possible worlds, and the extremes merely mark the limits of a host of intermediate positions Individuals who comprise groups show variations of viewpoint scarcely to be explained wholly in terms that ignore conditions over which the individual has but limited control Natural circumstances influencing the

development of personal philosophies include not merely the external environment, both social and physical, but the psychological and physiological make-up of each person as well Cynical, pessimistic, disillusioned attitudes may be generated by unfavorable economic and political situations but may, on the other hand, be due to a pathological nervous system, a defective liver or stomach, or faulty endocrine function, or they may be the result of both types of influence together And to avoid the possible conclusion from this, that one may predict what philosophy a person will adopt by the simple device of knowing his basic metabolism, it should be remembered that the height of optimism itself may result, partly at least, from a defective working of endocrine glands which may produce an indolent complacency not at all in keeping with the real conditions of life The situation is complex A personal philosophy is a growing thing which may be based upon ignorance as well as understanding, upon fancy as well as fact The agencies of its origin are as diverse, as complicated, and as unfathomable as the causes of life itself It takes form as we live and as it grows it lends a guiding influence to the practice of living It is the truth that what our world assumes in the way of meaning is largely dependent upon what we make it mean It faces each of us as a tremendous mass of indifferent potentialities Whether it wear a face of joy and beauty or one of sordid ugliness is very much a matter for each to determine for himself

To show further the complexity of contributing influences it should be noted that a world view characterized by high ideals and lofty motives and one breathing bitterness, disappointment, and renunciation may both arise out of similar uncompromisingly harsh environments Disappointments and hardships may cause one person to give up a search for betterment while another may find a source of renewed vigor in the very existence of obstacles. Again, there are those whose training or experience has taught them to expect much from the practice of living Expecting much, disappointments may be frequent and induce a world view proclaiming the futility of human effort in a cold and indifferent universe Another, hoping much, may be more demanding of his environment and exert his effort in the task of making the world give him the goods he craves There is no predicting what a man's viewpoint will be from the circumstances of his existence But whatever it turns out to be, his nature plus his environment in-

evitably shape his attitude toward the larger whole of things and develop a working philosophy by means of which he better adjusts himself, whether it be in terms of intense optimism or equally intense renunciation Thus each has some sort of working hypothesis or philosophy of life by means of which he seeks to adjust himself most satisfactory to the events occurring in a world of which the purpose or function is by no means understood We vary in the comprehensiveness and adequacy of these everyday philosophies, but the difference between the philosophy of the humblest of us and that of the sage is one of degree, not of kind

It is ordinarily the case that the collective thinking of groups of people geographically concentrated takes on a more or less well-defined attitude directed toward nature, society, and the individuals personally who compose it In a large measure the individuals of the groups express the same point of view, the same doubts and hopes and interpretations of their places within the whole There are, however, always a few malcontents, recalcitrants, radicals, both in thinking and in acting The complacency and conservatism of the group are opposed by these, and the society is forced to accept certain innovations which obtain perhaps a slender foothold at first but one often strengthened gradually by wider spreading acceptance So among any people there is a deep flowing undercurrent of thought and custom growing out of their mode of existence and, at the same time, a degree of diversity developing out of individual differences of fortune or of heritage or experience Above all things, experience tends to temper one's outlook, which may be, accordingly, as varied as the sorts of experience one may have This, as it has been suggested, may find outward expression in our everyday lives by attitudes such as optimism or pessimism, confidence or hesitancy, persistence or vacillation

The professional philosopher is one who makes the development of a consistent world view his lifework He is one who seeks the broadest, clearest, most sufficient interpretation his experience and thought permit His search is for an adequate ground for all his beliefs, expectations, and attitudes, so that his conduct may be reasonable and humanly becoming, so that he may properly evaluate the complex variety of human goods and experience He is the system maker, the supplier of interpretations, the analyst of human values, the dispassionate spectator of the human scene Though no system maker may see eye to eye with another, all of them have

much to contribute to our appreciation of the values and potentialities inherent, perhaps, in man and nature Their problems are also ours as soon as we cease taking all things for granted and begin instead a process of critical evaluation Their suggestions should aid us in setting our own house in better order and help us to furnish it more usefully as well as more cleverly.

As a vocation the practice of philosophy in the Western world has been earnestly pursued by a large number of men during the last twenty-five hundred years The history of philosophy would present their views and the reasons supporting them in the hope that we may gain insight and inspiration from them If life is to achieve the fullest meaning we can give it, then each of us for himself must engage in an evaluation of his beliefs, attitudes, and expectations together with the grounds upon which they rest We must bring out into the light of critical reason the hidden or assumed principles that guide our action. If they are sound, no amount of scrutiny will harm them and they will gain in significance during the examination If they are unsound, criticism will uncover some of the weak points and our better judgment will urge us to repair them In this business there may be much of value to be derived from thinking through the thoughts of the greater philosophers both past and present These philosophers have gone a long way and by devious paths If we are alert, they may be able to save us many steps in our own search for a suitable world view

They should broaden the horizon of our comprehension and reveal to our curious scrutiny realms of insight hitherto unsuspected or but vaguely felt They demand that we be critical in our thinking and open-minded in our judgments with respect to all matters of importance They urge us to take cognizance of the futility of bigotry and ignorance and to seek clarity of thought and tolerance of attitude They point to the need for an unprejudiced mind in considering propositions expressing thoughts opposed to our own opinions, and insist upon the cultivation of that flexibility of habit which permits change should it be discovered that some of our convictions have been discredited They suggest to us that no acceptable solutions for any of the intimate problems of existence have yet been found that are free from contradiction, inadequacy, or imaginative hocus-pocus Though from time to time particular system makers have been satisfied with their final conclusions, an examination of other systems reveals a disagreement

that sheds doubt upon the attainment of ultimate certainty But even if certainty persistently eludes our search, the values derived from the hunt are not, thereby, impeached, for problems concerning the nature, destiny, and values of life, as well as those directed at the structure, activity, and permanence of things, are problems of perennial interest and meaning Though a pleasant Sunday afternoon excursion has no particular objective to be reached and ends at the point of departure, the adventure has lost none of its significance and worth for having deposited us nowhere, for experience has been enriched and invigorated by it

Philosophy is a similar adventure from which we may return exhausted in mind and no end perplexed However, we are ultimately inspired by the exercise and repaid for the effort in the form of clearer insight into the practice of living and enlarged appreciation of it We find that it is essential, if we are to seek intellectual honesty, to recognize and consider the many-sidedness of life's problems In this business it is unnecessary to advance entirely alone and without compass, for others before us have deliberated on the identical problems With the assistance, then, of those who have thought these problems through, we may ourselves more profitably seek reasonable and valuable solutions for our perplexities as they arise in our personal experience

It should be understood that philosophic study is not designed to fix on the student the views of any single philosopher or systematic interpretation, it is not evangelically eager to find disciples for masters It has as its chief objective the development, by gradual accumulation of ideas, of a satisfactory, because reasoned, view of the world and of ourselves as inhabitants of it It seeks to lend growing power to the development of attitudes suitable to making harmonious adjustments to life situations It hopes to do this by shedding light on the complexities of problems of existence through acquaintanceship with proposed solutions of them offered by the great minds of the ages It is an examination of human values approached through the presentation of those diverse "goods" which human ingenuity has from time to time pronounced to be the highest and most worthy of human achievement Such an acquaintanceship, it is desired, shall have a living and, therefore, practical significance for the one who, for the first time in his life, sits down to an earnest contemplation of the drama and setting of human existence To him it should bring an awakening to the

enormity and diversity of the perplexities arising out of a life which refuses to take things for granted, but instead, demands that experience give a consistent account of itself

[It so happens that in the early years of our lives, at home, at school, or at church, we accumulate a sizable group of stock answers and solutions to earlier problems created by wonder Most of these solutions we come by unconsciously, and the very fact that we do not know their source, or that we have grown up for years with them, lends an atmosphere of certainty and finality to them The edge of critical interest too frequently is dulled beyond the hope of much sharpening Thinking problems through for ourselves becomes excessively tedious where it is discovered that others can be found to do our thinking for us The conviction of Aristotle and Plato that man is by nature and choice a thinking creature is yet to be clearly substantiated It is hard work to think for one's self and the majority of people assiduously avoid it Still, in spite of what may be the case respective of the majority of people, there are always some who never cease to wonder and explore With these philosophy is never dead]

In leisure, in perplexity, in old age, we tend to turn actively philosophic Then we stop for self-examination or more coldly and skeptically to regard those familiar things we have been taking for granted in the bustle of getting some place, the location of which so frequently is uncertain and obscure We hesitate a moment, withdraw an instant from the press to watch and wonder at the parade that whirls before our eyes We may be perplexed, exasperated, dismayed, amused, frightened, made joyful by it But most of those who pause to contemplate, return again and again, for the experience is intriguing and full of wonder, even if it dismays or exasperates And we cannot return again from our contemplation the same persons we were when we started

But philosophy is not the thing of leisure moment or old age merely, it is a dynamic factor in the lives of all of us, whether or not we are consciously aware of it "It is not the peculiar business of the Gods, nor of the specially endowed It is a human business; it is every man's business "[1] All of us have matured or are maturing in the midst of a process of active participation in life During this interim from birth through maturity, exigencies of environment,

[1] Hocking, W E, *Types of Philosophy*, p 6 By permission of Charles Scribner's Sons publishers

insistent demands of the organism, and interests derived from experience have left us with a fund of beliefs, attitudes, and expectations respecting ourselves, others, and the physical world These color and give us a prospectus of the present and the future We act because we believe, we expect because we are confident, we live because we are convinced that to live is somehow worth while As George Santayana remarks· "That life is worth living, is the most necessary of assumptions, and, were it not assumed, the most impossible of conclusions "[1]

Our common-sense philosophies, endless in detail and variously rationalized, are as natural and inevitable a part of our growth as are the muscles of our bodies A life that is forced to react to its environment is bound to develop some sort of attitude toward it and this is the foundation of philosophical outlook Our philosophy, however poor or rich it may be, functions as the ultimate court of appeal in making the decisions demanded by the pressure of facts and situations. With each new decision or evaluation one's philosophy changes a little and as we live it develops unfailingly Temperament or personality or "self" is largely constituted by the sum of adopted beliefs, attitudes, and expectations Thus a man's philosophy is vital because it is a personal part of him

A person must have a broader outlook than any to be gained from a special field, such as the professions or business. He must be able to see the whole of things and grasp the interrelatedness of its many parts Only then are the petty and the important phases of existence given their true weight and proper place in the whole Only when one begins to understand himself can he begin to appreciate his strengths as well as his weaknesses and develop a point of view that lends consistency and meaning to participation in life It is this wholeness of point of view that philosophy seeks to encourage With its cultural and broadening effects, it would push aside the confines of the usual human horizon Its bearing on life is seen to be intimate and its effect invigorating To the length of life, philosophy would add a bit to its richness, its breadth, and its depth

## DISCUSSION TOPICS

1 In what respect has everyone a philosophy of life?

2 What sort of problems do you gather philosophy is concerned to raise and discuss?

[1] *Reasons in Common Sense*, p 252 By permission of Charles Scribner's Sons, publishers.

3 What bearing on life do philosophic problems have?

4 What is the nature of the benefit to be derived from a study of the history of philosophy?

5 Explain why the problem of values enters into philosophic debate

6 Why should we study philosophic views of people who have thought them through if we are to form our own philosophies?

7 Why is it claimed that an unbiased mind is most desirable?

## PARALLEL READINGS

BARRETT, CLIFFORD *Philosophy*, Chap I
BRIGHTMAN, E S *Introduction to Philosophy*, Chap I
CUNNINGHAM, C WAITS *Problems of Philosophy*, Chap I
FULLER, B A G *History of Greek Philosophy*, Vol I, Chap I
HOCKING, W E *Types of Philosophy*, Chap I
MUIRHEAD, JOHN H *The Use of Philosophy*, Chaps I and II

# Chapter II

# THE RISE OF GREEK SPECULATION

## 1 *Why We Start with a Study of Greek Thought*

There are at least two good reasons for beginning a study of the history of philosophy with the work of the Greeks rather than with that of more eastern peoples The first is that Western philosophy, with which we are concerned, has its roots in Greek speculation and not in Oriental The distinctive marks of Occidental art, science, and philosophy have grown out of developments begun by the Ionian Greeks and have for the most part progressed with the Greek spirit of investigation behind them. Second, Oriental philosophy is basically either other-worldly or backward-looking It is interesting, to be sure, and frequently instructive in its moral teaching, but for all that its general impulse is opposed to the Western drive of thought toward better understanding of ourselves and our world And this is exactly the spirit that prompted Greek speculation

Indian philosophy is chiefly of two sorts which, while dissimilar in detail, arrive at conclusions that have much in common Both culminate in a denial of worldly pursuits and admit of ideals that may be realized only after life as it is known has ceased to be Brahmanism, the oldest philosophy of India, has long made asceticism the immediate object of living For centuries it has supported the unfortunate caste system which has been the greatest single obstacle to progress in India It has given religious sanction to the belief that it is impossible to better one's social status in the period of a single life, only in the hereafter is it possible for the soul to occupy a human habitation higher up the scale

Obviously such a way of life has little to teach those who expect at least some of the values of existence to be had here and now in our world of living things and events It is not a plan that would encourage science, art, literature, or human understanding It is hostile to this world, which is merely something that stands in the

way of salvation and must be overcome Far from any desire to improve or understand it, the Brahman would have as little to do with it as possible, would be rid of it as quickly as he can.

Buddhism, as something of an offshoot from Brahmanism, is less ascetic The Buddhist's approach to life is an attempt to understand the underlying causes of human desires and conflicts Once understanding has been achieved, the individual may act so that his cravings will become less important He will counteract them with conduct that will finally cause them to disappear Thus he will at last no longer feel the ordinarily intense cravings of the body The will or urge to live will be lulled to sleep, and Nirvana, a condition characterized chiefly by absence of the impulse to live, will be achieved But, however pleasant this idea is to the imagination of the Buddhist, or however much satisfaction he may derive from his belief that his conduct is bringing him to Nirvana, to the Occidental mind there is little of inspiration in all this True, the Occidental would like to understand his psychological nature, but not for the purpose of striving for a state of suspended animation. Most of all he wants to be alive and doing The vigor of life is strong within him and he would glory in that vitality as long as possible He seeks to understand the world in order that life may be better in it

While this characteristic of Buddhism is not in accord with the general impulse of Western thought, it should not go unmentioned that this Oriental philosophy has had a marked influence upon some notable thinkers of the Occidental world Buddhistic emphasis upon humility, control of self-assertiveness, helpfulness, gentleness, all appear in the works of Christian teachers Control of the passions through understanding them is a prominent feature of Stoicism and the philosophy of Spinoza In many respects Schopenhauer was a modern Buddhist for he, too, taught that the way to cope with life is to deny the impulse to live It is sufficient at this time merely to acknowledge these influences, for we shall come upon them again while tracing the history of Western philosophy

The traditional philosophy of another mass of people, the Chinese, while it has not been other-worldly, has at least been prone to gaze backward rather than forward It has been content to glory in the achievements of ancient sages and has not felt the urge to push on independently to original thought and action The man who was responsible for fixing this attitude upon perhaps

two hundred million Chinese was the great teacher, Confucius, who lived during the latter sixth and early fifth centuries before Christ At this time the great Chow dynasty was definitely on the decline and it appeared to Confucius that with it would go the glories and achievements of the ages He was deeply impressed by the learning of ancient Chinese sages and took upon himself the task of perpetuating their names and thoughts His work was done better than even he could have dreamed possible Confucius also felt a marked reverence for his parents, especially his mother, and in the course of time this sentiment attached itself to the larger aspects of his general views Reverence for ancient learning became united with reverence for ancestors Together they succeeded in convincing the Chinese that all that is great and good lies in the past The present is for the task of perpetuating the heritage of the past The future can possess no values of its own Before tomorrow's sun has arisen it has already set. It is clear that Confucianism is a culture philosophy rather than a religious philosophy like those of India But like the latter it sponsors an attitude issuing in action that is out of step with the ideals of Western culture

A habit of thought that thus causes a people to glory in past achievements alone can hardly aid them in moral and intellectual advancement We do not wish to restrict our study exclusively to any single time or period, especially to the past We desire to penetrate the paths ahead in so far as we can before we try them, for otherwise we can scarcely see reason for choosing one way of life rather than another And that is exactly what the Occidental spirit wants to find out It is a restless spirit, dissatisfied with things as they are, curious about the natural environment, insistent in its demand for reasoned explanation, eager for a glimpse of future possibilities Such a spirit, to be sure, sometimes is overanxious to forge ahead, and, losing sight of what has gone before, is apt to find that facts have deserted the ship and that fancy is in the pilothouse. It becomes necessary, from time to time. to take our bearings by a backward look or two. We cannot afford to ignore the past in the push toward the future Chinese philosophy, however, looked backward a number of centuries ago and never since has thought to turn around to look ahead again In doing so, it ceased to be a force behind the advance of human understanding and civilization

The Occidental spirit is impatient with either other-worldliness or placid content with past achievements It does not advocate a return to past glories though there are some people who long for the "good old days" Not only does the Western spirit scorn the Indian ideal of mystic absorption in Nirvana, but it is inclined to regard this Nirvana business as a lot of twaddle, unbecoming a man of common sense and sound judgment Occidental thought wants to be "tough-minded" and down to earth. It wants scientific *facts* and philosophies that do not ignore such facts; it demands a certain practicability about its ideals and schemes for better life adjustments It is impatient with philosophies that hint of other-worldliness because it wishes to keep its feet firmly planted on solid, scientifically supported ground with attention directed mostly ahead except for an occasional examination of the ground previously traversed It is to Greek philosophy that one must turn to find the origin and development of this spirit that more or less permeates the attitudes of all of us

## 2 *The Coming of the Achaeans*

Before the Greeks could achieve anything like originality and significance of intellectual contribution, they first had to go to school, as it were, with the people of a declining civilization and become aware of differences in points of view The Aegeans, or Minoans, whom they found occupying the region of the eastern Mediterranean, had much to teach the northern Greek barbarians and served, in the period of their intermingling, as a stimulus for the development of potentialities for achievement that reposed within the Greek spirit It was inevitable that the vigorous invaders should overrun and absorb the Minoans, for the latter were already past the height of their power Though it is perfectly true that the Greeks had lessons to learn from them, it is not true that Greek civilization merely began where the Minoans left off Their own originality flowered into an achievement distinctly new in the world, and its origins are to be regarded as Occidental rather than Oriental The Greeks brought with them their own tribal concepts of religion, morality, and social order, vaguely formulated, to be sure, but uniquely their own

During the six or eight hundred years prior to the first philosophical stirrings of life at Miletus, the Greeks gradually inter-

mingled with the conquered people Here the give-and-take of two different cultures served to stimulate the natural Greek curiosity and ingenuity Several factors entered into the life of the Hellenic tribes to prepare the way for the birth of science and philosophy All such conditions cannot and need not concern a study of ancient philosophy, but among them it will be of value to examine the interchange of religious viewpoints and take note of certain environmental conditions conducive to the rise and development of philosophy.

### 3. *Rise of Science and Its Separation from Religion*

Religion as accepted by the Minoans may be described as *animistic* The world of the Minoan was peopled with mysterious beings sometimes friendly, sometimes vicious, depending upon circumstances Events occurred through the instigation of some demon, spirit, or god, and woe to the unfortunate person or group to run athwart them Man's destiny and happiness were thought to be bound up with the whims or desires of such creatures Magic was the only means of appeal either for relief from their oppression or for the advantage of their favor The Minoan was not prompted to search for regularities in the occurrence of events for there was no reason to expect order Nothing really *had* to happen as it did unless some superhuman agency desired that it should To get along successfully, great care must necessarily be exercised not to offend such gods as those of thunder, fire, or flood, lest disaster overtake one By himself, man was helpless before these powers Things might occur only with the consent of the spirits

Explanations of things and events took the form of mythology, which developed historical accounts of the supernatural beings who supervised the entire sum of happenings in the world Magic ritual, divination, animal sacrifices, blood purification all emerged in due time as essential parts of a religious explanation and method of getting along satisfactorily in such a world A priesthood with secret rituals and a claim to the possession of the keys to the realm beyond conducted the religious practice with such an authoritative hold as to keep the masses of people in a state of superstitious awe

The religion of the Greeks, on the other hand, was highly *materialistic* Their deities were much like human beings who sojourned on not very distant cloud-capped Olympus The doings

of the Gods were not incredible, but instead distinctly human, since they were believed to be stimulated by the same desires, interests, and feelings as ordinary men They were, to be sure, supernatural, immortal, and influential in mundane affairs On occasion they might even descend from their lofty abode to sojourn among mortals, giving counsel or dealing out highhanded justice Yet there were a few rules which even the gods could not set aside This fact was of tremendous importance for the beginnings of science and philosophy among the Greek tribes, since it provided for the emergence of concepts of unalterable natural laws

Since they were blessed with all the human vices as well as all the virtues, the gods of the Hellenes could understand human desires, and human dealings with them might occur in a manner reminiscent of men trading among themselves An angry god might be appeased by suitable gifts and his pleasure assured by the same technique Religious service was a matter of bargaining man to man, a materialistic nonmysterious affair. Not everything was conceived to be at the mercy of supernatural caprice In a limited way, processes of nature might be altered by the will of a powerful god, and this made it important to cultivate his favor, but there was much less in Greek religion of the complete helplessness of the Minoan in the control of his deities

Communication with the gods of the Greek pantheon was open to any man by means of a very simple ritual Few demands were made upon the Greek by his religion other than the keeping of promises and the offering of occasional sacrifices Nor was there held out much promise of a satisfactory life after death Not until the rise of Orpheus did the Greek expect to go anywhere but to the cold reaches of Hades as described by Homer With the advent of Orpheus, however, the god Dionysus was advanced as identical with Zeus, transmigration of the soul supplanted the notion of a single life's experience, and ultimate happiness was promised those who were inducted into the sect by secret rituals.

Thus, during the intermingling of Greek and Minoan, there competed two fundamentally different religious viewpoints, both claiming to be authoritative How long it took some of the Greeks to realize that both viewpoints could not be accepted, it cannot be said, but the realization was inevitable And with it came skepticism and agnosticism How be certain which religion is valid? How be sure that either is? Why is it necessary to hold to any belief in

supernatural agencies? The problem of explanation dawned in a clearer light and the possibility of a new answer took shape

Furthermore the Greek religion was favorable to a loosening of the bonds of supernatural explanation in other respects (1) There was, in Greek theogony, no single all-powerful and supreme God The worship of many gods resulted in their being catalogued after a fashion into a hierarchy of importance, yet this did not prevent certain deities from attaining a place of supreme importance in some regions while at the same time being insignificant in others For instance, there were favorite gods of the upper classes like Athene, Apollo, Poseidon, Aphrodite, Artemis, and Hera, while among the lower classes the favored gods were Dionysius and Hermes From the latter group also came many of the mythical religious stories, such as that of Demeter, her daughter Persephone, and the underworld god, Hades Such a circumstance was not conducive to the development of a well-ordered, unified religious system and practice, and left much leeway for individual judgment and preference At times it was to the interest of politicians to support the supremacy of the gods of the poor against those of the rich The situation was disordered and, therefore, conducive to liberality of interpretation (2) The absence of a priesthood eliminated the possibility of rigid domination of intellectual beliefs and religious opinion Originality did not find this barrier to overcome and it was easier to slip into a more actively critical attitude on the relative significance and validity of supernatural explanation All in all, with the passage of centuries and the widening of the Greek horizon, religion became less convincing, more in need of supplementation by reason and experience Finally, in the sixth century before Christ, the time was ripe for the first negative answer to the question Are the gods a necessary part of an explanation of the universe?

The physical environment of the Achaeans was influential in another variety of ways for the development of science and philosophy Coming down into the Peloponnesus, the wandering Greeks found a country deeply indented by ocean bays and channels and tortuously divided by mountain ranges The result was a breakup of the tribes into relatively small and isolated groups Instead of a unified people, the Greeks became separated into groups under the government of city-states, each proud and jealous of its sovereignty Even so gigantic an impending disaster as the Persian invasion

failed to weld the Greeks into a solid battle front to meet the common danger Each city-state was free to organize as it pleased, thus making the Greek self-conscious and thoughtful of social and political affairs He awakened to the possibilities of human ingenuity and resourcefulness for improving the conduct of life and affording a more ample understanding of it. Interest in social and political issues grew, to reach its fullest consideration in the fifth and fourth centuries before Christ through the theorizing of the Sophists, Socrates, Plato, and Aristotle

The sea soon lured many Greeks away from the land The occasional visits of the tramp ships of antiquity aroused the desire to venture out on the everywhere-present Mediterranean, and gradually Greek ships came to dominate the commercial life of the time The sterility of the soil drove increasing numbers to the sea, and those who did not care for the carrying trade found ample soil on the neighboring coasts, especially in southern Italy, Sicily, and Asia Minor To these regions Greek ships brought increasing numbers Colonies rose and prospered, making their own charters, obeying no orders from the mother cities unless it pleased them to do so

Here originality could be given free reign Economic independence was made possible for some by trade and the fruits of slave agrarianism Private property increased in quantity and importance, creating a leisure class, some members of which were devoted to intellectual pursuits Leisure was not a new thing in the history of man, but here, in the case of the Greeks, it was not wholly squandered in riotous living or Oriental display To be sure, much wealth was lavishly spent, but a reserve remained to nourish the rising interest in philosophic speculation

Cities eventually began to compete with one another, as in more modern times, for the privilege of playing patron to men of learning. It was one of these cities on the coast of Asia Minor that has come to be accepted as the birthplace of Western philosophy Here, at Miletus, a thriving colony had grown on the venerable ground of former commercial splendor Ocean and land commerce met at the gates of the city and ideas from the known world were discussed and evaluated

As the trade capital of the seventh century, Miletus was particularly well situated to become the center of the new advance in cultural and scientific achievement in the century following Un-

hampered by the domination of set religious concepts, free to speculate as the whim pursued them, immersed in the concrete material world of business, and imbued with an insistent curiosity about the world around them, the leaders of the Milesian school were able to offer the first explanation or interpretation of the universe in terms of natural causes. They judged it both unnecessary and undesirable to resort to supernaturalism as a principle of explanation. Philosophy and science emerged together indistinguishable, not to be differentiated until the Greek mind had attended the school of experience for a long time and had gathered bodies of demonstrable information. Philosophy, the mother of all the sciences, made her first feeble steps, reason began to supersede superstition and imagination.

## 4 *The Philosophers of Miletus*

The Milesian philosophers all adopted the notion of a single cosmic substance, or stuff of the universe, as the basic principle of reality. It is a concept embracing acceptance of belief in the homogeneity and unity of the world. It asserts that to understand what the world is like it is necessary to find its basic element or structure. There were differences of opinion as to just what was the nature of the primary substance, one calling it water, another air, another simply The Boundless. The ceaseless flux of events, the incessant change exhibited by nature was accepted as self-evident and in no need of further analysis and explanation. It was of the nature of the real to move and change. Condensation and rarefaction were regarded as sufficient to account for the manifold diversity found in nature. The cosmic matter thus passed as something living, animated, self-moved, these being as characteristic of the real as wetness is of water.

*Thales* was first to put the basic philosophical problem squarely and answer it without recourse to supernatural explanation. His life covers the period of the last quarter of the seventh and the first half of the sixth centuries B.C. He was a native of Miletus and an accomplished man for his period, being at the same time a statesman, mathematician, engineer, astronomer, and the first philosopher of Greece. As a statesman he was apparently antinationalistic, advocating unsuccessfully the formation of a league of the Ionian colonies for mutual protection against the danger of Persian conquest. He is credited with having been the first to introduce

geometry into the Greek world His achievements, such as the diversion of the waters of the Halys River during Croesus' campaign against the Persians and his prediction of the eclipse of 585 B C , appear to be fairly well authenticated Other stories about his exploits—such as his cornering the olive-oil market, thereby amassing a fortune—may or may not be true The famous episode of his falling into a well while "stargazing" probably belongs to the same doubtful tradition

That Thales was widely known and highly regarded is reflected in the fact of his being called one of the seven wise men of Greece It seems clear that his interest in the Milesian world about him led to his spending much time in meditation and search for a reasonable understanding of all things. Philosophically, he was impressed by what seemed to be a fundamental unity of all things He sought to discover beneath the great diversity of nature a single all-embracing reality His problem may be stated in this manner What is the original ground of all observable manifestations, that from which everything is derived and into which everything returns, the indestructible, eternal, fundamental essence of nature? To this question he gave the answer *It is water* Why he called his first principle water is not explicitly revealed, but it probably was suggested by his observations upon the all-importance of water to living things Again, water manifests changes compatible with his basic generalization Rarefaction reveals it becoming steam, vapor, air, while condensation exhibits it in the form of ice. It was plain to Thales that water is essential to much that goes to make up the world of things, it is not incredible that it be regarded as the essential substratum of reality by one living during the dawn of science and philosophy Why water changes its appearance through condensation and rarefaction is a problem that did not exist for Thales. It was obvious that change did occur and the explanation for it must be presumed to have been interpreted by Thales as arising from the inherent capacity of water itself to change Self-movement would be possible on the assumption that reality is somehow alive, is dynamic rather than static. *Hylozoism*, or the proposition that the real is alive and hence is capable of motion, was either consciously or unconsciously accepted by Thales along with his other fellow Milesians

From our twenty-five-hundred-year distance, Thales' answer appears naive To evaluate his achievement and the achievement

of his followers, we must return to Miletus of the seventh and sixth centuries B C. and regard the problem as it was seen by them If we can do this it is possible to grasp the significance of Thales' speculations and realize the importance for us today of the *type* of answer given by him and his successors

The second member of the Milesian school appears to have possessed talents of his own along scientific lines, it being held that he invented a sundial and was the first Occidental map maker He was *Anaximander*, pupil of Thales, who pronounced the substance of the universe to be The Boundless Apparently he was critical of the simplicity of Thales' answer It is impossible, thought he, to accept as an ultimate principle of being anything less than the sum total of all things Whatever is real must have everything in it Some things, according to the interpretation of his predecessor, go unexplained, for example, the dryness of dust The real must be more obviously the source of all things Furthermore, it must be such as not to exhaust itself in its innumerable manifestations Water, in fact any finite substance, would be sure to do this, hence an infinite substance must be posited as the basic metaphysical entity

Experience cannot grasp an infinite substance, and reality, for this reason, must go beyond experience It cannot be described It has no boundaries, shape, or limitations It is a limitless, animate mass, eternally in motion, a chaos containing all unity and diversity Qualities such as colors, sounds, hardness, loudness, and roundness are produced by the eternal rearrangement of parts All qualities cancel each other out, as one is shaken out by the motion of The Boundless, its opposite is shaken out after it Among the first opposites to be canceled out are the hot and cold, the moist and dry Nature with all its complexities is the product of the union of opposites, the warm and dry forming the earth, the cold and moist the heavens The earth is a cylinder floating in ether and held there by its equal distance from all other bodies In the universe are an infinite number of worlds alternately created and destroyed, new worlds being built of the fragments of the old Nothing is ever destroyed and nothing comes into existence Creation is a product of the everlasting quivering of The Boundless

Anaximander called his substance divine, a remnant, no doubt, of the grip of religious interpretation This designation started a

precedent that has come down through the ages In all lands and in all times there have been and are now philosophers who predicate divinity of philosophical first principles Looked at from another angle, Anaximander's act of predication may be taken as the first philosophical concept of God, a concept devoid of all mystical and necessarily religious form or connotation

To Anaximander also goes the distinction of pronouncing a definite principle of biological evolution Back of Miletus he discovered fossilized fish embedded in the rocks and was prompted to find a suitable explanation for their presence At some time, he thought, certain fish apparently grew ambitious to live on land and proceeded to carry out their wishes Some, at least, succeeded and left their remains, their offspring probably being the ancestors of present animal forms, including man The thought was naive but new, and even as stated is reminiscent of modern theory regarding biological origins It would appear to suggest that there must have been some former type of organism ancestral to man that was capable of producing offspring able to meet the exigencies of dry-land environmental conditions, for obviously, the human infant, in his present form, could certainly not have survived alone Whether man is descended from fishes whose offspring were particularly self-reliant may be open to debate, but it seemed to Anaximander that, whatever was the nature of man's ancestors, they must have been very different from man as he was found living in the cities of the Greek world of his acquaintance

*Anaximenes'* criticism of Anaximander's first principle was the reverse of the complaint Anaximander voiced against the water substance of Thales If Thales had erred on the side of simplicity, Anaximander had leaned too heavily toward complexity. Anaximenes could not discover how nature had been further explained by being called the product of the eternal motion of The Boundless Understanding had not been promoted by including all qualities therein Explanation must return to a simpler concept, yet one as all-embracing as that of Anaximander Air or atmosphere appeared to fulfill the requirements to the mind of Anaximenes Through much the same reasoning as had guided Thales, this concept grew on its creator By rarefaction and condensation it became all things and yet remained eternally itself Being fully aware of his predecessor's criticism of Thales' metaphysical principle, coupled with his own opposite criticism of Anaximander, Anaximenes was,

probably, attempting to strike a middle course Just how he hoped to achieve this with his notion that air is fundamentally basic is not clear and his written work has not come down to us.

This third member of the school of Miletus is indeed a shadowy figure with respect both to the events of his life and to the development of his philosophy. He is reported as having been a pupil of Anaximander, a native of Miletus, and a man of considerable acumen His ultimate conclusions probably did not surpass the erudition of his predecessors For instance, his belief that the world is a disk floating in air was less advanced than Anaximander's view of the world as a floating cylinder To his credit in the field of astronomy should be mentioned, however, his distinguishing between planets and stars His work served further to clarify the problem of determining the nature of the real and the manner whereby it exhibits itself in experience As it is in many cases, the answer given is less significant than the question asked This is true of the pioneers in philosophical speculation, and the school of Miletus, with its problem of substance, its unchallenged problem of change, and its nonmystical type of solutions, has a valid title to careful consideration

## 5 *Emergence of Principles*

Besides such problems, arising out of the early speculation are at least four significant principles of philosophy and science, all of them playing important roles in thought since the days of the philosophers of Miletus

*a The Principle of Consistency* To avoid a double standard of truth and interpretation, to avoid the mystical in explanation, it was regarded essential to retain a single natural basis for drawing conclusions In terms of this principle the entire realm of the universe must be accounted for by recourse only to a single method and standard In the case of the Milesians, it is seen in their explanations of the All in terms of a single material substance Logical thought has always insisted on consistency, on noncontradiction, and science to this day makes it a cardinal principle

*b The Principle of Simplicity* In Anaximenes' criticism of Anaximander, it is seen that this principle was attaining to coherent expression He insisted that a simple explanation rather than a complex one lies nearer the truth Science, from the beginning, has held that whatever nature is, it must be reduced to the simple,

at least if it is to be understood Perhaps it is not wholly clear why it should be insisted that nature or the ultimately real should be simple Science at any rate has employed the concept as a working hypothesis with remarkable success As a presupposition of method few doubt its merits and it is to be found variously expressed by the several experimental sciences under the title Law of Parsimony. It does not follow, however, from this that simplicity rather than complexity lies at the end of the metaphysical quest

*c Nothing Can Come from Nothing ex nihilo nihil* Both Thales and Anaximander stress the point that it is inconceivable that anything real could possibly have come from nothing, from absolute nonentity. Anaximander's statement to the effect that whatever the real is, it must have everything in it, attests to the far-reaching influence of this concept It appears again and again in early speculation and most respectable philosophy today refuses to ignore it In its converse form it states that whatever is real cannot pass into unreality or nothing This in turn became the parent of modern concepts of the indestructibility of matter and energy

*d Evolution* Anaximander again is clearly the forerunner of modern biological theory The notion of development through natural selection we shall meet again in the philosophy of Empedocles, the first of the pluralists It is employed in various forms and interpretations throughout the long period of philosophic and scientific history, receiving finally objective support in the monumental work of Darwin and Spencer in the nineteenth century

With these principles and these problems, philosophy may be said to have launched itself as a ship christened and able to float, yet in need of internal alteration and reconstruction, a task that has been eagerly undertaken by the many who have booked passage on it

## 6 *Pythagoras and the Pythagoreans*

Another influential voice belonging to the period covered by Milesian speculation was Pythagoras With the growth of Pythagoreanism both the sciences and philosophy find profit philosophy in new concepts and finer discriminations, the sciences by becoming more conscious of their diverse subject matters as knowledge grew Some of the distinctions made by the Pythagoreans, such as

the One and the Many, the Limited and Unlimited, Form and Matter, are central to philosophic thought

The founder of the Pythagorean cult is the most nebulous and uncertain figure of all the ancient thinkers Tradition, hearsay, and myth obscure his life and work A curious mixture of legend and probable truth about him has come down to us. It is never quite clear, so far as doctrine is concerned, just what is to be credited to Pythagoras and what to his followers or what one should believe and what one should not Aristotle and others do not specifically attach beliefs to the founder but rather to "the Pythagoreans" Added difficulties may be traced to the fact that historically Pythagorean philosophy developed over a period of years beginning sometime during the sixth century, continuing through the fifth to the time when, in the middle of the fourth century, it was merged in the philosophy of Plato's Academy Necessarily during so long a period alterations and changes transpired so that it is somewhat difficult to outline in a general way the beliefs of the school without identifying particular aspects of Pythagoreanism with individual men or with limited periods of time So far as possible the exposition here given will seek to outline the basic thought of the school under no more specific title than Pythagorean philosophy

Pythagoras was born on the island of Samos, probably during the third decade of the sixth century B C , thus living as a contemporary of Anaximander and Anaximenes He appears to have found living in his native city under the tyranny of Polycrates an unpleasant experience, and either by request or by choice departed for other regions, settling finally at Crotona in southern Italy There he founded a semireligious cult composed of both men and women By his contemporaries Pythagoras was evidently held in high esteem It appears not untrue that he was one of the ablest and wisest of the early Greeks The reverence felt for him led some of his later followers to regard him as semigodlike Legend favored him with such enviable lineage as Apollo in one incarnation and Hermes in another He was even believed to have descended into Hades where he had conversation with the departed heroes and learned much of life and events after death. His remarkable memory enabled him to remember past incarnations to the number of twenty. Whatever may have been his travels in places beyond ordinary mortal pilgrimage, his more earthly travels took him to

Egypt and probably to Mesopotamia and the Peloponnesus His interests were diverse and his ability sufficient to lend vigor to the pursuit of them all He was a mathematician, moralist, political reformer, and religious innovator.

The colony he established at Crotona grew and flourished, finally to the extent of bringing about its own downfall There Pythagoras taught by precept, his followers ordering their lives according to his example even to minute details of dress and speech Some of his precepts regulating the activities of the brotherhood appear meaningless and absurd to us today and can best be explained as survivals of animistic taboos For example, it is not obvious why one should not sit on a quart measure, eat beans, wear wool, look in a mirror beside a light, or stir the familiar fire on the hearth with an iron poker These and other illustrations indicate that the cult was at first, at least, religious and moral Later, political reform and scientific research assumed importance alongside the religious and moral

[The Pythagorean organization had as its chief objective the purification of the soul during its sojourn in the body Orphic transmigration played a central role in the scheme Animate nature possesses souls which are in process of a long journey, with perfection the ultimate destination The purpose of man's life is to strive for higher degrees of excellence Purification of a soul permits it to escape the body for an abode in some higher type of individual—a means for avoiding possible unhappy future incarnations and an insurance against the prospect of not attaining a place in the eternal regions of the blessed Life is but a moment in the incarnate wanderings of the soul seeking immortality This Orphic-Pythagorean notion of the relation of soul to body and of purification profoundly influenced the later work of Plato and he, in turn, the thoughts of succeeding generations]

[Admission to the sect was granted only after the neophyte had undertaken much study and had been inducted by ritualistic ceremony The process was secret and on the whole demanded considerable intellectual capacity applied to fields of science, especially mathematics and medicine The vows to be taken demanded of the candidate such things as celibacy, vegetarianism, fidelity, chastity, communal life, meditation, and frequent self-examination The difficulties in the way of admission probably resulted in the rejection of a number of influential but lazy or

stupid people who could not master the necessary entrance requirements and who later used their influence to bring about the dispersion of the cult and its expulsion from southern Italy.]

[Making use of the observation that three sorts of people came to the Olympic Games, those who came to trade, those who came to compete, and those who came to watch, the Pythagoreans divided all men into three general classes. The majority of men belong to the class of those whose chief aim is the acquisition of wealth and worldly goods, whose objective is the pursuit of pleasure and bodily satisfaction, whose activities are constantly directed by the impulses they have in common with the lower animals. The second and smaller class seeks honors and worthy achievements. These obtain satisfaction from having obtained success in the field of practical activity or glory in consummation of laudable enterprises. The highest class and the least numerous are the lovers of wisdom, those whose lives are devoted to intellectual pursuits. Foremost among these is the philosopher, whose entire life is occupied in the business of searching out the true nature of the universe - the intellectual task par excellence. This emphasis upon the rational activity of man as characteristic of the higher types of manhood became an increasingly important point of reference in succeeding philosophy, exemplified most strikingly perhaps by the teachings of Socrates, Plato, and Aristotle.

Pythagoreanism may lay claim to distinction by its contributions to science and to philosophy, though imaginative appendages to, and expansions of, Pythagorean concepts resulted in considerable obscurity regarding just what there is of value in Pythagorean philosophy. It is valid, however, to argue that beneath their mysticism of Number there is a real body of valuable analysis. Foundations for the modern physics of sound and acoustics were laid by their investigations of the relationship between pitches and lengths of vibrating strings. The science of music had its inception with the application of mathematics to sound. The Pythagorean notion that physical health depends upon a harmony of bodily functions prompted research into the field of human physiology and thus stimulated both interest in and knowledge of a science of medicine.

It is thought that the Pythagoreans were the first of the Greeks to interpret the cosmos as being an orderly arrangement of events. This thought had not occurred to the Milesians, it appears, though

they clearly thought of nature in terms of a nonsupernatural structure If it is true that the concept of order is Pythagorean in origin, it is likely that it emerged as a result of their mathematical discoveries It must have been considerable of a surprise to them as well as a great source of satisfaction when it was found that mathematical relationships among natural phenomena exist to be discovered The knowledge that pitch is determined by the length of vibrating strings, that the pleasure derived from hearing the four-string lyre depends upon an arrangement of two short strings and two long strings in the proportion of 1 2, afforded an opportunity for stating a law of sound and harmony This may have been the cue needed to start the Pythagoreans on the search for other and more fundamental mathematical relationships throughout the cosmos At any rate arithmetic and geometry were studied assiduously by the members of the sect Many such relationships were discovered and it would seem that where they were not readily found they were imagined or assumed to be there With time, the Pythagoreans were led to attach a significance to numbers far beyond the bounds of their actual discoveries Their mysticism of numbers emerged out of the concept that behind or underlying particular objects in the world there is a more deep-rooted pattern of reality that should be the object of the philosopher's quest This semimysterious order the Pythagoreans firmly believed to be mathematical or numerical in character

In the course of time the program for discovering mathematical relationships among events became transformed into that of finding the essence of things through the medium of numbers That is to say, number, as expressing constant relationships, was given a more important place in speculation as the fundamental essence or reality of particular things The argument may be stated briefly in this way Bodies are dependent on their boundaries or surfaces, which in turn depend upon lines marking them off The lines in their turn depend upon points which compose them A line is determined by the number of such mathematical points it happens to possess, and so, ultimately, the object is marked off or determined by however many points there are that contribute to setting it off from all other objects In a sense an object is the sum total of all such points, and each thing, therefore, expresses a certain number To know the thing is to discover the particular number which is its essence. Thus the number which is a peach

tree will be a different number from that which is a pear tree, a man, a cat, or a wheelbarrow From this working hypothesis it is but a short step to the elaboration that would consider number as basic to moral and spiritual events as well as physical ones Justice becomes a square number, marriage the number five (the union of the first odd and first even numbers, excepting the figure one), perfection the number ten It is true that with the passage of time the Pythagoreans found increasing difficulties with their theory The later men were more inclined to interpret things as *like* numbers, and though in some respects this gave to Pythagoreanism a more acceptable interpretation it offered at the same time even greater opportunity for the expression of a nonsensical mysticism

Interest in the mathematics of the cosmos led the Pythagoreans to study the number and activity of the various celestial bodies visible to them without the aid of any of the modern instruments that are familiar accouterments of astronomical research Some of the conclusions of these ancient thinkers were indeed remarkably correct They were the first to suggest that the earth moves on its axis and even revolves in an orbit around a "central fire" Eclipses were accounted for in the approved modern fashion, the vast distances of stars from the earth were recognized Some of the Pythagoreans, notably Hicetus, became a source of inspiration for Copernicus when he studied in Italy in the dawn of the modern era The familiar interpretation of the heavens as it appears in the writings of both Plato and Aristotle is to be traced back to these men Around the earth are nine concentric circles or fixed spheres The outermost bears the fixed stars, and on those successively nearer the earth are the various planets Saturn, Jupiter, Mars, Venus, Mercury, Sun, Moon, and Earth Since this number proved to be short of the perfect number ten, a "counterearth" was proposed around which the earth itself revolved The invisibility of this body was explained in the same manner in which we today explain why we never see the reverse side of our moon At the center of the heavens is the great "central fire," the source of light, heat, and life An eclipse of the sun could thus be explained as the result of a shadow cast upon it by the earth or by the "counterearth" when either of these bodies is interposed between the "central fire" and the sun Though the details of this explanation are erroneous, the fundamental hypothesis was the correct one Pythagorean astronomical hypotheses were all in a sense guesses, more philo-

sophical than scientific in character, but this detracts but little from the remarkable ingenuity of imagination and breadth of vision displayed by the Pythagoreans

Perhaps the most significant single development in Pythagoreanism from the standpoint of future philosophical speculation was the distinction drawn between form and matter. Milesian analysis did not advance beyond the view of nature as a single material substance Diversity of nature was lost in the unity of the one ultimate stuff of the universe The diversity experienced by the Pythagoreans forced their thinking to make a more careful analysis, which resulted in a distinction's being made between the form of a thing and the matter of which it is composed It is clear that the same mold can be used to make the same figure with several kinds of materials The same material, be it marble or wood or almost anything else, may be fashioned into a number of different figures or forms Form and material are clearly distinguishable, at least in thought

The variety and apparent contradictions experienced were interpreted as being indicative of a fundamental cleavage at the very heart of things There is a matter, a stuff of things, enclosed by form There cannot be one without the other, for without matter form has no physical manifestation, is an abstraction, without form matter cannot be experienced, cannot be said to exist All things differ in form only Matter, hence, must be regarded as the indeterminate It is that which is enclosed by form or number, that which is measured out into determinate configurations by this number or that Here, then, are two separate and distinct principles conceived as existing side by side, a fundamental *dualism* clearly stated yet in need of a great deal of reworking and examination to find the hidden implications

In spite of the mystical nonsense of Pythagoreanism it may be observed that this speculation did much to advance thought in the fields of the sciences and philosophy The budding-off process of the sciences from philosophy was stimulated through the specialized studies of mathematics, astronomy, music, and medicine Philosophically, there is presented the notion that behind or beneath the phenomenal appearances of nature there is a hidden structure of reality This thesis received its most complete expression in the work of Plato during the ancient period, but it remains today a hypothesis by no means outworn or without supporters.

Future developments made central the distinction between form and matter, for the Pythagoreans bequeathed this problem to later generations of thinkers Its ablest expression is found in the theorizing of Plato and, particularly, of Aristotle.

## DISCUSSION TOPICS

1 What are the reasons for omitting Oriental philosophy from our account of the history of philosophy?

2 Who were the Minoans? What influence did they have on the rise of Greek speculation?

3 In what ways did the religion of the Greeks favor the rise of scientific and philosophic thought?

4 Discuss the environmental factors influencing the colonizing activities of the Greeks

5 What is meant by the problem of *substance*? This is called a metaphysical problem What do you understand to be the meaning of the word *metaphysics*?

6 How did the Milesian philosophers attempt to solve the problem of substance?

7 Discuss the meaning and application of *consistency*, *simplicity*, *ex nihilo nihil*, and *evolution* as scientific and philosophic principles

8 What is the meaning of *transmigration*? What had Pythagoreanism to do with the concept?

9 Distinguish between the scientific and more strictly speaking philosophic contributions of the Pythagoreans What is the problem of *number*?

10 What is the distinction drawn by the Pythagoreans between *form* and *matter*?

## PARALLEL READINGS

BURNET, JOHN *Early Greek Philosophy*, 3d ed , Part I, Chaps I, II
FULLER, B A G *History of Greek Philosophy*, Vol I , Chaps III, IV
ROBIN, LEON *Greek Thought*, Book II, Chaps I, II
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Secs 2, 3
WARBECK, JOHN M *The Searching Mind of Greece*, Chaps I, II, III
WEBER, ALFRED *History of Philosophy*, Sec 9

# Chapter III

# IS REALITY DYNAMIC OR STATIC?

## 1 *Reanalysis of Milesian Thought*

With Milesian and Pythagorean speculation, philosophy had set for itself some of its chief problems and attained a vigor destined to carry on to remarkable achievement Naive assumption had, in a degree, given way to a rational approach to the problems of explanation Already, in early Pythagorean thought, it was seen that solutions are not easily discovered and that only careful searching can instruct man about the world. The problem of change, left unanswered in the hylozoistic scheme of the Milesians, moved into the spotlight of attention with the Eleatic philosophers and Heraclitus In these are found two contradictory solutions for the problem, and out of this impasse finally came the attempts by the pluralists to mediate to find a middle course

The Eleatics, with Parmenides their founder and chief spokesman, were led to advance a theory that reality is something unchanging, eternal, and perfect This reality they called Being Heraclitus took an opposite point of view Instead of permanence as the essence of reality, flux, change, or Becoming characterizes it There is nothing that stands still The Eleatics declared the motion and change of things to be illusory while Heraclitus maintained that the illusory aspect of nature is the apparent stability and immutability of things These fundamentally opposed views grew out of Milesian speculation chiefly The world substance of the Milesians was seen to contain two undiscriminated elements (1) a substance or material forever remaining itself, (2) an assumed principle of change regarded as an aspect of the real In Xenophanes the first element emerged to be crystallized by Parmenides, the second was isolated by Heraclitus.

## 2 *Heraclitus Philosopher of Flux*

Outstanding among the early philosophers, Heraclitus in no small measure bears out his contention that he was the first to

make a truly significant contribution to systematic philosophy It must be remembered, however, that his efforts presuppose the contributions of the Milesians and would have been impossible without them His work grew out of a recognition of the apparent hopelessness of their quest for a single substantial world ground and culminated in a substitution for it of a reality construed as dynamic and ceaselessly changing The first principle of nature, the one unchanging element, is that all things change, that the real is process

The philosopher of Becoming (535–475 B C) was a member of a rich and aristocratic family of Ephesus which had the right to officiate at the religious sacrifices of the city The privilege of supervising the sacrificial ceremonies apparently did not appeal to Heraclitus and he declared himself rather definitely on the subject·

> Men [he said] seek in vain to purify themselves from bloodguiltiness by defiling themselves with blood, as if, when one has stepped into the mud, he should try to wash himself with mud I should deem him rather mad who should pay heed to a man who does such things And, forsooth, they offer prayers to these statues here! It is as if one should try to converse with houses [1]

As a result of such conclusions as these, Heraclitus handed over the ceremonial honors to his younger brother and turned to the pursuance of philosophical study He was contemptuous of luxurious living and disdainful of the smug complacency of the masses He was arrogant in matters of his firm convictions and conceited in his self-satisfaction A man of penetrating mind, he sponsored concepts analogous to principles which are basic to all science, the principles of uniformity of nature and conservation of energy [2] It would be a source of much satisfaction to Heraclitus today were he alive to observe the fate of his basic views as they have persisted through the ages Modern Bergsonianism, and pragmatism generally, have much in common with his interpretation Modern physics with its principle of indeterminism, its quantum theory, various atom theories, and transmutation of chemical elements would appear to offer him specific support

The fruits of his speculations upon nature were offered the world in a form of expression that was paradoxical and seemingly

[1] Bakewell Charles M *Source Book in Ancient Philosophy*, Chap III By permission of Charles Scribner's Sons, publishers (Unless otherwise stated, all quotations in this section are from this source)

[2] Warbeke John M, *The Searching Mind of Greece*, p 41

self-contradictory The reasons for this are to be found both in the philosophy and in the personality of Heraclitus Doubtless he enjoyed baffling his contemporaries, especially when at the same time he could give a genuine and startling exposition of his philosophical views As a result he came to be called "The Obscure" by his successors, and, because of his typically pessimistic conclusions, particularly in the fields of knowledge and morality, the "Weeping Philosopher" as well Socrates remarked that it took a "Delian diver" to get to the bottom of many of his sayings

"One cannot step twice into the same river" sounds the keynote of Heraclitanism Nothing abides, all flows and is in constant change, permanence, thought by many to be a characteristic of reality, is illusory The senses tell us that things persist but reason and further experience correct our sense experience Even the oldest and most durable objects, such as the mountains and the giant trees, are subject to change and eventual decay Seize upon any single thing in all the cosmos, observe it closely, and it will be found to alter and change Perhaps the changes will be slight, barely perceptible over a long period of time, but still the changes take place It cannot be said to have remained its identical "self" Nothing in all the universe can resist change There is relative permanency only, the one eternal thing in all the flux is the principle of change This principle it is the business of reason to discover and learn, as man's one possibility of finding an enduring aspect in the universe What is it that forever changes, the stuff of the real, that which is ever moving? It is declared by Heraclitus to be a divine fire

Fire is not an abstract principle as we might speak of the laws of nature such as uniformity or causality, but a real substance, in essence dynamic and transforming—a substance remaining identical with itself, but mobile, shifting, ever active, never at two moments the same It is a substance, conceived not as fixed or having physical extension, but rather as a never-resting force, constantly opposing itself Out of that opposition all things are born into a transient existence Change through the stages of earth, water, air, and fire is the "upward way" The reverse process is the "downward way" All things are constantly altering according to one "way" or the other The apparent permanence of things arises out of a temporary equilibrium of the two "ways," neither of which ever wholly overcomes the other Thus strife is the creator

of nature· "War is the father of all things." "Fire lives the death of air, and air the death of fire, water lives the death of earth, and earth the death of water." The real is an endless circuit without break or discontinuity. The whole process is ordered according to "fixed measure"—an unchanging order. This strife of opposites results in a harmony of opposites when a state of relative equilibrium of force ensues, and the seeming fixity of things is accounted for by the temporary equality of opposed forces. The fact that everything changes was expanded into, everything changes into its opposite.

The Heraclitan real is a *process* in which everything is changing into its opposite in a fixed, continuous order. Paradoxically stated, at any time a thing is both itself and its opposite. This is so on the ground that at any given moment of change an entity is becoming something else—its opposite—as day becomes night, and it cannot therefore be said to be wholly itself. There is no day of summer that is not becoming winter through degrees of autumn, every day of autumn is becoming spring through phases of winter. "One and the same thing are the living and the dead, the waking and the sleeping, the young and the old, the former change and are the latter, the latter change in turn and are the former." These are lesser cycles overlying the fundamental closed circle of the "upward" and the "downward" paths of fire and flux. In essence, the world is an invisible harmony in which all opposites are blended. At great intervals of time the universe is consumed in flames, but no sooner has this transpired than a new world emerges from the ashes of the old one. Thus the world is regenerated from fire in rhythmic intervals, and in all this ceaseless change no individual persists, only the law of change is real.

The flux unveils by no other law than a rule of sufficient reason. This orderliness Heraclitus called the Logos, the meaning of which incorporates the notion of rationality. Reason guides the destiny of the universe, and it thus prescribes what the order is. Rationally ordered natural events may be understood by human reason since the soul of man is a spark of the divine fire and is thus continuous with the real. The thinker may discover the Logos, the law of change, in the flux if he exercises his reason, an achievement the senses alone are unable to consummate. Possibly because Heraclitus conceived the Logos to be rational, he inferred that it also must be just. Process is measured by equitable proportion, it is good that

things are as they are Thus we learn that "the sun will not overstep his measures, else the Erinyes, the handmaids of justice, find him out" He is in accord with the later Milesians and Xenophanes by declaring his ultimate metaphysical principle to be divine

Heraclitan conclusions proved to have significance for problems other than metaphysical Out of his doctrine of the strife of opposites emerged the principle of relativity in ethics and epistemology, or theory of knowledge The identity of opposites such as good and evil, or right and wrong, made sharp distinctions impossible. What is good is also evil, what is just is also unjust There is but relative goodness and evil, and no absolute standard of right and wrong can be discovered It is argued that we would not know joy without sorrow, virtue without vice Hence, since sorrow is essential to joy, it cannot be called bad Likewise, vice is not wholly evil since it makes virtue possible, and virtue is not wholly good since it in turn makes it possible to experience evil Thus all goodness is relative evil, and all evil is relative good Absolutism must give way to relativism in the sphere of morality

This concept of ethical relativity in Heraclitan thought afforded an excellent vantage point for the later ethical skepticism of the sophists Furthermore, the proposition that nothing abides involves the necessity of concluding that persons, as individuals, are constantly changing and raises the problem of how, such being the case, moral responsibility is to be fixed The same relativity infects the entire realm of values and makes it impossible to derive objective and certain criteria for value judgments Here, again, a point of departure is established for Sophistic, Socratic, Platonic, and Aristotelian speculation on ethical principles

Two other thought-provoking aspects of Heraclitan ethics have to do with pleasure on the one hand, and insight on the other A very significant contribution to ethical theory was made when Heraclitus declared that one's chance of behaving properly depends upon his thinking clearly To be good, in so far as this is possible, is to be intelligent This became the Socratic conclusion that virtue is wisdom or knowledge, not good intention merely To be moral is to be guided by the dictates of reason In addition to insight a good life was thought to possess a definite preponderance of pleasantness over unpleasantness, this view having a later history in hedonism, both before and after Aristotle It is indicated, however, that pleasure thus sought is of the mind rather than of the

body, for Heraclitus, in one of the remaining fragments of his writings, says "If happiness consisted in the pleasure of the body, we should call cattle happy when they find grass to eat." Another time he says: "Wisdom is the foremost virtue, and wisdom consists in speaking the truth, and lending an ear to nature and acting according to her." This contention also had its influence, reappearing in both Cynic and Stoic philosophy.

In theory of knowledge an advance was made in the clear distinction drawn between sense experience and reason. The necessity for this distinction is evident on Heraclitan assumptions, for in a world where change is king, only contemplation would be possible if sense experience alone were the criterion of knowledge. All statements based on the judgment of sense must necessarily be at the same time false and true, that is, true for what *was*, false for what *is*, since no sooner have the judgments been uttered than the situations giving rise to them have changed. Only by recourse to reason can anything like truth be obtained. By this device, permanence, as expressed in the Logos, may be extracted from the flux. In rudimentary form it was an expression of the problem of phenomenon and noumenon. By amplification it was soon to become an aspect of the problem of form and matter for Plato and Aristotle.

### 3 *Xenophanes: Commentator and Critic*

Xenophanes was exiled from his native city, Colophon, in Asia Minor, about the middle of the sixth century B.C., probably for his impious attitude toward orthodox Greek religion. The remainder of his life was spent mainly in Sicily and southern Italy. Here doubtless his ideas came to the ears of the young Parmenides, the course of whose thought they possibly influenced. Xenophanes appears to have lived to the ripe age of at least ninety-two, during which time he was essentially a reformer and critical analogist of contemporary Greek life and beliefs. Perhaps the most remarkable thing about the man is that his criticisms were tolerated at all. He was not particularly an original thinker, and his claim to mention in the history of philosophy lies in the tenor of his criticisms and in the nature of a few of his rather hazily defined conclusions.

His criticism was of two chief sorts: that directed toward the social practice of the middle and upper classes of Greek society, and that directed more specifically against the Greek polytheistic

religion His social criticism, in some respects, has a distinctly modern sound He opposed the athleticism of the Greeks on the ground that the premiums placed on physical excellence far overstepped justification and resulted in a neglect of the intellect and of the pursuit of knowledge Men gave more care to their bodies than to their minds Extravagance of dress and empty small talk about mythical figures and legends likewise came under his disapprovingly critical eyes

Far more important for future philosophy was his attack upon the religious views of the people about him The central theme of this criticism was a polemic against the ridiculously anthropomorphic aspect of current belief Man does not pay his gods compliments, insisted Xenophanes, by picturing them with human figures and as motivated by human desires This is unwarranted and absurd, for God is unlike man both in form and in thought Man is like the animals in his thinking, for, doubtless, "if oxen or lions had hands, and could paint with their hands, and produce works of art as men do, horses would paint the forms of the gods like horses, and oxen like oxen, and make their bodies in the image of their several kinds "[1] This is a foolish and infantile manner of thinking about God for "there is one God, the greatest among Gods and men, resembling mortals neither in form nor in mind "[2] He is one and eternal "and he stays always in the same place, nor moves at all, for it is not seemly that he wander about, now here, now there "[3] Perhaps here are concepts of a dawning *monotheism*, at any rate there is a definite identification of the universe with the religious concept of God in a pantheistic scheme of things describable as fixed, immovable, eternally divine The interpretation of the universe or God as unchanging developed into a central thesis for the first and greatest Eleatic

## 4 *The Eleatics Repudiation of Flux*

The Milesians had declared the real to be composed of one material substance, thus advocating and supporting a monistic doctrine A *monism* insists that the real is wholly and completely

[1] Burnet, John, *Greek Philosophy*, 3d ed , pp 119–120 By permission of The Macmillan Company, publishers

[2] Bakewell, Charles M , *Source Book in Ancient Philosophy Xenophanes*, Fragment 1 (Karsten) By permission of Charles Scribner's Sons, publishers

[3] *Ibid* Fragment 4

made up of a single basic stuff By the time of Heraclitus, and his philosophic opposite, Parmenides, an early fifth-century resident of Elea, speculations had discovered a discordant note in earlier thought regarding the place and possibility of change or motion in a substantial monism On the one hand, it would appear that rigorous insistence on retaining change and alteration would result, as it actually did for Heraclitus, in denying that a permanent substratum of reality exists Accepting this approach, the real turns out to be a process, a never-ending Becoming, in which sense experience reveals a world of illusory permanence On the other hand, another alternative appears if the Milesian concept of a single material substance is accepted Then the reverse of Heraclitanism develops the contention that motion and change are unreal, as illusions of the senses The real is declared to be immovable, eternal, and solid This is the basic Eleatic hypothesis How, it is asked, could the one substance change? In changing it could only become itself, since there is but a single real substance. Hence change is impossible, and if no change is possible then neither is motion conceivable The hypothesis of flux is repudiated

To arrive at and support his theory of the universe, Parmenides made use of two basic principles, neither of which he felt called upon to prove One was *intelligibility* that is real which is thinkable. What cannot be thought cannot be real The content of thought must be congenial to reason, and all sense data repugnant to the intellect must be rejected as unreal and nonexistent The other was *ex nihilo nihil* nothing can come from nothing Sheer nonentity is impotent, barren, incapable of producing the real Nor is it conceivable that what is actual can ever wholly disappear into nothingness Armed with these twin principles, Parmenides set forth to prove that only Being *is* On the ground of its nonintelligibility, nonbeing was held not to exist It is unthinkable, since how can one think that which is just nothing, the absence of anything? With nonbeing out of the way, the real, or Being, alone remained Empty space was claimed to be synonymous with nonbeing and hence devoid of reality For if space is anything real, it is Being, and if space is not anything real, it is nonbeing and nonexistent

All motion and change were denied What are the conditions of motion? A thing can move either where it is or where it is not, that is, in empty space But if a thing moves where it is, it does not move, and it cannot move where it is not, since in the first

place it is not there to move and in the second place there is no empty space in which to move Again, a thing can change only into Being or into nonbeing A change of a thing into itself or into Being is not a change at all, and it is absurd to regard a thing as changing into nonexistent nonbeing What is real, then, is permanent, unalterable, immobile, and change is impossible

Furthermore, Being must be regarded as eternal because of having come to be only from Being or nonbeing Since nothing can come from nothing, to hold that Being originated from nonbeing is untenable, if Being came from Being, this is synonymous with saying that it always existed and is, therefore, eternal On the same grounds, Being must be everlasting It could only become Being, which is to remain the same, or nonbeing, which is impossible Being and space filling are identical, corporeality is the essence of reality [1] In the universe there is no room for emptiness It is solid, homogeneous, complete, imperishable, and yet limited Infinity bespeaks imperfection The universe is a well-rounded sphere, perfectly proportioned

This is the information supplied us by the reason Sense experience and uncritical thought tell us the world is in constant motion, in kaleidoscopic alteration The reason sees beneath the flux and discovers the contradiction implicit in assuming the real to be capable of change We see, in this scheme of Parmenides, the flowering of Xenophanes' god universe and his denial of the necessity for activity on the part of god owing to his omnipresence Xenophanes' pantheistic universe assumed the proportions of Parmenidean Being For this reason it may be justifiable to regard Xenophanes as a forerunner of Eleatic philosophy This is not necessary, however, since Xenophanes was interested in developing his pantheism more as an alternative to Greek anthropomorphic religion than as a metaphysical explanation

Parmenides had sought to uphold his views by positive proof Zeno, his most famous pupil, chose to defend the master from attack by a negative approach, by showing the absurdity of believing otherwise He developed a technique of argumentation later made famous by Socrates—a practice of assuming the truth of the arguments to be refuted and proceeding to an examination of their consequences with the object of showing their self-contradictory or absurd nature It was Zeno's object to show that greater diffi-

[1] Windelband, William, *History of Philosophy*, p 37

culties were involved in the Heraclitan and Pythagorean concepts opposed to those of Parmenides than there were in the principles of Eleaticism The Pythagoreans sponsored a theory of reality which recognized the atomic nature of things; that is to say, they interpreted an object as composed of parts set off by some definite form The substance of nature may be endlessly partitioned—it is *a many* This is sharply opposed to the Eleatic contention that man inhabits a solid, indivisible block universe It became one of Zeno's chief aims to destroy the arguments that gave support to the Pythagorean interpretation. In a large measure Zeno successfully consummated this objective, and his procedure of discrediting arguments by reducing them to the absurd has become well known under its Latin title *reductio ad absurdum* He attacked opposed contemporary views on such problems as the size and number of parts making up the universe, the nature of space, the relation of parts to the whole, the possibility of motion

If one believes with the Pythagoreans, that the universe is composed of parts, Zeno argued, he must accept the contradictory conclusion that the number of parts is at the same time finite and infinite All elements that together comprise the universe, however many these may be, must be just that many and thus are finite in number The universe must have some definite determinative boundaries However, if the parts are infinitely divisible, as it is likewise claimed, the universe must be composed of an infinite number of parts. This is clearly contradictory, for the parts that make up the universe cannot simultaneously be finite and infinite Further, if the universe is made up of a definite number of parts, in the final analysis they must be incapable of further subdivision. However, that which is not amenable to further division can have no magnitude and it follows, therefore, that the universe is infinitely small since it is composed of an infinity of parts each without size The other alternative of division *ad infinitum* fares no better, for that which is capable of infinite divisibility must be thought of as infinitely large to make such division possible.

The concept of space, too, has its difficulties If space is real it must be *in* something That is, it must be a part of Being If it is said that the real exists in space, inquiry must be made into the metaphysical status of that space Following Parmenides, we may ask Is it real? If we affirm that it is we have accepted it as a part of Being We may go on to assert that this entity mistaken for

empty space lies within another space But where is the space in which the first space is? And where, if this is in another space, is that space? The absurdities involved in such views are, Zeno maintained, too patent to be acceptable One is launched upon an infinite regress that gets nowhere except to become more and more absurd

Regarding the relation of parts to the whole, Zeno argued that if wholes are made of parts, then the effect of the whole should be equal to the sum of its separate parts. On this assumption he felt that it was possible to show how a sum of silences must be held to produce a noise A handful of clover seed dropped on the ground produces a sound, a single seed when dropped makes none Hence, a sum of silences results in a noise, which is absurd This goes to indicate further that the universe is one and not a sum of discrete parts

More famous than these arguments are the ones regarding motion Achilles and the tortoise, and the resting arrow The infinite divisibility of the space separating the tortoise from the overconfident Achilles, who has given him a head start in their race, proves to be Achilles' undoing Even if the tortoise refuses to run, Achilles could not overtake him, for in order to cover the intervening distance he has to run the first half of it, and before this, the half of the half, the half of the half of the half, and so on *ad infinitum* Achilles cannot really even start in pursuit But, supposing he can, by the time he reaches the point where the tortoise was the latter has moved on a bit By the time Achilles reaches this point the tortoise has moved a little way further Though Achilles comes closer and closer to the tortoise he cannot really ever overtake him In this way Zeno attacked the claim that motion is possible either in a space with fixed boundaries or in one with movable boundaries

It appears, said Zeno in substance, pursuing another tack, that an arrow shot from a bow very quickly traverses the space intervening between the marksman and his target But this is illusory The arrow can never reach its mark for at any time during its flight it is occupying a group of points in space And what does it mean to occupy a point in space except to be at rest? Though there be an infinite number of points, in fact *because* there is an infinite number of such points, the arrow, being motionless while occupying them, in reality does not move No matter how many

states of motionlessness are added together the sum will never be a motion Paradoxical and contrary to experience though Zeno's conclusions were, they have puzzled thinkers ever since his time Not until more than a score of centuries later did modern mathematical developments respecting the nature of concepts like infinite and continuum produce a fairly satisfactory answer to Zeno.[1] His arguments are still cogent against concepts of the universe that accept it as comprised of parts of an extended substance.

Two lesser lights interested in Eleatic thought deserve mention here Melissus of Samos, a somewhat younger contemporary of Zeno, is to be remembered both as successful Samian leader in a conflict with Athens and as a supporter of Parmenides He apparently made use of dialectic similar to that of Zeno His chief philosophical work consisted of repeating Eleatic principles, with the chief exception that he regarded Being as infinite Since a finite substance must be bounded and the only limitation possible would be by empty space which does not exist, it follows that Being is boundless and hence infinite This deviation from Parmenideanism is possibly traceable to Milesian influence

Gorgias, known better as a sophist than as an Eleatic, turned Eleatic dialectic into *nihilism* and proved that Being does not exist If Being *is*, it must have come to be either from Being or from nonbeing On Eleatic principles the latter is inconceivable Hence Being came from Being and is eternal and, following Melissus, infinite That which *is* must be in space and time, and is limited by space and time Being, since it is infinite and thus not bounded and limited by space and time, must be outside them and for that reason does not exist

The close-knit technique of argumentation used by the Eleatics came to be called *dialectic* Today the word is employed to designate any complex form of logical analysis As developed by the Eleatics dialectic incorporated the beginnings of logic Though its systematization came later with Aristotle, some significant elements are to be found earlier For instance, there is clear recognition of the so-called *law of contradiction* When Zeno drove the arguments of his opponents into contradictions he felt justified in discarding them as absurd Again the dichotomy of Being and nonbeing implies the *law of excluded middle* Between Being and nonbeing

[1] Russell, Bertrand, *Mysticism and Logic*, Chap V

there is no middle ground When arguing against motion to the effect that a thing can move only where it is or where it is not the law is clearly implied The *law of identity* is likewise incorporated in the dialectic To declare that a thing is real is to establish its identity with all other things. In the language of the Eleatics, "Being is" To express the law of identity in the same words it is only necessary to add the word "being" thus Being is being, A is A Besides these elements of logic, attention may be directed to the beginnings of argumentation from first principles When Parmenides set out to draw up a picture of the universe, he employed two principles to guide his thinking *ex nihilo nihil* and *intelligibility* What was the source of these principles? Were they held to be self-evident? Perhaps At any rate they afforded the means of guidance for an approach to philosophy hitherto unknown Such innovations as those mentioned in this paragraph are possibly the most significant contributions made to philosophy by the Eleatics

It came to be the case that the speculations of the philosophers of Being and Becoming arrived at the widest of divergent opinions and the flattest of contradictions This development emerged during the latter sixth and fifth centuries So divergent were the interpretations, notwithstanding the common agreement that sensation is illusory and reason a valid criterion, that a reexamination of the problems set was seen to be essential to further philosophical advance

## DISCUSSION TOPICS

1 In what respects did Milesian speculation fail to meet with the approval of Heraclitus and Parmenides?

2 Of what significance for philosophy were the criticisms offered by Xenophanes?

3 Make clear to yourself the ground of agreement and disagreement between Parmenides and Heraclitus

4 Why are Zeno's arguments called *paradoxes*?

5 What is the distinction between *being* and *becoming*?

6 What is meant by Heraclitan *relativism*? Apply it specifically to ethics and theory of knowledge

7 What is the meaning of the phrase *nihilistic doctrine*?

8 What is the significance of *logos* in Heraclitan philosophy?

9 Select the new terms appearing in this chapter and familiarize yourself with their meanings

10 What phases of Heraclitan philosophy were influential upon future thought in science and philosophy?

## PARALLEL READINGS

CUSHMAN, H E *A Beginner's History of Philosophy*, Vol I, pp 22–38
FULLER, B A G *History of Greek Philosophy*, Vol I, Chaps V, VI
ROBIN, LEON *Greek Thought*, Book II, Chaps III, IV
ROGERS, A K *A Student's History of Philosophy*, 3d ed , pp 22–32
WARBECK, JOHN M *The Searching Mind of Greece*, Chaps IV, V

# Chapter IV

# ATOMIC INTERPRETATIONS: MEDIATING EFFORTS

## 1 *The Problem of Reconciliation*

Paradoxical conclusions such as those of Heraclitus and the Eleatics could not stand long before the intellectual scrutiny of certain thinkers familiar with them. Certainly both conclusions were together untenable, and separately they revealed a tendency toward abstractness and divorce from ordinary experience of the physical world. The explanations of Parmenides and Heraclitus had wound up in a denial of half of what, in each case, they started out to account for. To explain a situation by denying its existence is at best a procedure of doubtful value. Both views had discovered important elements concerning the universe, and to the pluralistic mediators of the opposed concepts both Being and Becoming seemed to deserve a place in the scheme of things.

The attempts to carry out this reconciliation recognized the Eleatic insistence on the permanence and homogeneity of the real and at the same time recognized the reality of motion in a relative sense. All of them denied absolute change, or the transformation of the cosmic stuff of reality into anything other than its identical self. Substance was thought to change or move, in a relative degree, by virtue of the shifting parts of the real. Necessarily, then, it followed that the Eleatic principle of a solid universe of a single substratum must be modified so as to make room for more substances than one, in order that the parts of these may admit of movement. The Eleatic adjectives of permanence, indestructibility, homogeneity, and the like were then predicated of each of the several basic elements of the real.

With change interpreted to mean change of place among the parts of the universe, the stage was set for attempts to reconcile the Eleatic and Heraclitan opposition. Of the four thinkers who chose this as their chief problem, the first two, Empedocles and

Anaxagoras, are more properly regarded as pluralists, while the last two, Leucippus and Democritus, are definitely atomists The difference between a pluralistic and an atomistic metaphysics as employed in this discussion lies chiefly in this the former affirms that the universe is composed of several substances each finely divided, while the latter contends that it is made up of one substance shattered into countless atoms

## 2 *The Pluralistic Solution of Empedocles*

Empedocles, a native of Agrigentum in Sicily, lived during the middle of the fifth century B C He was a leading physician of his time and something of an engineer as well Interest in the occult coupled with his knowledge of physical events resulted in his being regarded by many of the populace as the possessor of supernatural powers Empedocles seems to have made no marked effort to dispel such beliefs and perhaps even encouraged them He belonged to a ruling family of his city and eventually came into considerable political power, which he exerted for the benefit of the classes beneath the nobility This, however, incurred for him the hostility of other powerful men and resulted finally in his banishment from Agrigentum during the interval of his absence to officiate at the opening ceremonies of the Olympic Games Though it is fairly widely accepted that Empedocles died an accidental death on the Peloponnesus, legend has pursued him to the end, and we hear of his being wafted heavenward in a cloud of fire from the summit of a mountain His life is as nearly obscured by myth as that of Pythagoras before him, a life possessing a curious mixture of natural and supernatural interests

In the role of physician, Empedocles was naturally led to explore the field of physical phenomena His study of physiology, especially the valve action of the heart and the significance of the blood in maintaining life, marks him as an early pioneer in this field Living as a comparatively near neighbor of his contemporary, Zeno, it is certain that he was acquainted with Eleatic principles His travels in the eastern Mediterranean brought him into contact with Heraclitanism Convinced of the intrinsic merit of both systems, Empedocles set for himself the task of retaining the permanent aspect of the physical world along with the changeability everywhere manifested

To do this he posited four basic elements of the real: fire, air, water, and earth, declaring each to be indefinitely divisible and equally enduring and imperishable Fire can be only fire, water cannot become other than water Each substance is itself unchangeable, but, by virtue of its many minute parts, things can come into existence and pass away by a combining and dissolution of varying quantities of the several real substances Objects are composed of particles of the various substances in varying proportions When an object containing at any one time a quantity, say, of earth and water and fire, loses some of its proportion of earth, it undergoes change and alteration The earth particles lost have not become something else, but have merely been dispersed to some other part of the universe Individual entities are mixtures, then, of the four elements Death is a process of separation of the elements Nothing is ever lost, nothing absolutely changes There is a constant activity of uniting and disuniting of elements Permanence attaches not to things but to the atomic elements composing them Empedocles did not consider it necessary for the functioning of such a scheme to recognize empty space as a medium for motion As colored liquids in a sealed jar may mingle and fuse, so also in a completely filled world the parts could join and disunite without confusion

Earth, water, air, and fire, however, do not have self-movement as an essential characteristic. Each in itself is inert and lifeless, and no activity would be possible except for the presence of two motive forces in constant struggle These Empedocles named Love and Strife As powers separate from the inert elements, they bring about whatever process there is in the world The complete intermixture of the four elements as an original state of things was brought about by the power of Love Strife entered the scene to break up this fusion and cause the four elements to unite with all the particles of their kinds This stage of the cosmic struggle of the twin forces was followed by the reascension of Love once more to recombine the elements in such fashion that each again loses its identity in the complete harmony of intermixture This alternate supremacy of Love and Strife Empedocles apparently believed to be going on in rhythmic sequence The complex organization of nature is the product of this opposition of forces It is a state in which neither Love nor Strife has completely gained ascendency, a state in which the four elements are neither isolated to themselves nor so completely intermingled as to lose their identity entirely

At the same time that Empedocles adopted the automatic rhythm of forces, he also advanced the thesis that in the end Love would win a final victory over Strife. This would seem to reiterate the familiar Oriental notion that the cosmos is involved in a struggle between good and evil and that the good is due in the end to triumph over evil. This suggestion of cosmic moral order will be found to play a much more significant role as a metaphysical principle in the philosophy of Plato. Though the motive forces would perhaps suggest an immaterial nature, it is doubtful whether they ever were conceived by Empedocles otherwise than as material entities endowed with power to move other and perhaps more material elements. At least this is the turn given to the notion of a separate principle of motion by the second of the pluralists, Anaxagoras.

Along with these more metaphysical parts of Empedoclean discourse are two others deserving of mention. One is his rather fantastic theory of evolution, the other, his explanation of perception. In the beginning, he held, nature produced at random chance groupings of elements in the form of eyes, arms, fingers, hair, skin, organs, etc. These united in all manner of grotesque figures, creatures with eyes in the arms, with legs fastened directly to the head, hands with ears as fingers, as well as figures resembling, in measure at least, present forms of life. By a long process of natural selection unfit combinations perished, while other, more favorable configurations survived to procreate their kind. Thus a natural mechanical process of evolution has produced the present forms of living organisms, as survivors in the struggle for existence. Though such an explanation is judged crude by us who are in a position to profit by centuries of study, it should not be overlooked that Empedocles is here suggesting a purely natural origin of species along with the principle of *natural selection* to account for the forms of life that exist.

To account for human perception, Empedocles was led to a theory that like elements perceive like elements. Man as a being composed of all four elements is thus able to know, through sense perception, the world about him. Things were held to shed minute images or effluences of themselves, which, passing through the intervening medium, reach the pores in the body setting up activity, especially in the blood as the seat of the soul, resulting in objects being perceived. Innumerable images populate the uni-

verse, but only those which the pores permit to enter and affect the inner substance of perceivers ever get into the perceptual field Though Empedocles' insight falls far short of satisfactory explanation, it is significant as an effort to meet the problem of knowing more squarely Reason may have been upheld as the source of knowledge before his time, but the question of just *how* reason secures its data had never seriously been met It is the earliest specific effort to analyze the process of sensation, to tell what actually occurs when one's organs of sense are stimulated by events in the physical world

### 3 *Anaxagoras Qualitative Pluralism*

The city of Clazomenae gave the Greek world the last Ionian philosopher of note and the first to make Athens his home Anaxagoras, somewhat after the fashion of Heraclitus, refused to continue his official duties as a member of the ruling class of his native city, and, giving his wealth and power to relatives, he devoted his life to philosophic pursuits When about forty years of age he accepted an invitation of Pericles to make Athens his residence At the time Pericles was playing the part of enlightened ruler, and consequently the majority of leading intellectual lights, including Phidias, Sophocles, Protagoras, Socrates, were familiar figures in his and Aspasia's choice circle Nor was the group favorably regarded by the Athenian citizenry, for its discussions called in question many problems of morality and religion already solved to the satisfaction of the conservative masses Altogether it was an evil situation, and when Anaxagoras, near the close of his thirty-year stay in Athens, went so far as to publish a book denying the divinity of the sun and moon, it appeared to be time to take matters in hand Anaxagoras was arrested on a charge of impiety and sent to prison His life was saved by the influence of Pericles and he fled to Lampascus in Asia Minor There he lived a few apparently pleasant years, before he died about 429 B C For years afterward, the day of his death was set aside as a school holiday, and citizens of Lampascus, in his honor, erected in the market place an altar dedicated to Truth and Mind

In the main, he followed the philosophical example of Empedocles, but with marked differences in detail He, too, could not be wholly Eleatic or Heraclitan, and, in order to retain the best of both, agreed with Empedocles that reality must be presumed to be

of more than a single substance Then only may the reality of both permanence and change be kept But instead of four basic elements, he held there must be an indefinite number The Empedoclean elements were declared to be compounds rather than single substances and thus not ultimate in the structure of things On the ground, chiefly, of the principle that whatever *is* is unalterable and indestructible, Anaxagoras felt impelled to accept as many elements as there were distinguishable characteristics in nature revealed to experience There must be countless numbers of substances throughout the universe if we are not to accept the possibility of hard actually becoming soft, or sweet transforming into bitter, or black becoming white

The ultimate nature of the real is a countless number of elements such as hard, heavy, sweet, smooth, red, irregular, flesh, sharp, etc , each divided into countless very small but also very definite particles, all homogeneous as species of the same elemental genus A food tastes bitter because of the presence of more bitter particles than sweet or sour, a surface is smooth because more smooth particles than rough are in the object, ice is cold and hard because of a strong majority of cold and hard particles The inclusion of such phenomena as sounds, tactual qualities, odors, tastes in the scheme of reality has resulted in the term *qualitative atomism* being used to designate this type of metaphysics from that of later and thoroughgoing atomism The latter distinguishes differences in quantity only, qualities having no reality except as products of quantity

The variety and complexity revealed to experience are the product of proportionate representation of the elements in things Yet in each particular object there are portions of all the other elements varying from discernible to infinitesimal quantities Preponderance of one or more kinds of elements in atomic form is the source of all individuality Nothing comes into being and nothing passes away Birth and death are matters reducible to the activity of uniting and disuniting of atomic elements With one exception, all the elements are immobile, inert By themselves they remain in a state of rigid inflexibility One element alone is capable of self-movement and the imparting of motion to the other static elements. There is, however, nothing abstract about the element of change It is a material substance like the others, but differing from them in being the finest, most aristocratic, and independent of all of them, as

well as having the unique characteristic of self-movement. This force-producing stuff Anaxagoras called Nous, or Mind, a designation probably growing out of the deep impression made on him by the regular, orderly, and apparently reasoned activity of the celestial bodies he was fond of observing "In everything there is a portion of everything except *nous*, and there are some things in which there is nous also."[1] Thought stuff is greatest in quantity in man, next in animals, less in plants and least, if not entirely absent, from the large group of lifeless objects in our world

These observations present somewhat crudely an interpretation of the universe of the sort that since has been popular among those who believe regularity in nature to be indicative of rationality or purpose It has the earmarks of a teleological interpretation, though the notion of nature ordered according to ends in all likelihood did not specifically occur to Anaxagoras This seems to be supported by the fact that he used the thought substance only to get the universe started, after which it continued with regular mechanical motion For this failure to make use of Nous consistently throughout his scheme of the universe, Anaxagoras was severely criticized by Socrates It seemed to the latter that if mind or thought generated natural processes it would follow that all occurrences would possess a rational significance either as "ends" or "means" Every event, therefore, could be understood most adequately by discovering its purpose, learning why it happened It is improbable, however, that such a program was ever thought of by Anaxagoras

Probably it was through becoming aware that the direction of human life, in measure at least, may be determined by conscious reasoned activity that Anaxagoras was led to propose Nous as a source of cosmic motion However he arrived at the hypothesis, he proceeded to explain that the beginning of all things was a time when Nous imparted motion to the original chaos After these first stirrings the whirling motion imparted by Nous gradually involved more and more of the chaos in its regular sweep Like particles were separated out by the process and combined in aggregates to form individual objects At the center of the whirling mass, the earth was formed, which owing to its own spinning, caused heavy rock masses to be thrown off, thus forming the celestial bodies The fiery condition of the stellar bodies is due to the swift

[1] Bakewell, Charles M, *Source Book in Ancient Philosophy*, p 51 By permission of Charles Scribner's Sons publishers

rotary motion of the ether Hence, the sun, moon, and stars are the products of natural processes and are not divine The sun is a very hot rock approximately the size of the Peloponnesus, while the moon is creased and uneven and has no fire of its own, merely reflecting light from the sun Life itself came as seeds blown by the cosmic winds and found root in the primeval slime left as water dried up on the surface of the earth Thereafter, life continued by kind reproducing kind as we know the phenomenon today The universe was apparently formed once and for all at the instigation of Nous, a view which deviates from the popular Heraclitan and Empedoclean cyclical world creation and destruction.

Following Empedocles' example, Anaxagoras also recognized the necessity for an explanation of sense perception He was aware of the difference between reason and sense experience, though for him the importance attaching to that distinction was not great Empedocles had said that sensation arises when like perceives like This interpretation appeared unlikely to Anaxagoras on the ground that the body is insensitive to situations paralleling bodily conditions, that is, in the case of temperatures, for example, the body is aware of changes or degrees only when it is either warmer or colder than the temperature in question Objects are cold if our bodies are warmer, they are warm or hot if our bodies are by comparison colder Thus Anaxagoras arrived at a fundamental disagreement with Empedocles by declaring that sense perception arises when unlikes come into contact—warmth within detects cold without, cold within discovers warmth without From a common-sense angle, Anaxagoras appears to have marked an advance over Empedocles in theory of knowledge. However, the fact that sense perception was a problem at all for him is more significant than the answer given by him, for it served further to indicate that difficulties were involved in the problem of knowing He made it increasingly necessary for his successors to devote more of their time to finding a satisfactory explanation for the knowing activity, the intricacies of perception on the one hand and reason on the other

### 4. *Leucippus and Democritus Quantitative Atomism*

With Leucippus and Democritus, his able pupil, definite steps were taken toward a well-polished atomism, entirely material in substance and mechanical in activity. All suggestion of teleology

was abolished, and philosophical speculation emerged on a higher level of development as a thoroughgoing naturalistic scheme of things The precedent started by Thales of explaining nature without recourse to any outside force, especially to a supernatural order, at last brought to light a consistent and rather complex system with its entire structure and function arising out of the very stuff of the physical world The trail had been blazed dimly by Empedocles and Anaximander, it remained for Leucippus and Democritus to clarify their concepts, correct some of them, and develop the implications of their fundamental premises into an internally consistent world view.

The work of Leucippus, the teacher, is largely obscured by the more comprehensive work of Democritus, the pupil The ancients refer to them together, and their work cannot be adequately distinguished Both are known to have come under the influence of the school of Elea and to have refused to draw its conclusions Leucippus very likely dissented from them in his early life, as had his probable contemporary, Anaxagoras. In this he was afterward heartily supported by Democritus The birthplace of Leucippus is unknown, various cities such as Elea, Miletus, Melos, Abdera, being mentioned by later writers.

Of Democritus much more is definitely known He was born during the middle years of the fifth century B C , in the Thracian city of Abdera Here many lines of thought converged to broaden his intellectual growth, for cosmopolitan Abdera was a gathering place for thinkers from all over the Greek world, notably Pythagoreans and Eleatics Here, too, Democritus felt the force of Anaxagorean thought But the most significant influence was that of Leucippus Inherited wealth permitted Democritus to indulge his fancy for travel and learning, so that he came to be regarded, at least by himself, as the most widely traveled Greek and as a possessor of greater mathematical knowledge than the priests of Egypt. Most of his life he spent at Abdera, for greater freedom of thought was possible there than at Athens, where he probably went occasionally for brief visits His writings, reported by later men to have been numerous and excellent in quality, have been lost with the exception of a few fragments His system of materialism comes down to us in the work of other men, notably Aristotle, who found it necessary to expound his views in order to criticize them It seems safe to conclude that Democritus achieved fame and reputa-

tion to an extent only less perhaps than Plato and Aristotle The loss of his work has been pronounced as one of the greatest tragedies suffered in the destruction of ancient treatises His life spanned practically an entire century, his death coming after the age of ninety

The views of the two sponsors of mechanical atomism will be discussed together, since it is impossible to separate them and because there is, so far as is known, complete agreement fundamentally, though Democritus doubtless pushed his inquiry beyond that of Leucippus The Eleatic conception of the fixity and indestructibility of Being was accepted as a basic principle, except that Being was held to be broken up into countless particles moving in empty space All the atomic particles of Being are alike in possessing the properties of corporeality and movement Empty space was declared necessary as the medium in which the movement of atoms could occur This does not imply necessarily that the void is real, for apparently all that is real is the swarm of material atoms Though it is unreal, having no property to distinguish it, empty space exists as a necessary condition to account for change The atoms moving in it are homogeneous as to essence, but differ among themselves as to size, shape, and motion All of them are imperceptibly small, aggregates of them only are ever experienced Sense experience is thus seen to be illusory if taken as a guide to truth about the atomic structure of the universe Genuine knowledge is insight into the atomic corporeality of Being and is a product of reasoned deliberation The senses reveal a world rich in qualitative diversity, full of colors and tastes and sounds, but these are merely the effects produced *in* us by the activity of the material atoms Sense perception is subjective and dependent on the character and general condition of the percipient, while reason recognizes this subjectivity and searches deeper into things to discover their atomic natures, the sum total of this being truth as contrasted with opinion

The universe has been from the beginning a complex structure composed of innumerable, imperceptible, corporeal atoms raining downward through empty space Were it not for differences in the speed of fall, the heavy atoms falling faster than the light ones, there would be no alteration in the primitive atomic rain However, since faster falling atoms catch up to slower ones, disturbances occur Some atoms catch on to others by means of hooks, mortices, notches, and other irregularities, in this manner forming

aggregates which take on considerable size, density, and weight Atoms which hang insecurely may fall away, others may be hit glancing blows and sent off in various directions to collide with other atoms Whirling motions result, in which heavy and light atoms tend to separate off, the heavy at the center and the light at the periphery Such motion arises automatically and necessarily from the nature of the real itself, without let or hindrance from external agencies The endless bump of atom on atom results in a mechanical grouping of atoms of like weight and density into homogeneous bodies

There is no purpose other than mechanical necessity, according to which all change and alteration arises The form of atoms is unalterable diversity experienced among things is due to alterations and variations in the commingling of atoms Some atoms are apparently smooth and slippery and are always on the move except when surrounded by other atoms which hang together Thus some configurations of atoms are unstable and easily fall apart owing to internal strife, while other groupings prove durable and relatively stable over long periods of time because of the firm interlocking of their atomic parts Some objects appear heavy, indicating greater quantity of atoms, while others are light owing to the presence of fewer atoms A paradoxical type of situation often results in cases where objects are heavy and soft, like gold, or hard and light, like aluminum This is explained by differences in atomic structures and the various quantities of empty space enclosed within an object Some atoms fit close-grained, others unevenly, making cracks and crevices in objects An object such as gold is composed of many more atoms than aluminum but is full of very small air spaces as well, accounting for the characteristic softness of that metal Aluminum, on the other hand, though composed of fewer atoms, is harder, owing to the firm knit of its atoms Where atom contacts atom and the joints are firm, strength and hardness result

Strong odors and bitter tastes result when sharp and rugged atoms come into contact with the sense organs, while sweet odors and tastes arise out of contact with smooth regular atoms These sensations are personal experiences and not characteristic properties of reality Thus phenomena such as colors, tastes, odors, and sounds, which the senses proclaim to the unsuspecting as a part of the real, are actually the product of atomic action and are reducible

to it This means that all sense qualities are secondary to quantitative reality as derivatives of it

Plausible though this distinction may be, it was by no means so simple when it had to be made on the basis of differences in motions of atoms only. Since the entire universe is composed of atoms, all basically alike, it follows that mind or soul, the reasoning apparatus, must likewise be composed of atoms. This position is consistently taken and defended by Democritus. Soul atoms are the finest, most active, and smoothest, identical with those of fire, and are dispersed through the entire universe in all things in measure, but most of all in man No sharp line can here be drawn between animate and inanimate nature In man, soul atoms are interspersed throughout the body, one between every two of other sorts, and are held there and replenished on demand by the activity of breathing Reason, therefore, cannot be localized in any particular part of the body, as in the head or breast Whenever the fire or soul atoms are disturbed by the contact of atoms outside the body, perception results. Following Empedocles, the atomists argued that things shed minute atomic images of themselves which pass through space to impinge perchance upon the soul atoms of perceivers Since the images are faithful to things as their copies, and as such images contact the soul atoms, the resulting activity reveals, necessarily, the true nature of the object sensed The atmosphere is thick with images of things after much the same fashion that we conceive the air to be filled with rays or forces of all sorts Some of these countless images get into experience if they happen to come into contact with percipient things

Why things should shed images at all and why objects should not exhaust themselves in the activity are not explained Error, obvious in all experience, was accounted for in part by the battering of images as they pass through the air from object to perceiving subject Thus close scrutiny is apt to be more correct than distant vision, but at best the revelations of sense perception are untrustworthy as compared with reason. At the same time, since all mental processes are actually the activity of soul atoms arising out of impact of atom against atom, reason can differ from sensation in degree only Thought is a different sort of motion On the one hand, there is a perceiving organism, and on the other, a realm of atoms which produces in the perceiver two different sorts of activities sensation and reason The difference is explained as arising

out of violent motion and smooth motion of soul atoms. Sensation is violent motion caused by coarse images, while the smoothest, gentlest, finest motions of delicate images result in reasoned thought. The senses narrow and distort the vision, for such special organs can receive only images that fit into them Man thinks with his whole body and does not need to depend on the several particular senses for the data of thinking. In fact, if he does, he falls into error Only when the senses are regulated and subordinated to reason is the soul able to conduct itself judiciously and unexcitedly along the pathway to truth

Democritus' image theory presented a very plausible account of knowing to ancient speculation, though obviously it was not without its faults. Among other things, it involved the necessity of accepting the objective existence of all things imaged by the minds of men Gods and devils, golden mountains and unicorns, all had to be accepted as actual creatures existing somewhere All that can be thought must be But whatever the difficulties involved, it should be noted that the principle of consistency is employed throughout in the effort to explain all events, including knowing, solely by mechanistic atomic motion

When analyzing the conduct of life, Democritus was not less consistent Reason or insight based on the gentle motion of soul atoms was set up as the guide to human action He was entirely an intellectualist in ethics, constantly urging the avoidance of ends suggested by the violent and distorted activity of sense experience The virtuous, and therefore happy, life is one directed and controlled by reason rather than one bent upon the achievement of worldy gain and sensuous happiness Pleasures of the senses, through the constant emotional disturbances arising from their presence or the yearning for them when they are absent, blind men to the finer, more worth-while satisfactions of a rationally conducted life The object of living is probably a search for pleasure, but a kind of pleasure not founded upon sensuousness as the masses of the people suppose It is rather a pursuit of an end that will free one from passion and bring calm through the achievement of truth. Intellectual activity that is free from greed, superstition, desire, and ignorance is the highest goal of living For the most part, such an ideal is best approached individually, although friendship is desirable and friendliness perhaps the highest social virtue. The ideal life does not need strong state organization to assure its consumma-

tion, although a less closely united association of men with common intellectual interests is stimulating and necessary for the cultivation of a calm and imperturbable soul We may remark here the inclination toward individualism, an attitude which is one of the dominant features of the next period

The fear and distrust Democritus constantly felt of the Greek democracy accounts, in large measure, for his semi-individualistic attitude toward the ideal life Oftentimes it seemed apparent to him that democratic rule abounded in ignorance of the higher values inherent in intellectual achievement Therefore, such a governmental form is not to be argued as best or even as fairly satisfactory since it is detrimental to the achievement of ideal existence Again, the masses consistently place transient pleasures above lasting enjoyments and thus entirely overlook the enduring peace of a calm intellectuality Furthermore, the masses presume to be able to settle moral issues by plebiscite, as if merely counting noses were any fair and consistent criterion of right and wrong This Democritus vehemently denied, holding that it were better if the democratic masses were held in check as a man must hold his senses, in order that a rule may be instituted which is founded upon insight rather than upon emotion

Heraclitus had before now declared insight to be the means to a moral life, and Socrates, a contemporary of Democritus, carried on the tradition, declaring ignorance to be vice and virtue to be knowledge To be good is to be intelligent How great an influence Democritus had upon succeeding thought, for instance, on Socrates himself, it is impossible to state accurately, though it could hardly have helped being considerable and far-reaching It is certainly to be directly seen in Epicurean speculation and negatively, perhaps, in the teleological systems of Plato and Aristotle

## DISCUSSION TOPICS

1 What specifically, is the central problem attacked by pluralistic metaphysics?

2 What parts of Heraclitean and Eleatic philosophy did the pluralists wish to retain and reconcile Explain their procedures for doing so

3 What is the role of empty space in the work of Parmenides, Empedocles, Anaxagoras Democritus?

4 What is meant by *qualitative atomism, mechanism, teleology, subjectivity of sense qualities, relative vs absolute change?*

5 What advance over previous speculation was made by the pluralists in dealing with the problem of knowledge?

6 Compare Anaxagoras' account of motion with that of Democritus Which is mechanistic and which, in part at least, is teleological? Which is more congenial to the growth of science?

7 Analyze and criticize Democritus' theory of knowledge By whom was he apparently influenced in this respect?

8 What philosophers were mentioned as having ideas in common with Democritus in the matter of moral theory?

9 How was sense perception analyzed by Empedocles, Anaxagoras, Democritus?

## PARALLEL READINGS

BURNET, JOHN *Early Greek Philosophy*, Chaps V, VI
FULLER, B A G *History of Greek Philosophy*, Vol I, Chap VII
ROBIN, LEON *Greek Thought*, Book II, Chaps V, VI, VII
ROGERS, A K *A Student's History of Philosophy*, 3d ed, Sec 6, pp 32–42
WARBECK, JOHN M *The Searching Mind of Greece*, Chaps VI, VII

# Chapter V

# THE SOPHISTS AND SOCRATES

## 1 *The Rise of the Sophists Anthropocentric Emphasis*

The Sophists were a group of teachers and practical philosophers who lived chiefly during the fifth century before Christ. The conditions which occasioned their rise are of two sorts, one philosophical, the other broadly social By the middle of the fifth century conditions within the schools of philosophy had reached a point where the conflicting doctrines necessitated a reconsideration of their conclusions Two interests characterized philosophy preceding the Sophists One was that of discovering in nature that which is the ultimately real, a metaphysical problem which took precedence over all other issues The second claim made by the majority of these early thinkers was that truth about reality is obtained by the exercise of reason in contrast to sense perception. One and all had declared against sense perception as giving ultimate truth They had discovered that experience reveals perception as fallible and the source of many illusions and errors common to mankind. No such criterion, therefore, could they accept as a guiding principle to employ in their search for ultimate truths On the other hand, reason was alleged by them to overcome the handicaps of perception and if carefully followed could be employed as the source of genuine knowledge The Sophists were in complete agreement with their predecessors with respect to the shortcomings of sense perception, but at the same time they were also aware of obvious difficulties with respect to the employment of the criterion of reason It seemed extraordinary to them that, if reason is the source of truth about nature, the various philosophers who employed it should have arrived ultimately at such divergent interpretations By means of reason Parmenides supported the reality of a changeless substance material in character, while Heraclitus employing reason argued against the existence of a changeless substance as truly real, substituting for it the concept of a process of

change Empedocles believed that reason indicates a universe of four substances, each divided into microscopic particles; Anaxagoras interpreted the universe as being constituted by an indefinite number, Democritus advanced the theory that the universe is one substance atomically divided. Thus reason, so widely discussed and so highly esteemed as the source of truth, seemed to fare even worse than the senses in the search for lasting principles. The masters quarreled among themselves, and by the same criterion of reason pronounced the real to be Number, or Flux, or Being, or Atoms There seemed to be no common ground on which to agree It would have been extraordinary if a skeptical attitude had not begun to gain momentum against the claims of reason. The Sophists gave voice to that sentiment

Along with the Sophistic attack upon the criterion of reason went a marked skepticism with respect to the profit alleged to result from a study of nature It seemed to this group of thinkers that the world at large cannot be the true or fit object of the philosopher's study, since there is no possible means available for knowing its true nature. The whole of speculation appeared to have fallen into dogmatism and naive rationalism Certainly the time was propitious for evaluating the results of philosophy to date The outcome of this inventory appeared to be an itemized statement so full of flagrant discrepancies as to suggest that a thorough audit of philosophic bookkeeping would be both a necessary and a profitable undertaking. Somewhere was a manifest weakness, and apparently it was to be discovered in the much lauded power of human reason. The universe was apparently hiding behind a veil of sense experience, refusing to exhibit itself to man's prying intellect. The Sophists concluded that it was really hopeless to pursue the quest further or to continue the search for a final answer to the problem of reality

In addition to these theoretical or philosophical conditions lending impetus to the Sophistic movement, it is to be noted that there were certain more tangible and practical influences of a social, political, and economic nature. With time there arose an increasingly insistent demand on the part of many people that they have made available to them the benefits of knowledge accumulated to date in the special sciences, law, and politics. The realization grew upon men that the possession of knowledge is distinctly an advantage in securing position and power among their fellow beings. With

this demand for learning upon the part of many people, it became necessary for others to deliver to them the information they desired. This task the Sophists undertook. Another symptom of social uneasiness during the fifth century was reflected in the increase of criticism directed at traditional Greek institutions. Individual judgment and reflection exerted a more prominent influence than during the earlier period, and the individual set himself up as a critic of social practice. The Sophists lent a guiding hand and enthusiastic support to this activity.

With complications becoming greater within the official governments of the Greek city-states, another demand was created to be satisfied by the Sophists. It became of practical necessity to have training in statesmanship if success in this enterprise was to be assured. A political career was substantially the only profession becoming the social status of the young aristocrat, since professions like law or medicine were considered by the Greeks beneath the dignity of a gentleman's practice. The Sophists attempted to supply this necessary training in statesmanship, and many of their lectures were concerned with political and economic theories underlying the conduct of government. Their knowledge of politics in many instances was broad and sound, and to study under them proved advantageous to the average young aristocrat who proposed for himself an active career in government. In addition to these aspects, history indicates that Athens had, during the period covered by the lives of the philosophers discussed to date, been busily engaged in elevating itself to a place of supreme economic importance in the Greek world. She had organized the Delian League of Greek colonies, which was designed originally as a means for mutual protection from the Persians. After a number of years the members of the League began sending money instead of men and ships, as the original agreement specified. Athens found such an arrangement congenial, and with the funds she proceeded to build a huge fleet that soon commanded the eastern Mediterranean. Athenian commerce grew as a parallel development. As a result ideas as well as goods from distant places were bartered in the market place and hidebound tradition and dogmatism softened their grip, at least upon the better educated groups. There was more of a widespread interest in human affairs and practical problems on the part of more people than there had been hitherto. With the demand for training and information there emerged, as a

natural consequence, a group of men from various parts of the Greek world, especially from the colonies, who undertook the task of disseminating the desired knowledge

As has been remarked, prior to the time of the Sophists almost the whole of speculation relevant to human perplexities had concentrated attention first of all upon the physical world in order to ferret out its true nature and meaning Only secondarily was attention given to man himself and his ultimate destiny It was the implicit assumption that in order to know man it was first necessary to know the universe The Sophists chose to concentrate their energies upon the task of understanding man rather than nature The ground for this shift of emphasis was metaphysical skepticism together with the conviction that reason is not a valid criterion of knowledge In the eyes of the Sophists, reason was discredited by its contradictory asseverations, and the world of physical being, its object of study, was demoted to a secondary and relatively unimportant place The conviction spread among them that only man himself ought to be the object of study, and their interests thus became definitely anthropocentric

Especially were two pre-Sophistic assumptions challenged and rejected by the Sophists The Greeks in the uncritical age, with group morality dominant, had come to look upon all laws as valid, as part of the nature of things They were proper and commanded acknowledgment unquestioningly Behind them were decades of usage and tradition. However, with the increasing amount of reorganization of older political systems, and the founding of new self-governing cities during the seventh, sixth, and fifth centuries, it became more and more obvious that not all laws were valid, as part of the nature of things Nor did the second assumption which claimed that it was to the advantage of individuals to obey laws, and to their disadvantage to disobey them, fare any better Some Sophists taught that by nature all men are equal and that laws are arbitrary restrictions to be circumvented whenever it is safe to do so No advantage was to be gained by obedience to law, as a matter of fact, only disadvantage accrued In no uncertain terms the Sophists distinguished between laws of nature and laws of convention or custom They made clear the necessity for distinguishing between what, as a matter of fact, *is* going on and what *ought* to go on and raised the problem of the origin and purpose of law Since laws could be made and actually were made to suit the

purposes of men, they were pronounced to be inferior and lacking in coercive power The wise man will recognize that they are invented for the advantage of the makers, and, whenever his interests run counter to convention, he will regard the laws as unnatural obstacles to his desires and attempt to avoid them

The skeptical attitude toward man-made laws in general had a more specific application to moral laws, when inquiry discovered these to be the basis for political organizations Validity was denied to any and all general precepts of moral action. It is *never* always the best policy to tell the truth, or avoid stealing, or return good for evil Instead of absolute principles, conduct *can* and *should* be guided only by individual interests which may from time to time prompt people to act The promotion of personal welfare or happiness, through successful activity, is the goal Hence, what is good or bad, right or wrong, is such according to the judgment of each individual All values are subjective, since what is food for me may be poison for you If you judge a thing to be good for you, then it is good, and there is an end to any argument That another may pronounce it bad is irrelevant so far as you are concerned For him it is bad, for you it is good, and there is no criterion other than personal preference The view is excellently stated in a famous fragment from the writings of Protagoras "Man is the measure of all things, of things that are that they are, and of things that are not, that they are not "[1]

Greek democracy, particularly that of Athens, lent impetus to the Sophistic movement The Athenian citizen of the later fifth century belonged, perhaps, to as purely democratic a form of government as history records Laws were made and trials conducted in a general assembly of which all free citizens were members Here the citizen cast his vote according to his rational convictions or the temper of his emotions, as the case might be Public office, from highest to lowest, might fall to him in the periodic drawing of lots If he desired to bring suit in the courts, it was necessary for him to conduct the prosecution before the judges, or, if the tables were turned, he had to appear in his own defense His success, in either event, obviously depended, in a large measure, on his skill in debate Certain legal facts and court procedure he had to know and, if

[1] Bakewell, Charles M., *Source Book in Ancient Philosophy* Chap VIII By permission of Charles Scribner's Sons publishers

he could find them, a few tricks of the trade if his case were weak. As the demand for training in such knowledge grew, the Sophists came to supply the need

What the young Athenian wanted was practical knowledge that would assist him to meet successfully the demands of the political and social machinery of his age. Theoretical speculation was of *no utility. How did it help one before the judges to be able to* discourse on Being and Nonbeing, or the organization of the universe out of a chance concourse of atoms? The pupils seconded the theoretical skepticism of their Sophist instructors

Because the Sophists had no particular doctrines to teach, they were free to be as eclectic as they chose Their wandering life and ready wit enabled them to amass a considerable fund of information, both from personal experience and from acquaintance with that of others. They claimed to be able to teach whatever one wished to learn, and some, notably Hippias, took considerable pride in their versatility Their first impulse was doubtless an honest desire to teach, but the lure of wealth and the demands of their customers gradually led to excess and malpractice sufficiently obnoxious to win for the younger Sophists an evil name The early Sophists, however, were perforce men of considerable acumen Their trade demanded that they be familiar with the legal codes of the cities they visited and with the procedure of trying cases, skillful in the art of using language, familiar with social and moral traditions

With the younger Sophists, pride in the command of knowledge and in the ability to teach it was displaced by pride in being able to teach any side of any issue, even in "making the worse appear the better reason" Not victory by possession of greater information or superior merits of the case, but victory at any cost, by fair means or foul, became the goal Devices were taught whereby an opponent might be made to appear ridiculous in the eyes of the judges or the court might be swayed by emotional appeals The arguments familiar to logicians, *argumentum ad hominem*, *ad misericordiam*, *ad populum*, and the sort, echoed daily in the courts A few perhaps, notably Socrates, saw clearly the fallacious character of such arguments. Their effectiveness in coloring the judgment of the bulk of the citizenry was eloquently described by him in his famous self-defense during his own trial when he steadfastly refused to

employ them in order that he might escape receiving the death penalty [1]

The most deservedly famous of all the Sophists was Protagoras of Abdera A porter by trade, he consummated no small achievement by learning to read and write during his youth—arts seldom acquired by members of his low station Possessed with abundant interest and curiosity regarding natural and social problems and influenced deeply by Democritan and Heraclitan principles, he began offering instruction in receipt of small fees His lectures proved popular and lucrative. In time his reputation grew, and the more famous he became, the more he was in demand and the larger the fees he could charge. He wrote extensively, but his work has been lost, destroyed, it is likely, by public decree, as it is known was the fate of his work *On the Gods* It has been suggested by some historians of philosophy that Protagoras fell a victim of Athenian bigotry, was charged with impiety and exiled, losing his life in a shipwreck while on his way to Sicily This conclusion is held to be supported by the small remaining fragment of the above work "With regard to the gods, I cannot feel sure either that they are, or that they are not, nor what they are like in figure, for there are many things that hinder such knowledge, the obscurity of the subject and the shortness of human life "[2] This sentence alone would have been sufficient ground for an indictment on the charge of impiety

Protagoras maintained that the only source of knowledge is perception This varies with the individual differences among perceivers All one has are sensations, or at best percepts, which are not the objects said to be perceived Among individual percepts there is no way to determine which is absolutely true or false For you, your experience is personal, private, and true for you. For another, his experience may prompt very different conclusions To secure absolute validity as a characteristic of judgments is a futile dream Such a position as this must necessarily declare all science to be a fruitless pursuit, since no objective truths are available Truth and right are designations of individual types of experience, and what shall be indicated by them is a matter entirely up to whoever it may be that is judging Since truths about physical

[1] Plato, *Apology*

[2] Burnet, John *Greek Philosophy*, Part I, p. 117 By permission of The Macmillan Company, publishers.

nature are inaccessible, the only justifiable object of study is man himself and the chief aim of such study is ascertaining, in a practical way, what it is prudent for him to do At least it is possible to observe human conduct, evaluate it, determine what prompts it and gives it direction Though physical nature remains an enigma, human nature displays itself everywhere for the student to investigate Laws of human nature can be found even though laws of physical nature remain a mystery The one basic law of human nature most acceptable to the Sophists was *self-preservation* of the individual Every man endeavors to keep his life and add to his store of goods whatever his particular insight pronounces to be conducive to its continuance

Among the Sophists there were various interpretations of this fundamental principle Protagoras himself was inclined toward a doctrine of equalitarianism He proposed that nature makes no distinction among men, each is endowed with equal measures of moral judgment, equity, sympathy, reverence, respect This being so, a hands-off policy should result in a genuinely satisfactory social system based on natural law It follows, therefore, that all laws designed to set up barriers to this equality in the form of creating class distinctions or special privilege are unjust and unnatural The implications of this view were also variously drawn by different Sophists, communism being advocated by some

It appears that the skeptical tenor of most of Protagoras' conclusions was not pursued by him in his dissemination of knowledge Plato speaks well of him and portrays him in the dialogue, *Protagoras*, as an earnest sponsor of customary Athenian morality Protagoras believed that by his teaching he could effect an improvement upon the moral character of any who would listen There is nothing to indicate that he taught the worse to appear the better reason Nor can it be said that he incited his pupils to lawlessness or the cultivation of antisocial attitudes His theories about human nature and conduct were one thing, his practice was quite another. At worst he could be accused of no more than encouraging a rational skepticism of the traditional Other, especially younger, Sophists were not so conservative

Among these should be mentioned Thrasymachus, who plays a leading part in the early books of Plato's *Republic* In this dialogue Thrasymachus attempts to uphold against Socrates the thesis that justice is determined by the strongest man Right and wrong acts

cannot be standardized for all The morality of the strong cannot be the same for the weak Power, prosperity, fame, reputation, success come to those who are able to use their resources to further their personal interests The strong, the mighty are the best among men *The laws are made by the strong to secure their position and* power against others within a society who might upset them The object of any law is to control others while the makers of the law enjoy its benefits The strong man is thus superior to all laws of society and can make or break them proportionately as he is strong enough to do it The determining factor will be the expectation of personal gain To the strong no law of man is sacred before the law of human egoism It is quite true that by no means all the other Sophists were in agreement with Thrasymachus He was perhaps only one of the more radical among them Others, such as Callicles, held to an opposite opinion that laws were made by the masses to insure their safety from exploitation by the strong Religious principles, as well as political and moral, were explained after the same manner Thus Prodicus insisted that man had made gods of all that bring him blessings, and Critias declared that beliefs in gods were inventions of a farseeing statecraft and have as their objective the domination of the ignorant masses through superstitious fears of the supernatural

Second to Protagoras in fame and ability was Gorgias of Sicily, who came to Athens as an ambassador from his native city At that time he was advanced in years and famous for his dialectical skill Athens intrigued him and he stayed on as semiofficial representative of his city Gorgias was conversant with Eleatic doctrine and, using its dialectical approach to the problem of the real, proceeded to prove that Being does not exist, that if conceivably it did exist we could not know it because of the subjectivity of perception, and that, even supposing this latter, we could not communicate it to another because the perceptions of each are different from those of every other His fame rests largely on this nihilistic doctrine, by means of which he arrived at the same subjectivistic and relativistic position as Protagoras During his sojourn in Athens, Gorgias was known as the leading rhetorician, or teacher of the art of public debate, and enjoys the distinction of having one of Plato's dialogues named after him [1]

[1] For discussion of the practice of rhetoric, see B A G Fuller, *History of Greek Philosophy*, Vol. III, pp 294–302

As the fifth century waned, so did the popularity of the Sophists The first ones, such as Protagoras, were largely above reproach, the extravagances of the younger Sophists did the damage Having no objective doctrines to promote, they were free to instruct in whatever manner they pleased This, together with their easygoing attitude regarding the sort of things taught, was bound to stir up animosity toward them Then, too, they were getting rich by charging exorbitant fees. The poorer aspirants for wisdom were eliminated forthwith and resented it To them, the Sophists appeared to sponsor the interests of the rich and powerful, since it was from these they drew their pupils Besides, they were un-Athenian, practically all of them coming to Athens from foreign cities Again, among the more reactionary members of the ruling factions, it was still beneath the dignity of a gentleman to stoop to accepting payment for such menial service Furthermore, the Sophists were too free with their skeptical attitude toward good Athenian traditions and altogether too flippant in their manner of speaking about the gods and their worship.

In spite of their many faults, the Sophists made a real contribution to the future of thought. In the first place, they made it necessary for succeeding philosophers to examine critically the problem of knowledge in order to refute, if possible, Sophistic skepticism and subjectivism By declaring perception to be the only source of knowledge and denying its claim to establish true principles, they stimulated one of the greatest thinkers in the field of morals that has ever lived, Socrates, who rose to defend the thesis that objective principles may be formulated They revealed in a negative way the imperativeness for a greater systematization of philosophic speculation.

In the second place, they raised, among other problems, those of the origin, variety, and validity of laws and the question of who shall obey them and why such obedience is to be expected What is the purpose of laws? What is to be achieved by their enactment and enforcement? In the third place, they challenged the distinction between right and wrong, thus calling attention to the necessity for finding a sound foundation upon which to rest that distinction. By making clear the distinction between nature and convention, they intensified the problem of making reasonable any and all regulatory principles By declaring that only laws of nature are worthy of obedience and that the first law of nature is self-advance-

ment through the rule of the strong, they challenged the ingenuity of moral theorists to show that moral precepts rest on other than purely biological grounds

In general their contributions may be stated as chiefly twofold first, the raising and clarifying of certain far-reaching problems of human nature and of conduct, second, the supplying of a type of answer to their problems, at once stimulating and thought-provoking Assumptions that before their time were ordinarily taken for granted were rudely cast aside for a thoroughly skeptical, individualistic, subjectivistic attitude toward them Such relativistic answers as were given by the Sophists rested uneasily on the minds of men in search of stable solutions There was too much Heraclitan flux about their answers to satisfy human aspiration at heart Eleatic Reaction was inevitable and assumed the form of a ragged, ugly, wise man Socrates of Athens

## 2 *Socrates*

By tradition and early training Socrates should have become a sculptor or stoneworker like his father, by preference he became a philosopher whose interests converged on man and human values Early in life he developed a skeptical attitude toward science and attempts generally to get at the ultimate substance of physical nature Birds and trees, the greenery of rural spring, held no lessons for him With man it was different He felt that in the field of human activities there was much to be learned of lasting value He thus agreed with the Sophists that the metaphysical problem was a profitless one to pursue, that the only justifiable study was man himself But however much Socrates agreed with the Sophistic attitude in this matter, he was, at the same time, very much at variance with their conclusions on other points Openly declaring against the assumption that all knowledge is a private and individual matter, not subject to objective criteria of truth, Socrates was able to escape the subjectivistic position of the Sophists by redefining knowledge and asserting that its source was other than perception He agreed that, if sense perception were the sole avenue for approaching truth, no objective and public criteria could be derived and hence no genuine knowledge. Against the Sophists he maintained that all genuine knowledge is conceptual and is obtained by the exercise of reason

Perception can reveal to us only particular entities, but conception penetrates the individuality of particulars to make the discovery of common qualities or characteristics present in various classes of things Each individual entity exhibits both unique and differentiating appearances that distinguish it from all other particulars and a number of characteristics which it possesses in common with numerous other particulars That is, though there are many sorts of men, each an individual distinguishable from all others of his kind by means of such things as facial features, weight, speech, height, and color, each person at the same time exhibits features in common with all others All men have limbs, fingers, eyes, nose, ears, neck, shoulders, torso, parts that bear uniform relationships to one another All have noses and mouths in common, yet no two sets of them are identical

The same holds true of all chairs, trees, horses, houses—of all classes of things In fact it is the common characteristics discoverable in things that enable us to make our rough everyday classifications or groupings of things It is these common elements that make up the body of knowledge and certainty is derived from the permanence of such characteristics which do not perish with any individual who may exhibit them Socrates held that this is the kind of knowledge that science must seek, and science today is still in pursuit of just that sort of objective

As has been pointed out, Socrates was convinced that physical science is not a profitable activity, the study of man alone being worthy of occupying one's time and effort For this reason, he gave all his attention to the understanding of human nature To him, science was ethics and its subject matter, human conduct From early manhood to the day of his death, Socrates believed his mission to be that of improving the citizens of Athens Not that he was confident in his own knowledge of what was best for them, but rather that he was convinced that, though Athenians *claimed* to know, they were, as a matter of fact, ignorant in their supposed knowledge and misguided in the conduct of their lives By being made aware of their lack of knowledge, they might be made to see the value of reflectively attacking the problems which they had been shown not to understand By question and answer he would attempt to ascertain what a citizen understood to be the meaning of friendship, or piety, or courage, or justice By first claiming ignorance of the problem he would elicit a definition from

someone Then, not satisfied with the definition offered, he would ask for additional enlightenment Eventually, the ignorance of the one questioned would be exhibited If the latter were important in city affairs, or proud of his assumed knowledge, it frequently happened that the conversation would break up with much resentment directed at Socrates As he is made to relate in Plato's *Apology*· "And then the persons who are cross-examined get angry with me instead of with themselves, and say that Socrates is an abominable fellow who corrupts young men "[1]

If, however, the one questioned did not become angry, he was at once urged to advance with Socrates to a fresh search for a satisfactorily defined idea of the subject matter of the debate Still by question and answer, Socrates then would endeavor to discover the common elements in all particular instances of the given type of conduct Perhaps the subject was the nature of piety, as in the dialogue called *Euthyphro* In that case what Socrates wished to discover were those characteristics found in all pious acts If it were possible to discover these, a good definition of piety could be formulated, one that could be used at all future times to determine whether or not acts are pious

Thus Socrates believed he knew that a satisfactory definition must be based on common elements discoverable in particulars The technique followed in this search for truth has been called the Socratic *dialectic*, involving question-and-answer procedure, a give-and-take debate in which obscurities are uncovered to the light and hidden ideas are discovered and developed. In this latter role, Socrates referred to himself as an intellectual midwife He did not claim to supply ideas but to assist at the birth of new ones Socrates was frequently ironic in his conversations, often pretending greatly to admire the imagined wisdom of his opponent in debate Always he held himself ready to learn, but when the supposed wisdom of his interlocutors was revealed to be ignorance instead, the irony not infrequently became sarcasm.

In this way the search for defined ideas became a central impulse in Socrates' life, an impulse that was further intensified by the report coming to him through his friend Chaerephon that the oracle at Delphi had pronounced him the wisest living man Mystified by the statement, yet unwilling to believe that Apollo would lie, Socrates sought to verify it by approaching with questions all

[1] Translation by F J Church By permission of The Macmillan Company, publishers.

those who had a reputation for wisdom One after the other of these wise men proved to be really ignorant of the very things they were supposed to know This was most obviously true of the politicians and poets. Only the artisans seemed to know their business, but these were ignorant, too, in presuming to know about statesmanship and other things outside their trades Those who claimed to know appeared to be unaware of their ignorance In this at least, Socrates did not find himself wanting, for he well realized his own ignorance The declaration of the oracle appeared to mean that Socrates was the wisest, for he alone of all people recognized his own ignorance, that he was wise in knowing that he did not know.

Socrates held that the realization of one's own ignorance is the initial step in the process of moral self-development One must rid himself of false opinion and superstition in order to make room for the body of genuine knowledge obtainable from a rational analysis seeking concepts. The Sophists were probably right that complacent acceptance of custom and moral practice must be ousted in favor of intelligent examination But in the opinion of Socrates the Sophists were wrong in concluding, at the end of their search, that no stable criteria of conduct were to be obtained Clear the ground of prejudice and false opinion and a residuum of common knowledge will remain instead of the absolute blank claimed by the Sophists

This clearing away of misunderstanding and ignorance from the minds of the Athenian citizenry was looked upon by Socrates as his duty In the *Apology*, Plato reports him as saying to the crowded court

> God has sent me to attack the city, as if it were a great and noble horse, to use a quaint simile, which was rather sluggish from its size, and which needed to be aroused by a gadfly and I think that I am the gadfly that God has sent to the city to attack it, for I never cease from settling upon you, as it were, at every point, and rousing and exhorting and reproaching each man of you all day long [1]

Most of his waking hours Socrates spent in this manner, interrogating, exhorting, urging Athenian citizens to be thoughtful and to seek the good

Socrates' most influential dictum was that *virtue is knowledge* It is virtue that makes people good and since it is knowledge it can be taught for the benefit of those who apply themselves Virtue

[1] Translation by F J Church By permission of The Macmillan Company, publishers

is not an end in itself, but a means to an end—the good of the individual Virtue is knowledge of the good As a matter of fact, each man seeks his own welfare, he does those things he believes to be beneficial to him, either directly or indirectly A man does not do things which he knows to be detrimental to his best interests If one knows what is good for him, he cannot help doing it Knowledge controls the will, for to know an act is good is the prompting to engage in the act People make frequent mistakes in pursuing certain activities but the activity at the time perforce must have appeared to be able to advance certain interests Ignorance is the source of trouble, it stands to vice as knowledge does to virtue People can be made virtuous only by being made wise, by being given deeper insight into themselves and human relationships The vast majority of people have opinion only, instead of knowledge Some may succeed in making the proper judgments and hence the proper responses, but it all remains largely a matter of guesswork *Why* one judgment or activity is better than another is unknown to these people It is important not only to have correct opinions, but also to know *why* one has them, that is, to have the criteria for determining true judgments )

(Here is presented a more elaborately drawn notion, first suggested by Heraclitus, that to be good one must be intelligent Socrates, by claiming virtue to be wisdom, made morality depend upon intellectual achievement and set a precedent, thereby, for most of the ethical theories that followed The emphasis upon knowing has exerted its influence on morality by the efforts men have exerted to make ethical theory rational, rather than merely emotional As a basic thesis it has indicated that good intention alone is an insufficient excuse for moral error What is demanded by such cases is not merely good will or intent, but as much understanding and reason as it is possible to develop, to go with it Only then, it would follow, should one be let off for his mistakes, and even in such cases with the admonition to seek wisdom )

(Socrates believed that all men could develop some degree of insight by the exercise of reason and that, furthermore, it was their duty to attend to that development, for by knowledge alone could men be made free By insight man is enabled to escape the Sophistic criterion of knowledge based on impulse and feeling and thus substitute certainty and objectivity as regards knowledge of moral conduct for the relativism and subjectivity of Sophistic ethics

Following his conviction that knowledge determines the will, Socrates maintained that the test of what a man knows is what a man does Hence, one could not be regarded as really believing a thing if he refuses to act upon it There is no way of doing anything otherwise than according to the plans that appear at the time to be most apt to further one's own welfare.

It was the contention of Socrates that the good and virtuous man is wise and that if one is virtuous he is also happy Furthermore, if a man is virtuous in one respect he tends to be so in all, for the virtues are one Each has a single opposite, folly, which has a single opposite, wisdom Therefore, Socrates concluded, virtue is wisdom or knowledge Being virtuous is more than acting according to prescriptions based on long usage, and hence dependent on feeling and habit To be virtuous is to conduct one's life by the dictates of a type of reasoned thinking that has long devoted itself to self-examination and has as its product moral insight By means of insight one is able to determine what is good By acting in pursuance of that good, a man becomes happy The better he understands what is good for him, the greater the amount of his moral excellence and the happier he becomes Socrates' whole effort appeared to be directed toward the objective of developing happy and useful citizens The pursuit of knowledge he claimed to be the only way to achieve either goal Whether he meant that the good is the useful, or that happiness is pleasure, is never quite made clear in the dialogues, and the subsequent interpretation of his beliefs have been the source of much disagreement

That man is wholly a product of the social order expresses the beginning and the end of Socrates' social and political beliefs The *Crito* reveals Socrates as one convinced that all he was or could be is due to the beneficence and security of the Athenian state Always it is the state that stands first before the welfare of any individual The benefit and security of *all* the citizens must take precedence over the desires or complaints of citizens separately The state expresses itself in the form of laws, which constitute its ribs and backbone Only by laws may other laws be set aside Rebellion against them by one displeased or injured by them is intolerable In the dialogue just referred to Socrates is presented as being urged by his friend Crito to take flight from prison in order to seek safety in Thessaly Socrates, with his usual desire to think through the problem, suggests certain arguments that would be advanced by

the laws of the state Could they speak, they would say that to escape would be a wrong done them by one who has for many years argued that it is never right to do evil in return for real or imagined evil done

"Consider, Socrates, if we speak truly that in our present attempt you are going to do us an injury For, having brought you into the world, and nurtured you and educated you, and given you and every other citizen a share in every good which we had to give, we further proclaim to any Athenian, by the liberty which we allow him, that if he does not like us when he has become of age and has seen the ways of the city and made our acquaintance, he may go where he pleases and take his goods with him None of our laws will forbid him or interfere with him Anyone who does not like us and the city, and who wants to emigrate to a colony or to any other city, may go where he likes, retaining his property But he who has experience of the manner in which we order justice and administer the State, and still remains, has entered into an implied contract that he will do as we command him And he who disobeys us is, as we maintain, thrice wrong first, because in disobeying us, he is disobeying his parents, secondly, because we are the authors of his education, thirdly, because he has made an agreement with us that he will duly obey our commands, and he neither obeys them nor convinces us that our commands are unjust, and we do not rudely impose them, but give him the alternative of obeying or convincing us—that is what we offer and he does neither

"Well, then, since you were brought into the world and educated and nurtured by us, can you deny in the first place that you are a child and slave as your fathers were before you? And if this is true, you are not on equal terms with us, nor can you think that you have a right to do to us what we are doing to you Would you have any right to strike or revile or do any other evil to your father or your master, if you had one, because you had been struck or reviled by him or received some evil at his hands?—you would not say this? And because we think right to destroy you, do you think you have any right to destroy us in return, and your country as far as in you lies? Will you, O professor of true virtue, pretend that you are justified in this? Has a philosopher like you failed to discover that our country is more to be valued and higher and holier far than mother or father or any ancestor, and more to be regarded in the eyes of the gods and of men of understanding?"[1]

These remarks put into the mouth of Socrates by Plato give a fair indication of the general Socratic opinion as to the relationship of state to citizen As far as individual citizens are concerned, it is clearly a radically paternalistic type of political theory. It is found largely repeated in the general theory of politics accepted by Plato and presented in his well-known dialogue, *Republic*

[1] Plato, *Crito*, Jowett's translation By permission of the Clarendon Press, London

For approximately fifty years the "gadfly" buzzed about the busy market place and streets of Athens. During this time he acquired many enemies from all walks of life who wished to put an end to his constant exhortations. Socrates was executed by the Athenian democracy in the year 399 B.C. because it was convinced that he was a dangerous influence upon public morals. The elucidation of the charges against him, together with the account of his trial and conviction, comes from two of his student admirers, Xenophon, who was absent during the trial, and Plato, who was present. The majority of students of the documents incline to the opinion that the account given by Plato in his *Apology* is a fairly faithful description of the proceedings. The charge was "that Socrates was an evildoer who corrupts the youth and who does not believe in the gods whom the city believes in, but in other divinities."[1] This charge was officially brought by three men: Meletus, a poet; Lycon, a rhetorician, and Anytus, a powerful figure of the recently restored democracy. One of the charges appears to have been rather superficial and of the traditional type familiar already to some who had run afoul Athenian bigotry. This portion of the complete accusation alleged that Socrates denied the existence of Greek deities and proposed others in their stead. There was no evidence offered during the trial nor any suggestion from Socrates' life that such an imputation had any reasonable foundation. The second charge made in the indictment claimed that he was a corrupter of the youth of Athens. Meletus and his confederates were unable to produce any witnesses before the court who could testify to their having been corrupted, but a majority of those in attendance believed him guilty despite the paucity of evidence.

This prevalence of opinion may be looked upon as the product of years of misunderstanding of Socrates' life and teachings. It is apparent that the negative aspect of his method might easily offend the dogmatic, who resented the display of their ignorance before the grinning circle of Socrates' friends. In addition to this the fact that Socrates considered no social, moral, political, or religious institution sacred beyond critical investigation facilely led some to interpret his inquiries as hostile to such institutions and his objective that of discrediting and destroying them. Since twentieth-century critics of social institutions are today suspect

[1] Plato *Apology*, translation by F. J. Church. By permission of The Macmillan Company, publishers.

in the eyes of the mob, one need not be surprised to find a similar attitude prevalent during the fifth-century years of Socrates' life Especially was Athens afflicted with public prejudice against liberal thought It is a bit ironical, too, that the queen city of the Golden Age should be at the same time probably the most reactionary of all the cities of Greece

One other result of Socrates' activity may be noted as a contributing cause of his condemnation If he alone had been critical of the Athenian institutions, it is likely that he would have been permitted to live out his life, but when his youthful followers began emulating him, no doubt with his encouragement, it was carrying things a bit too far Age has ever resented the criticism of youth, and it was but natural that Socrates should have been marked as the cause of much adult embarrassment Resentment which had been accumulating for years found its voice and at last had its revenge, when Socrates refused to surrender his principles and bow before the forces of ignorance His accusers named the most severe punishment they knew, which was death, hoping probably that in the end some less drastic measure for curbing Socrates' activities would grow out of it They succeeded even better than they expected, for Socrates refused to name a punishment for himself, which he believed undeserved This procedure insured his execution, which took place approximately one month after his trial and conviction

### 3 *Socratic Schools*

Following the death of Socrates several schools of thought arose, each claiming to offer the correct interpretation of the work of the master Each felt that the conclusions it drew were more faithful to the spirit of his teaching than any of the others Especially is this true of the Cynic and Cyrenaic groups, which were basically ethical in interest The Megaric, on the other hand, had in addition to its ethical beliefs others of a metaphysical and logical variety Whatever may have been their claims, it is by no means an undisputed issue as to just how much of the work of these schools is to be attributed to the inspiration of Socrates and how much, on the other hand, is due to the activities of the Sophists Though the leaders had contacted Socrates repeatedly during their lives, and though each doubtless felt that he was giving voice to genuine Socratic principles, it is true that, whether consciously or uncon-

sciously, they inserted a number of beliefs which had been supported by various Sophists and had been criticized vigorously by Socrates himself. Notably is this evident in the case of the Cynics, who adopted as a basic principle of their philosophy that men should be guided by the dictates of nature This, of course, could be interpreted as meaning either human nature or nature in the more general meaning of that term as including all physical existence

Among the Sophists we have a notable example of the humanistic emphasis in the case of Protagoras, who advocated that all judgments and all conduct based upon them should be guided by the opinions of each separate individual, dictated by his human nature On the other hand, Sophists like Prodicus and Hippias appear to have based their teachings upon the wider meaning of the term nature In all events, these latter men made clear the distinction before mentioned between laws of nature and laws of man In the case of each, their insistence was that, in any instance of dispute or controversy as to which of the kinds of laws should be used as a guide to conduct, in every case the laws of nature should predominate Another obvious example of Sophistic influence is the marked individualism that characterized the post-Socratic schools In the final analysis the true situation probably is that the schools drew from both sources, Socratic and Sophistic, for their basic principles and each in its own manner attempted to present a synthesis of these beliefs in a form which would be usable in the practical activities of life

Perhaps the most significant immediate cause of the divergent views of the schools is to be found in the ambiguity of Socrates' concept of *the good* He had pronounced man's chief objective to be the achievement of a virtuous existence, virtue being defined in terms of knowledge. By declaring that virtue is knowledge, he left open the question knowledge of *what* To say, as he did, that it is knowledge of the good, in turn, leaves the latter ambiguous At times Socrates appeared to interpret the good instrumentally, that being good which acts as a means to some desired end However, it is improbable that he left matters thus His conviction that beneath the diversities of human opinion were to be found a common human nature and universal human values must have led him to conclude that the good that is to be sought must have such universal human values as its content Yet for all this, the final determination of the content of the good is not clear, and that it was not is perhaps best

indicated by the contradictory interpretations of his thought in the period succeeding his death Both Cynics and Cyrenaics held with Socrates that ethics can be the only science and that virtue lies in a sort of knowledge

*a* The *Cynic* school was founded by an elderly admirer of Socrates, a blunt, none too understanding, and somewhat uncouth man, one Antisthenes of Athens Antisthenes seized upon the Socratic emphasis on simplicity of living and freedom from the pursuit of worldly goods as the central core of the master's teaching The name "Cynic" appears to be derived either from the Greek word referring to dog, or from the word "Cynosarges," the name of the suburban school where Antisthenes conducted his lectures

Virtue, he taught, is to be pursued for the sake of virtue It cannot be regarded merely as a means to something else and above all things not as a means to pleasure, as the Cyrenaics taught Antisthenes was skeptical of ever achieving wisdom in the degree that Socrates expounded A man cannot be wise, for, on the one hand, emotions and feelings blind his insight and, on the other, reason makes illegitimate use of judgments It says, for instance, that *paper is white*, while as a matter of fact the two are not the same Paper is one thing—paper, white is another thing—white All that reason can truthfully say is that *paper is paper* and *white is white*—which is to utter nonsense The wisdom to be sought is such that may be valuable as indicating that no knowledge is possible and that the wise man will renounce the search for it and concentrate upon the avoidance of being fooled or taken in by the practice of seeking worldly goods and honors.

How may a Cynic be happy? By wanting nothing, by being completely independent of worldly goods and aspirations, by developing self-sufficiency and freedom from the ordinary course of worldly events Each desire, each aspiration acts as an impediment to the virtuous existence, for one has no control over the natural environment, which must be taken into account if these are to be realized The wise man will seek complete freedom from want and thus, desiring nothing, will never be disappointed and therefore unhappy Live according to nature, satisfy only one's bodily needs, recognize all conventions and morality as unnaturally restrictive, adhere to no society and no nation, avoid human relationships that leave one with responsibilities, recognize that

wisdom is unattainable, and be satisfied with one's inevitable ignorance, believe nothing, that you may never be mistaken In this manner, the Cynic must seek a state of imperturbability which is the ideal of virtuous living. The later Cynics in some degree modified the ascetic tone of the school, and Crates, for example, married a young Thracian

Other than Antisthenes, probably the best known Cynic is Diogenes, famous in legend, if not in philosophy, for the tub he used as a dwelling, for carrying a lighted lantern about the streets in broad daylight in his search for a worthy man, and for his cryptic conversation with the great Alexander of Macedonia Diogenes was probably not so bad as the Cynics made themselves out to be, for he spent a number of years tutoring the children of a Corinthian gentleman But even with these softenings, the Cynics remained solidly opposed to the hedonism of Aristippus and his followers

*b* The second Socratic school of importance, the *Cyrenaic*, was as certain as the Cynics that objective, scientific knowledge could not be obtained Protagorean skepticism permeated the viewpoint of Aristippus and caused him to retain a subjectivistic attitude toward science and ethics He was chiefly impressed by Socrates' emphasis upon the happy life, which he, Aristippus, interpreted to mean a life of pleasure As a matter of fact, he argued, all that one can be sure about are the feelings of pleasure and pain that one actually experiences With these objective science cannot deal, for my feelings are uniquely my own, and the same uniqueness is characteristic of the feelings of all other people Furthermore, the Socratic ideal of social happiness cannot be achieved, for the virtuous life is a private and individual affair

In this, Aristippus agreed with Antisthenes To rely upon sources of help outside the individual is a most serious blunder Religion, politics, the family, morality, all alike must be eschewed if the Cyrenaic is to become happy At times he is almost a Cynic in his emphasis upon renunciation of external goods, advocating, it would seem, that a man may be happy if he is able to enjoy the warm sun, a garden of flowers, or the company of friends or to find his way home after a day afield Both the Cyrenaic and the Cynic are essentially individualistic and antisocial in contrast to the Socratic teaching, and in both cases the causes are Sophistic in origin

Cyrenaicism upheld pleasure as the ideal and proceeded to develop the first coherent hedonistic ethics Virtue is knowledge employed to secure the most intense and lasting pleasures of existence Of the future, one cannot be very sure and must, perforce, concentrate upon the joys of the present The pleasures of the past cannot be recalled vividly enough to dwell long upon them Immediate pleasures are the surest, for we have them now It is best to enjoy them while we may To be able to enjoy these immediate pleasures of life fully is to be virtuous Especially the early Cyrenaics, including Aristippus, emphasized bodily or sensuous pleasures as most intense With later members of the school, the emphasis was shifted more to the achievement of lasting pleasures With lasting pleasures to be sought, insight became necessary so that by means of it one might know when to resist an intense present pleasure in order to insure a durable future one whenever the probabilities were favorable Retained, however, was the basic ideal - a life as vigorously enjoyable as it is possible to achieve The softening of their ideal so as to include lasting pleasures enabled the Cyrenaics to be absorbed in the later Epicurean school, which gave chief prominence to the durability of intellectual pleasures

Two other later developments of the Cyrenaic teaching came from Theodorus and Hegesias, respectively Theodorus advocated the allegiance of man to no gods whatever on the ground that religious belief and worship interfered with happiness Added to this was the assertion that legal and moral rules were good only for the masses He claimed that the wise man should ignore them all in order to enjoy whatever may come to him in the course of events In a similar vein, Euhemerus explained the origin of gods as deified heroes and hence unfit to be worshiped, being man-made [1]

With Hegesias, hedonism experienced a pessimistic turn Accepting the thesis that pleasure is the end of existence, he arrived at the conclusion that such a good is beyond human realization because of a preponderance of pain over pleasure. Man may seek pleasure and find it the greatest of values, but by the nature of things he cannot obtain such a value, for at every turn he finds pain instead The highest good, or pleasure, is a painless state beyond life Hence, to reach it one must first die This, he advocated, would better be done than to live a life of fruitless search for pleasure By

[1] Weber Alfred, *History of Philosophy*, 6th ed p 72

this teaching Hegesias earned the title "Persuader to Death," and his lectures were forbidden in some places He was perhaps the first ardent pessimist of antiquity His sympathizer, Schopenhauer, offers a more systematic account of pessimism in modern times.

*c. Euclid* of Megara, a warm friend and admirer of Socrates, set up a school in his native city and had as his objective the uniting of Socratic ethics and Parmenidean Being He denied the reality of the data of sense experience and advanced the Socratic emphasis upon reasoned insight as the means to true knowledge The conceptual certainty sought by Socrates and declared by him to be the *good*, appeared to Euclid to bear the earmarks of Eleatic permanence and perfection As a unity, it closely resembled the Parmenidean One which has been regarded, to be sure, as a material substance but which at the same time had been largely divested of all qualities other than its perfect form To unite the Socratic concept of the good with Eleatic Being appeared to be the logical thing to do

More than this Euclid probably did not accomplish It served, however, to make an impression on Plato's thought during his stay at Megara following the death of Socrates Both the form of the good and the Eleatic concept of permanence and immutability of the real became firmly fixed in the system of Plato One cannot say that these concepts were presented to Plato for the first time during his visit to Megara, but it is legitimate to assume that thinking them through again at that time added something to their cogency for him The work of the Megarics in the field of logic is significant in that, for the first time, logic is given specific attention as a separate study Their results were meager and their disputes usually degenerated into quibbling over finely drawn distinctions, such as the "problem of determining at what point a horse that is fed one less wisp of hay a day will eventually starve "[1]

Of the later Megarics, Stilpo, a contemporary of Aristotle, is perhaps the most important, for he served as a connecting link between the Megarics, the Cynics, and the later Stoics. Stilpo added a considerable portion of Cynic ethics, with its emphasis upon living according to the nature of man, to the Megarian doctrine and transmitted this combination of metaphysics and ethics to his pupil, Zeno, who became the founder of Stoicism Thus threads of the dominant philosophy of Rome grew out of the post-

[1] Fuller, *op cit*, Vol II, p 92

Socratic schools just as the thought of Socrates grew out of the thinking of the philosophers who preceded him

## DISCUSSION TOPICS

1 Trace the origin and development of pre-Socratic problems in the work of men before Socrates

2 What were the conditions making for the rise of the Sophists? What sort of men were the Sophists? What is the modern meaning of *Sophism*?

3 How was the Protagorean thesis that "man is the measure of all things" answered by Socrates? How did Socrates escape the subjectivism of the Sophists?

4 In what ways was Socrates in agreement with the Sophists? On what grounds did he disagree with them?

5 What is implied by the Socratic claim that "virtue is knowledge"? What is meant by the criticism that on Socrates' ethical ground few if any men could be virtuous?

6 After reading the *Apology* be able to state the charges brought against Socrates and give his criticisms of them

7 How does the argument in the *Euthyphro* illustrate Socratic method, Socratic irony, the search for conceptual knowledge?

8 What phases of the thought and character of Socrates became central doctrines in Cynic and Cyrenaic philosophy?

9 Criticize the Socratic thesis that no one does wrong knowingly or purposely

10 Outline and evaluate Socrates' opinions upon the relationship of the individual to society

11 In what respects might it be argued that the Cyrenaics advocated a parasitic ideal of life?

12 Why are the Cynic and Cyrenaic viewpoints said to be individualistic and antisocial? Were they in agreement with Socratic teaching in this matter?

13 From the point of view of future developments in philosophy, in what ways was the Megarian school important?

## PARALLEL READINGS

BURNET, JOHN *Greek Philosophy*, 1st ed., Part I, Chaps VII, VIII, IX, X
CHURCH, F. J. *Trial and Death of Socrates* (*Euthyphro*, *Apology*, *Crito*, *Phaedo*)
LUTOSLAWSKI, W. *Origin and Growth of Plato's Logic*, Chaps II, III, IV
ROBIN, LEON *Greek Thought*, Book III, Chaps I, II, III
ROGERS, A. K. *A Student's History of Philosophy*, 3d ed., Secs 7–9
WARBECK, JOHN M. *The Searching Mind of Greece*, Chaps IX, X, XI
WEBER, A. and R. B. PERRY *History of Philosophy*, 6th ed., Secs 14–15
ZELLER, E. *Socrates and the Socratic Schools*

# Chapter VI

# PLATO

## 1. *Plato and His Predecessors*

Of all the admirers of Socrates the most brilliant and original was Aristocles, known to the history of thought by the name of Plato Since he was by birth and preference an aristocrat, one would expect politics to have been his normal career, for his family on both sides had long been closely affiliated with the governmental affairs of Athens His family roster included some of the most famous names in Greek history, including Codrus and Solon. Apparently the shifting fortunes of statesmen during his early life plus an awakened interest in philosophy through Socrates developed in him a degree of disillusionment respecting the use of his talents as a statesman At any rate, the death of Socrates at the hands of the democracy was sufficient to allay any doubt in his mind, and he turned definitely toward philosophy His life as a student in the Socratic school lasted approximately eight years, beginning when he was twenty Much moved by the untimely death of his inspired teacher, Plato left Athens shortly thereafter and took up residence with Euclid at Megara, where it is likely he began the writing of those early dialogues describing the life and death of Socrates From Megara tradition has it that he visited many places of the Greek world, including, perhaps, Asia Minor and Egypt, journeys which occupied a number of years

Ten years after his departure from Athens he returned, only to leave two years later for Sicily and the court of Dionysius of Syracuse His visit appears to have been prompted by his friendship with Dion, a brother-in-law of the reigning king, Dionysius I. Owing to the fact that Plato incurred the dislike of the boorish and unscrupulous Dionysius, the visit proved to be a hazardous one and very nearly concluded disastrously In due course of events Plato was bundled off to a Spartan emissary at the Syracusan court, who took him to Aegina to be sold into slavery. There, fortunately,

Plato was recognized by a friend, purchased by him, and sent safely to Athens. Back home again he resolved to stay and to continue his work, a resolution broken only by a second visit to Syracuse years later, again through the encouragement of Dion, this time for the purpose of educating the Syracusan heir, Dionysius the Younger. This last visit proved scarcely more satisfactory than the first and perhaps contributed something to the occasional note of disillusionment appearing in the pages of his last dialogue, *Laws*.

With his first period of travel finished, Plato settled down to serious work on his philosophical interests. He was then about forty years old. On the property he inherited near the grove of Academus he established a school that became known as the Academy. There he wrote and taught. Instant success attended the founding of the Academy, and the number of students who studied there necessitated the adding of assistants to aid in the work of instruction. Among these we shall find one outstanding genius, Aristotle, to whose thought attention soon must be given.

Plato's philosophy was preceded by two centuries of speculation by thinkers from diverse parts of the Greek world. Without knowledge of the results of their theorizing, the intellect even of a Plato could scarcely have attained such lofty philosophic heights. That his dependence upon his predecessors was enormous can easily be seen from a survey of the elements which go to make up the main body of the Platonic system. There is no doubt he borrowed much from such men as Pythagoras, Parmenides, Heraclitus, Empedocles, Anaxagoras, and Socrates. This obvious eclecticism makes even more remarkable the ingenuity and insight of him who succeeded so admirably in fitting the parts together into an intricately woven pattern. This need not be taken to imply that all the different elements fit smoothly together, but only that there are fewer loose ends and more interlocking unities than might be supposed considering the complexity of the solutions endorsed.

Cratylus, a Heraclitan, imparted to him the interpretation of a world wherein nothing ever remains itself and no particular event endures. To Plato this seemed a fair estimate of the natural sphere, for assuredly there was nothing in his personal experience that appeared to contradict it. Certainties dwindle to probabilities, knowledge can boast no greater claim than mere opinion, human relations find no solid ground for adequate adjustment. Still, for

Plato this could be but less than half the total picture In reality there must be more at the core of things than opinion, relativity, and everlasting change. The Eleatics supplied the other side of the case, with their insistence that there must be *something enduring* and final in the way of reality and truth Parmenides appeared to be correct in his conclusion that the essence of reality is changeless and that the intellect can transcend the vagaries of opinion. Whatever is the most lasting in the universe must be accorded a higher status of reality than all that is subject to alteration The Socratic search for defined ideas, for common properties, evidently was a correct beginning in the search for changeless principles But Socrates had only begun the task and had been misled into supposing that the enduring essence of the real actually inheres in the unstable realm of physical things and actions Not only must the seeker after truth go deeper than surface markings, but ultimately he must go entirely beyond them to discover a province wherein all things are real The Pythagoreans had already seen the necessity for a search behind the world of appearances for a reality more secure and enduring Their insistence that reality is number and measure made a lasting impression upon Plato, as it is indicated in such a dialogue as the *Sophist* Their moral-religious theory of metempsychosis reappears throughout the writings of Plato and afforded a working hypothesis congenial to his own moral and religious convictions. It also became a significant part of his theory of knowledge as expressed in the well-known doctrine of remembrance The *Timaeus* myth of creation is pregnant with Pythagorean concepts and employs as well the Empedoclean quartet of substances, earth, water, air, and fire, as the basic ingredients used by the demigod in fashioning the universe Cosmic teleology, hinted at by Anaxagoras' concept of Nous, emerges full-blown in the metaphysical parts of the *Republic*

From the standpoint of general inspiration, of all the predecessors of Plato Socrates must be placed first Many of his ideas were conveniently adopted, though some of them to the mind of Plato were in need of clarification, amplification, and correction. Outstanding among those in need of correction was the Socratic interpretation of the status of concepts Since Socrates was no metaphysician, this is not surprising For Plato they became metaphysical realities, while for Socrates they were merely objects of thought. The anti-individualism of Socrates finds amplification

in Plato's political philosophy, while Socratic ethics and epistemology both receive clarification and elaboration Socrates' faith in the existence of absolute moral principles and his tireless search for wisdom in these matters both carry on full force in the work of his successor That virtue and knowledge must inevitably be wedded and that wisdom is the highest achievement of mankind are theses familiar to the student of Plato The manner of presenting his ideas even follows the dialogue form of expression that Plato for some eight years heard from the lips of Socrates

That Socrates inspired Plato both as a great man and as a great teacher is incontrovertible So marked was this influence both generally and specifically that some notable authorities in the field of philosophy give Socrates most of the credit for what appears as content of the dialogues [1] The fact that Socrates was used as the mouthpiece for both his own ideas and those of Plato has led to a very considerable amount of debate in the effort to distinguish clearly the content of the dialogues that belongs to the originality of Socrates from that which is properly the work of Plato. For our purposes we can perhaps best be guided by Aristotle in the matter, leaving the debate on technical points to professional students of the documents It is scarcely probable that so brilliant a man as Plato should have spent almost his entire philosophic lifetime of nearly sixty years merely giving artistic expression to the ideas of another It is reasonable to conclude with Aristotle that Plato's thought, beginning with that of his teacher, developed with it for a time, eventually to outgrow it, not in the sense of complete disagreement, but rather as expanding and pushing beyond it with fresh insight

The amazing fertility of Plato's genius, the relatively random occurrence in the dialogues of the problems he discusses, the failure to offer complete solutions have led some to question the thesis that there is a Platonic system Modern study, especially respective of the chronology of the dialogues, does not bear out this contention. Metaphysically, his thought developed the Socratic notion of defined ideas into a central place in the interpretation of the real, his theory of knowledge, involving his refusal to accept the physical world as its object, is definitely an outgrowth of his reaction to the Socratic-Sophistic controversy, his ethics is a rather well-defined theory of self-realization The difficulty of

[1] For example, John Burnet and A E Taylor

obtaining general clarity regarding these issues is increased by the poetic type of expression Plato gave them plus his frequent use of myths, which offer manifold possibilities of interpretation

## 2 *Theory of Reality*

Two deep-seated convictions possessed Plato from the early years of his intellectual development They became fundamental principles governing his thought and served to delineate the broad boundaries of his metaphysics and epistemology One of them is basically Eleatic, though its roots extend back to the very beginnings of philosophy It is the thesis that whatever the real may be, it must be that which is eternal, everlasting, unchanging, and perfect The latter characteristic was given greater emphasis by Plato than by any of his predecessors and is traceable probably to the Socratic conclusion that virtue is knowledge of the good To Plato it was absurd to seek a theory of reality that would recognize instability or changeability as descriptive of the ultimate stuff of the universe Upon so shifting a ground no final knowledge could be adduced, no principles could be extracted to function as safe guides to conduct That such principles were available to those who sought them properly Plato had no more doubt than his teacher, Socrates Essentially, therefore, his theory of reality was required to be such that sound and useful epistemology and ethics could be grounded upon it Then only would it be possible to find the truths of all sorts which could be used with assurance that conduct based upon them would be both wise and proper

Plato's second conviction was that the sort of reality he believed genuine could nowhere be found in the physical world Natural objects one and all fail to display the aspect of permanence that should be theirs were they actually real The Heraclitan description of nature fits it well and subjects its reality to doubt Parmenides had accepted this thesis and even Heraclitus had urged the necessity for seeking behind the flux a cosmic order of change forever remaining the same Plato accepted both views with his own particular alterations The realm of physical events is an unreal world, a shadow, a fleeting image of a world of real entities beyond and "above" them It is to the latter that the lover of wisdom must address himself if he is to obtain genuine knowledge. In this search after true understanding, the physical

sciences, which have the natural world as their object of study, are not to be ignored They have an important place in the early stages of the process, wherein they serve as temporary guides that direct the searcher to more ultimate truths of reality.

In order more easily to follow the trend of Plato's reasoning with respect to theory of reality, it is necessary to return again for a moment to the philosophy of Socrates We discover that foremost of his interests was that of finding adequate definitions of moral concepts He methodically searched for the kind of definitions that would be general enough to encompass all instances and specific enough to afford particular applications. The common-sense practice of including a number of particulars within a single class or type supplied him with a working hypothesis Why is it we constantly make these rough classifications? The common-sense answer would probably be to the effect that they are convenient, since they make communication simpler and more practicable A still more important question would inquire upon what basis or according to what criterion these commonplace classifications are made Consideration suggests that particulars are grouped together because they are employed for similar purposes (tools), or because they produce similar effects (foods), or are made of the same materials (metals and tools), or assume similar forms (trees and men) In general whenever we discover resemblances of any sort among particulars we are prompted to think of them together This practice has led to the formulation of terms to designate such classes, these terms being the common nouns of the language An analysis such as this is still too loose to be satisfactory We may further inquire are the designations we employ merely terms or names which we invent in order to facilitate our activities, or are the classifications forced upon us by our discovery of properties or qualities that are in actuality the determining qualities of their essential natures? The first of these alternative interpretations goes by the name *nominalism*, the second by the name *realism* Both Socrates and Plato adopted the realistic interpretation, though with differences which it is now time to indicate.

In opposition to the moral relativism of the Sophists, Socrates proposed that absolute principles of conduct could be found by a careful examination of many particular instances of types of behavior. While granting that each instance is uniquely different

from all others of its kind, he insisted that besides these distinguishing characteristics there were other qualities which all members of each class exhibit in common The real or essential nature of each type of conduct is to be defined in terms of these common properties Hence, Socrates was interested during his lifetime to clarify the thinking of his fellow Athenians by enlisting their cooperation in the pursuit of clear and practically useful definitions This is as far as Socrates got, and it is the place where Plato began

Plato argued that the common properties cannot be found actually *in* the particulars Nothing so genuine inheres in the world of change, where nothing persists for very long nor for any time remains its identical self All particular things can be counted on to lose their individuality completely in decay and degeneration Many beautiful flowers or sunsets may come to be and pass away, but at no time throughout this process would it be legitimate to argue that beauty itself ever ceases to be. It is able to survive the death of any and all objects called beautiful It is the same for justice Just acts may cease to be done or acts done cease to continue, yet justice is not thereby destroyed To Plato this same analysis appeared applicable to the entire realm of experience Everywhere the essential ingredient of real acts or situations seemed to transcend the fortunes of their particular embodiments. Equality is more lasting than things that are equal, piety more durable than pious acts; triangularity more permanent than particular triangles Ordinary experience informs us of particular objects or acts, but these never are the end of our experience We pass quickly beyond the data of sensation to organize them under general laws, classes, types, or species These entities are never the objects of sensation, but instead are the products of abstraction, generalization—thought activity The permanent quality they seem to possess held for Plato a significance beyond the ordinary They were considered genuine objects of thought analogous to particulars which are objects of the senses To the thinking of Plato we ordinarily place the cart before the horse in the matter of knowing That which is ephemeral, unstable, unlasting we declare to be the real, while the permanent and genuine reality we relegate to the category of the unreal This situation must be reversed. The true reality is not grasped by the senses but discovered by the reason. The very fact that there is proneness on our part to regard particular things as realities was evidence to support the claim that

it is therefore all the more justifiable to interpret the objects of reason as more genuinely real.

If these universal qualities are not to be discovered in nature, then where, granting that they exist at all, are they to be sought as the objects of knowledge? The answer, paradoxical though it may sound, is simply that they exist in another realm not to be located in space nor to be limited by the dimensions of time. This realm is nowhere and nowhen, but it is the "place" where the Socratic concepts are. In this sphere there is one perfect type or true reality for every class of particulars discoverable in the world of space and time. It is this realm of eternal essences that Plato called reality and his name for them is Ideas. Entities such as beauty, justice, equality, man, tree, chair—anything that we designate by a common noun Plato called Ideas. To seize upon the meaning of Idea, be reminded again that it is essential to hold in mind that they are neither mental nor physical entities. They are not ideas in the usual meaning of that word, as indicating the content of one's mind. The Platonic Ideas are in no mind either of God or of man. They do not exist in the world of space and time after the manner of corporeal objects and are, therefore, not subject to location or temporal description. They are original and served as models for the demigod of creation when the universe was made as Plato outlined it in the *Timaeus*. They are what philosophy traditionally calls substances or that sort of entity which depends on no other thing but is itself the cause or essential nature of all things.

Plato's interpretation of the cosmos depicts it as sundered into two parts, one real and one unreal. In this scheme of things, what is the status of nature? Plato identified it with the sphere of unreality, thus giving to it a secondary place. Though the realm of Ideas transcends nature, there is, notwithstanding, a subtle and essential relationship between the two. Though none of the adjectives applicable to Ideas can be used to describe physical things, though there is no characteristic in common between them, this relationship actually exists. Were it not so, the world of nature would have absolutely no significance, no order, no purpose. It is only by discovering the connection that genuine understanding can be achieved. Whatever degree of reality nature has it possesses by virtue of whatever vague similarity it may have to Ideas. Particular things stand to Ideas as the imitation stands to the

model, the painting to the actual landscape, the portrait to the person The world of sense takes on a measure of reality in proportion to the degree the objects in it correspond, or as Plato expressed it, "partake" of the Ideas They are vague and partial copies of the real The relationship thus expressed between things and Ideas involves a twofold character The whole world of Ideas is completely beyond the world of things, and yet Ideas give to the world of "generation" an aspect of rational order according to whatever degree things resemble them Thus on the one hand there is the eternal, transcendental world of Ideas, which is reality, and on the other the world of phenomena, the world of sense experience, which obtains its meaning by a sort of imitation of Ideas The man who is a slave to sense experience is apt to mistake the phenomenal world for the real and obtain no more than opinion or faulty and uncertain understanding The wise man will not be deceived by the apparent realness of things but will strive for a nearer approach to the real by discovering genuine knowledge, which is of the Ideas rather than of the things participating in them Reason must rise by ever-increasing generalization to a grasp of Ideas themselves

Besides holding the conviction that the more durable and lasting an entity the more reality it has, Plato inclined to the thesis that the everyday ideas one has have a genuine connection or correspondence with things outside the body of the perceiver An idea, if true, must be found to agree with some object in the world, the perception of Socrates with the man Socrates, the notion of Mt Olympus with the actual mountain Some notions such as those given appear quite obviously to have correspondence with physical objects Yet it is to be remembered that such objects to Plato's way of thinking are far less durable and lasting and therefore less real than certain other entities which we call concepts or general notions, such as beauty or equality, the actual likenesses of which are not discoverable in the world of sense Therefore, if no idea in the mind can be regarded as true without its objective correspondence and we actually possess general ideas, then there is evidence that there is an objectively real world constituted by these general concepts Concepts are more ultimate than percepts for they correspond to entities far more real than particular things As we have already seen, this is the conclusion drawn by Plato about these essences It is between them and our subjective ideas

that there is a correspondence of a sort which must be established properly if truth is to be obtained.

The procedure whereby the reason passes from a study of things to a knowledge of Ideas Plato called *dialectic*. Otherwise expressed, dialectic is the science of "correlating" Ideas. The approach to an understanding of them is outlined in the dialogue, *Symposium*. Those who seek true knowledge of the beautiful

> Ascend through transitory objects which are beautiful, towards that which is beauty itself, proceeding as on steps from the love of one form to that of two, and from that of two, to that of all forms which are beautiful, and from beautiful forms to beautiful habits and institutions, and from institutions to beautiful doctrines, until, from the meditation of many doctrines, they arrive at that which is nothing else than the doctrine of the supreme beauty itself, in the knowledge and contemplation of which at length they repose [2]

The means for deriving knowledge of beauty here described may be taken to be the method of approach to a knowledge of any and all Ideas. It is this procedure that Plato made a discipline central to the education of his philosopher kings in the ideal state. He who is counted most wise must have in his possession the most universal of all truths. To obtain these truths years of intellectual discipline are demanded. Study must begin with the simple sciences of natural events and advance to ever more universal principles made possible by the mastery of that science of all sciences, *dialectic*. Though the world of sense is rejected on the ground of its unreality, it is at the same time an indispensable step in the task of obtaining ultimate truth. It is despised as the end of knowledge, though the many sciences which pertain to the world of nature are valuable, as stepping-stones to a higher realm of truth which is dependent upon reality itself.

Traditional knowledge, as exemplified by the several sciences, more or less automatically falls into interrelated categories. The sciences are not discrete and separate but are instead mutually dependent. This is of significance when the analysis turns to a consideration of the status of Ideas in the realm of reality. Though mathematics, medicine, and physics, as well as the other sciences, have distinguishable fields, there is no sharp line of cleavage between one and the others. The terms of mathematics apply to

[1] Warbeke, John M., *The Searching Mind of Greece*, p. 185.

[2] Plato's *Symposium*. Translation by P. B. Shelley. By permission of J. M. Dent & Sons Ltd., London.

the arrangement of stars or rocks or man-made objects Medicine has common ground with a larger field of animal physiology Remembering, then, that such sciences are really concerned with phenomena which only participate in Ideas, it would seem to follow that relatedness, or interdependencies, or rank orders among the phenomena of such sciences imply similar relationships among the Ideas after which they are modeled If even among phenomena there are to be found differences in universality and dignity, it is beyond question that still greater universality and degrees of dignity characterize the entire realm of Ideas

It is likely that the thought of a hierarchial arrangement was suggested by a consideration found presented in the dialogue, *Parmenides* Here discussion raised the question as to whether or not there are Ideas of lowly, despicable, or sordid things as well as Ideas of the exalted and beautiful In the discussion, Plato appeared to be loath to admit such Ideas into his realm, yet was hard pressed to find justification for excluding them The logic of this is clear If for every class of things there is an ideal, a perfect model of it, then any class of things whatever should have its representation, as it were, in reality In the end Plato was forced to acknowledge the right of Ideas of filth and dirt and things sordid to be members of the world of Ideas He was not yet willing to grant them a place in the scheme so exalted as the place of Ideas like beauty, justice, or goodness He therefore declared them to be deficient in varying degrees with respect to excellence, and placed them low down in the scale of Ideas It appears that though Plato's early thought entertained the notion that all Ideas are equally dignified and worthy, his mature opinion held that some among them must be more excellent than others This being the case, a fresh problem immediately presented itself Which of the Ideas, if they differ in excellence, is of all the Ideas the most excellent, and upon what ground is it to be decided that some are more worthy than others? In the final analysis it came to be Plato's opinion that of all the Ideas, one is superior to all the others. It is superior to them in somewhat the same fashion that the whole realm of Ideas is superior to all particular things in the physical world of phenomena This is the famous Idea of the Good. This Idea assumes the role of conferring value upon all the other Ideas beneath it in the scale, in the same manner that Ideas at large supply the world of sense perception with whatever degree

of reality it may possess Reality, then, is seen to depend not merely on durability, but even more on excellence, and the entire realm is arranged in a pyramid of excellence, the good at the apex and the Ideas of the sordid and the ugly at the base It is the business of dialectic, the science of sciences, to guide the philosopher through the subject matter of the natural sciences to the higher reaches approaching reality that he may glimpse the true order of the Ideas and obtain a measure of lasting wisdom

### 3 *Ethics of Self-realization*

In a certain sense the entire labor of Plato is basically an ethical one His metaphysics is an ethical teleology and all his teachings take their start from that metaphysics It will be of service to clarity, therefore, to dwell for a time specifically on the ethical view Briefly stated, his theory of ethics contends that man's highest good cannot be found in Cyrenaic pleasure, nor in worldly power or wealth, but rather in terms of a *rational existence* Reason alone may be taken as a satisfactory guide in the choice of conduct, for by its exercise a man realizes his true nature The business of living has as its end the complete development of selfhood, complete self-realization The self that is to be realized or developed is not however, just any self, but the kind only that is becoming a human being There are many selves not worth realizing, there is but one worthy of a good man It is the Idea of man that is to be realized in so far as it is humanly possible

In order to comprehend this object of moral striving, it is necessary to understand what Plato believed about the soul of man, for it is the soul that is of chief concern in the higher life The frequent moral struggles men have with themselves during temptation, or in making general applications of moral codes, led Plato to define three basic activities of the inner man None of the three can be reduced to the others In fact, the very obviousness of their opposition convinced him of their distinctness There is the tendency to satisfy the appetites of the body, to indulge in worldly pleasures and vices These impulses are frequently withstood by a higher power of reason which warns of dangers ahead and imposes the necessity for the exercise of temperance in satisfying them Intermediary between the appetites and the reason is a third capacity, that of vigorous or spirited activity, "enthusiasms," or will.

Man's highest good cannot be defined justifiably in terms of any one or two of these capacities Instead, the complete man, the realized self, is one wherein all three capacities are functioning, but functioning in proper measure or proportion Pure knowing, even of the Ideas, if it is in no way effective for efficient doing, cannot define a complete man Will, unguided, is as blind as the appetites The good man is he who possesses a soul, the parts of which are harmoniously related and cooperatively functioning; that is to say, when the appetitive part of the tripartite soul is under the guidance of reason supported by the energetic power of the will or the spirited element

This is the picture of the just man He achieves self-realization when these three faculties function in harmony Excess in any one of them upsets the balance, as when the appetites pursue pleasure A real man does not act as if he were in quest of pleasure. If he does he will obtain but little, for pleasure is the accompaniment of the good life, not its end As Plato beautifully states it in the *Phaedrus* myth, the charioteer, reason, must be able to steer his unruly steeds, appetite and spiritedness, in the proper direction for the attainment of truth, beauty, and goodness The art of good living, then, is a matter of bringing about the satisfactory dominance of reason over the baser faculties Metaphorically speaking man may be conceived to possess the nature of a pig, a lion, and an owl, but in Plato's thought it is regarded as *most* natural and becoming for the appetite of the pig and the courage of the lion to be directed and censored by the wisdom of the owl.

Though Plato held the soul to be comprised of three parts or faculties, but one of these was advanced as a candidate for immortality Though a good man is one whose tripartite soul is harmoniously functioning and for all practical purposes the parts are bound together, when it is time to consider the possibility of future life the parts of the soul are considered as capable of separation and the ideal man comes to coincide with the rational element alone With the kingdom of living things man possesses a common vegetative or appetitive soul, with animals, a spirited soul, in addition, he is marked off distinctly from both by possessing a rational soul The three souls are as one, each being a part or function of the whole It is the rational that is capable of rising to a grasp of the realm of truth through dialectic, it is this part, too, that enables a man to rise above plant and animal nature by

opposing the ways of the other two parts. By its affinity with the world of Ideas it must partake of their eternality and escape the body at its destruction to assume its immortal state

There are several arguments advanced to support the belief in the soul's immortality, the most important ones being presented in the dialogue *Phaedo* Only the most famous one of them can be discussed here It may be remarked, however, that Plato admitted that this particular argument proved to his satisfaction only that the soul preexisted and not that it would necessarily continue after death It is the *doctrine of remembrance*, the thesis that, prior to the occurrence of a soul's confinement in a body, it existed in a condition of free access to the world of Ideas, a faded memory of which the soul brings with it into the body.

Knowledge is a matter of remembering the truths obtained during this time through being reminded of them by certain resemblances of them in the world of things That is, the phenomenal world which participates in Ideas, and, therefore, dimly copies them in corporeal form, acts as a reminder for us of knowledge once possessed but subsequently lost at the birth of the body when the soul entered it This theory that all knowledge is remembrance was one apparently quite familiar to all of Plato's associates It was used to support the thesis that the real is Idea, to assist in proving the immortality of the soul, to supply a basic principle in his theory of knowledge The best exposition of the doctrine is given in the *Meno*, wherein Plato attempts to show that even an ignorant slave can be shown to possess within him a grasp of true principles of knowledge

Out of Plato's analysis of the soul emerged his division of virtues into four basic types *temperance*, *courage*, *wisdom*, and *justice* A well-ordered soul and a well-ordered state, as well, exhibit all these, the *cardinal virtues*. Three of them result in practice when the true function of each of the parts of the soul becomes actual When the vegetative part refrains from blind indulgence and excess at the instigation of reason, temperance in action results. If the spirited part resists the impulse of the sensual appetite and heeds the guiding voice of reason, courage in pursuing good and avoiding evil follows Wisdom grows as exercise of the rational faculty is continuously pursued. Justice grows out of the proper functioning of no single part of the soul, but instead from the harmonious functioning of all three parts with reason the

directing force The just man is truly wise, courageous, and temperate, and this is the ethical ideal

The just state, too, is one wherein its parts function in harmony and the remaining three virtues characterize the three distinguishable classes of citizens It was Plato's contention that predominating types of citizens determine the kind of state that governs them That is, good people produce a good state, bad people, a bad state A state will be just and good when all classes of citizens cooperate fully under the guidance of the wise for the purpose of establishing *order* in the promotion of the common welfare.

## 4 *Theory of State*

The ethical ideal of self-realization is possible only in a social order that has as its objective a state organization making possible the complete development of good citizens To this problem Plato gave much thought, the result taking the form of a description of an ideal or perfect state Following his analysis of the soul of man into its three faculties or functions, he discovered three kinds of people populating his ideal state This conclusion followed his conviction that a well-ordered state should find its citizens doing those things for which each is best fitted, in so far as this is possible. So, accordingly, the three classes, rulers, soldiers, and artisans, emerge, as the division is made on the basis of what things they were best able to do Like a well-ordered life, the state, too, must realize its true nature in the proper functioning of its three parts The virtue of the rulers is wisdom, by which they guide the state, the virtue of the soldiery is courage, by which the state is protected, the virtue of the artisans is temperance whereby they are able to curb their passions or appetites and devote their energies to feeding and clothing the great state Any friction between the classes upsets the harmony and results in hardship and suffering. A good state, then, one that realizes its ideal nature, is one that has all its parts functioning just as they should without interference

The problem of getting such a state started in the first place was a problem that failed to detain Plato long His concept is of an ideal state, and, even if no actual state ever practiced his principles, the concept of the ideal is in no way vitiated, nor is it less valuable to consider Two ways, however, were suggested, one of which Plato apparently thought workable Either take over a city and drive out all but children under ten years, and immediately

begin their education preparatory to their occupational assignments, or find a prince who is young and powerful who can be taught the principles of ideal statehood, following which teaching the principles would be legally enacted and enforced by the power of the prince Plato's trips to Syracuse appear to bear out his belief in the feasability of the latter course

The desirability of political reform was all too obvious even to a casual observer of the times Civil wars had upset the older political order, and there seemed to be little prospect for a return to any immediate and lasting peace Thus we may add an external disordered political situation to Plato's natural interest in the inner completion of his system of thought as a motivating cause behind his political philosophy *The Republic*, perhaps his outstanding masterpiece, is devoted mainly to this subject

The devices suggested for the reform of the state are (*a*) the equalization of the sexes, (*b*) community of family and goods, (*c*) authority based on wisdom, (*d*) a thoroughly organized educational program, (*e*) a practical application of eugenics The chief purpose of the resulting state is that it should enable its citizens to become complete men, to become good citizens and, therefore, happy ones.

*a* Among the most startling proposals for the organization of the ideal state was the plan to draw no distinctions among male and female members, except those based on differences in capacities and abilities Even in twentieth-century America such a proposal would find much opposition, in Greece of the fourth century before Christ the idea was revolutionary Differences between the sexes were clearly recognized, but it was contended by Plato that such differences were overestimated All men do not differ more from all women in many ways, such as in the matter of agility or of strength, than do men among themselves Therefore, let those of the women who can best the men at soldiering or craftsmanship or at ruling the state do so, for it is a benefit to all that the most capable shall handle the many tasks of government Therefore, let there be women soldiers as well as men, women philosopher-kings as well as men, depending entirely upon their capacities Suitable tests or measures of various skills shall be devised which will be applied without sex discrimination To support this proposal attention is called to the selections made by the animal breeder It is not just the males among hunting dogs

that receive training for the chase, and in many instances the females are fleeter and more clever than the males The same is true of horses, whether they are used for draft purposes or for chariot racing When the human sexes are considered, there is discovered a host of prejudices respective of the inferiority of the female of the species Perhaps women are by nature better fitted than men for cookery and general housework, but the arguments for female inferiority in other pursuits had better be examined carefully before any final conclusions are drawn In a society wherein each is to give his best for the general welfare of all, prejudice must not be allowed to obscure the true situation Each citizen, male and female, must be afforded the opportunity, first, to demonstrate his ability, and, second, to exercise it in the interest of the state This is the ground upon which Plato took his *stand against unenlightened sex discrimination*

Though by this provision the way was left wide open for women to rise to the topmost pinnacles of wisdom and to rule the state by virtue of their exceptional capacities, Plato was of the opinion that women were fundamentally inferior to the male and, therefore, unlikely to supplant him in the ruling capacity He felt reasonably sure in his own mind that his state would not be given over to Amazonian rule Despite this pet prejudice Plato did not permit his bias to deny women the right to rise as high in the ideal state as their abilities might take them

*b* Scarcely less startling than the equalization of the sexes, was the proposal that the guardians, that is, the rulers and soldiers, of the new state should possess wives and children and property in common The institutions of private property and the independent family were alike rejected, except in the case of the class of artisans For the latter he held it necessary to offer limited wealth and family as bribes or incentives for them to do their part in the scheme of the whole state Their mental ability was conceived to be so deficient as to prevent their grasping the underlying theory of state in such manner that they would voluntarily pursue their tasks. For the other two classes, on the contrary, those discovered by examinations to be superior, no need was felt for offering bribes since they can understand that it is to their best advantage to eschew both material wealth and family fireside In this concern as in other, the individual must be made to function for the good of the group

All things were prohibited which might function to the advantage of individuals at the expense of the state Two outstanding practices appeared to Plato to do that very thing: the accumulation of wealth and the maintenance of the private family. To gain wealth a man will use his fellow citizens as means to that end and will come to regard his personal advancement as the paramount objective of living Selfishness, avarice, egotism, chicanery, all will prevail at the expense of public good This basic self-interest comes to involve his family Its members assume an importance beyond other persons of the community, and the family head will strive to secure their well-being at any expense It is not that Plato believed such practices unnatural or wholly bad, but rather that he wished to enlist such dominant interests and energies in the business of making all the people of the state happy and contented citizens One of his greatest objectives was to use impulses and interests traditionally exercised for the benefit of single individuals or small groups in such ways that the whole social group might receive the benefits of them

By providing for the guardians to hold all women and children as common wives and sons and daughters, he hoped to make the state a great family with the family emotions such as parental love and filial affection transferred from small family units to the large membership of the communal group Under these conditions no woman or man would know exactly which child was his Therefore, rather than take chances of failing to love their own offspring, they would love them all alike In the same manner, sons and daughters, not knowing what members were their parents, would call all the older group immediately preceding them their fathers and mothers In this way, a strong and lasting society would grow, each member desiring the happiness and well-being of every other member

Likewise, all property must belong to the society. No man may command goods another cannot have It will be clear to all that private property is a source of struggle, commercial rivalry, animosities, and internal wars All these make for disharmony and must be strictly prevented by eliminating their cause All goods and properties are to be used to promote the common welfare The guardians shall, furthermore, live in common quarters and eat at common tables. State dormitories, state mess halls, state nurseries —state institutions of all sorts will meet every need and look after the welfare of all

*c.* How shall the ideal state be directed? Who shall determine its policies, its internal regulations? The answer is found in Plato's dictum the wise shall rule Not wealth, nor beauty, nor influence, nor the voice of the mobs will determine those who shall lead Only wisdom, knowledge of what is best, is a just measure of the right to lay out the course of state These shall be designated philosopher-kings They are not philosophers as we know the species today but those who have proved themselves best in the study of dialectic, those who have come nearest to a knowledge of Ideas For it is possible to guide correctly only after the objective has been determined, and this cannot come about otherwise than by glimpsing the ideally real state through rigorous pursuit of the science of dialectic The number will necessarily be small and will represent the best talents of the whole state

*d.* In order to ascertain who shall be the rulers of the state, Plato proceeded to a lengthy analysis of state education. The children of all parents must alike be allowed to exhibit the full extent of their capacities As early as possible and before the suckling stage is over the children shall be started on their way to that end As they grow older, competitive examinations on increasingly more difficult subject matter will serve to weed out the inferior In the meantime, the most carefully supervised training is given them.

Most important of all items therein included is moral education Above all, the future citizen must be guarded against influences apt to undermine his character Among the things forbidden to be taught or discussed are the stories of the Olympian gods which reveal them in immoral deeds unbecoming of deities Only those stories should be told that possess a fine sense of propriety and moral purity Music and art in general may also act as powerful molders of character Only the painting or sculpture or poetry which leads one to appreciate beauty and seek it for itself shall be permitted At best, art is but a copy of a copy and is thus thrice removed from reality and for the most part is beneath the dignity of pursuit by serious men All the unseemly and ugly shall be excluded Passionate and exciting types of music come under the ban of the censor These appeal to the baser parts of one's soul and when cultivated make it more difficult for the reason to assume command The calm and unexciting airs will be the only ones heard by the tender ears of future ideal citizens.

By the age of seventeen, those who are to become future guardians will have been separated from the rest and are further instructed More and additionally difficult training in the knowledge of the time and in military tactics occupy this group for a period of years extending to their late twenties At this time, competitive examinations enable a final division of the guardians into the soldier group and a smaller, superior group destined for the most rigorous training and the eventual holding of various state administrative positions The soldier group continues its training and assumes the duties of protecting the state from external aggression and internal discord Courage is their chief virtue, enforcing the orders or laws of the rulers is their chief function Those who were less capable than these two classes have been in the meantime introduced into the trades and work of the artisan class

The education of the future kings or rulers includes intensive study of the sciences, which eventually brings them to a study of the science of sciences, dialectic Eventually the wisest and best assume the role of rulers at the age of fifty. Others take over the duties of lesser state offices All members of this group, after their studies, must engage in the practical business of conducting the state's affairs After fifteen years of active service, the rulers give way to other younger men or women who have been going through the same process of selection as they did The retired members may act in advisory capacities and are maintained on state pensions and rewarded with state honors

Finally, a last means of reforming the state took the form of a skillfully directed eugenics program to insure the good quality of succeeding generations of citizens The procedure was twofold Marriages of inferior adults were to be so controlled as to permit a segregation and disposal of their offspring Marriages of superior adults were to be encouraged in order that superior children should grow to populate the state The practice of infant exposure advocated by Plato, though jarring to modern sensibilities, must be remembered as a common practice in his time and seemed justifiable according to standards then accepted Regardless of the method, the object is the significant point Little though Plato knew of principles of heredity, he was sure that superior stock, whether it be domestic animals or man, cannot be produced from inferior stocks Children obviously maimed or deformed mentally or physically must be quietly "put away."

The eugenics program sought to treat causes rather than effects The rulers shall arrange for the men who distinguish themselves for bravery in battle or in valuable state enterprises to be frequently mated with women who also have distinct charm and superior abilities In this way more children will be born to citizens of acknowledged superiorities, while those of lesser ability are to be permitted to have a limited number only On the other hand, people of known inferiority will be tricked by a clever prearrangement of lots into mating with others inferior like themselves The children of these unions may be disposed of in the usual manner In the instances of all unions, a state ceremony shall be arranged so that future marriages may not violate the laws of consanguinity All children born of those united at a given ceremony shall be common children The children shall call all adults participating in the ceremonies at that time their fathers and mothers Thus the relations of consanguinity are not lost, and marriage within its first lines may be forbidden

## DISCUSSION TOPICS

1 What elements of previous philosophizing are you able to find in the work of Plato?

2 Explain the fundamental differences between the Platonic world of Ideas and the physical realm of nature

3 What is the meaning of *dialectic* as used by Plato? Of what significance was it in his theory of state?

4 Do you consider Plato's drastic censorship of art justifiable? What do you consider the proper function or role of art in life?

5 What is the meaning of the thesis that art is thrice removed from reality? On what grounds, according to his philosophy, could Plato support this position?

6 How would you criticize the feature of the ideal state providing for community of wives and children?

7 Are the objectives of Plato's eugenics program similar to those suggested by the sponsors of such plans today What practical difficulties confront such a program?

8 What basic objective did Plato have in mind when outlining the administration of the ideal state? Are there any modern states that approximate that objective?

9 In what way is Plato's system (*a*) dualistic? (*b*) teleological? (*c*) nonmaterialistic? (*d*) ethical? (*e*) rationalistic?

10 Discuss and evaluate Plato's attitude toward the institutions of (*a*) the family, (*b*) private property

11 What is the meaning of *self-realization* as an ethical theory?

12 What is the Platonic *doctrine of remembrance*? How could you criticize it?

13 As clearly as you can, state the meaning of the term *Idea* employed by Plato as compared with the ordinary meaning of *idea*

14 In what respect did the Socratic search for defined ideas influence the metaphysical system of Plato?

15 What are the *cardinal virtues?* Explain their significance for the Platonic ethics

## PARALLEL READINGS

CUSHMAN, H F *A Beginner's History of Philosophy*, Vol I, Chap VII
FULLER, B A G *History of Greek Philosophy*, Vol II, pp 142–469
PLATO *Works of Plato*, Modern Library ed
ROBIN, L *Greek Science and the Rise of Scientific Spirit*, Book III, Chap IV
WARBECK, JOHN M *The Searching Mind of Greece*, Chaps XII–XVIII
WEBER, A, and R B. PERRY *History of Philosophy*, Sec 16

Although many kinds of political organizations are possible, only those are justifiable which have as their chief objective the well-being of their citizens. Aristotle, therefore, was not particularly interested in outlining an ideal state as we found Plato doing, but was content to say that though an aristocracy or monarchy is probably the best form of government, a republic or a democracy may be good, provided the political ideal is always uppermost. Whenever a political organization fails to pursue this objective it at once degenerates into an evil form of government The monarchy develops into tyranny or the promotion of the welfare of the single individual An aristocracy, losing sight of the objective, degenerates into an oligarchy, a government for the welfare of the few, usually the rich A democracy, losing sight of the goal, degenerates into anarchy, which finds each citizen pursuing his own selfish ends without regard to any other member

A well-balanced state must necessarily be rather small to avoid the danger of becoming unwieldy The Greek city-state was upheld by Aristotle as well as by Plato as an example of the most suitable size for a state Aristotle also agreed with his predecessor that the distribution of authority should be according to skill or qualification, that it should be the design of the state administration to give rewards on the basis of civil service

On other points he had occasion rather thoroughly to disagree with Plato In the first place, he opposed Plato's revolutionism. Plato had advocated, as a means of establishing the ideal state, the driving out of all persons over ten years of age or finding a group of people who would listen to pretty stories about gold, silver, and bronze men and be convinced thereby of the value of introducing the ideal state as their form of political organization Still another expedient suggested the discovery of a gullible and powerful young prince who would be willing to institute the improved state by the passage of sweeping reforms Opposed to this, Aristotle advocated a gradual modification of an existing government with the idea of improving it, so that in time the welfare of the group might be enhanced by the change. Therefore, it may be said that against the revolutionism of Plato, Aristotle suggested an evolution toward a more ideal form of government

In the second place, Plato's communism was attacked chiefly on the ground that it would interrupt the processes of nature. The family, which Plato regarded as the last bulwark of individual-

ism and an evil to be abolished, was held by Aristotle to be the very foundation of the state and, therefore, at all costs to be maintained. He was also interested in combating the phase of Platonic communism which advocated the abolition of private property He argued that wealth or goods are significant as factors enabling a man to live a completely moral life through the complete development of capacities Without goods the magnanimous man cannot be realized

The Aristotelian state would exclude from citizenship all men engaged in the trades or in economic pursuits generally He contended that such men are unable to live a completely intelligent life, that they are, in other words, incomplete men He goes on to say that money-makers cannot possibly be well-rounded men, and only well-rounded or complete men justifiably might be granted citizenship rights He regarded Plato's ideal state as composed mainly of bad men The remedy offered was to make virtual slaves of all imperfect or incomplete men, giving them no rights as citizens and making them produce for the state It would be better, however, if these slaves were foreign, preferably barbarian. No Greek should be a slave

Slavery in Aristotle's meaning is to be thought of as involving a mutual understanding between the slave and his owner, an understanding which aims at the best interests of both slave and master It is a necessary outgrowth following from differences among men, some being by nature destined to rule or be masters, others by nature destined to be slaves and obey Perhaps the best comparison that can be drawn between this concept of slavery and any actual situation involving slavery is that of certain aspects of slavery in the southern states of our own country There were here to be found a few examples wherein it was probably to the best interests of the slaves to be controlled by the masters, an arrangement whereby both owner and slave obtained mutual benefit It is another question, however, whether or not such a situation gives any justification to the institution of slavery

One might notice also, in connection with Aristotle's state organization, the very low status of business activity and those who engage in it, as compared with business today with its social and political advantages for those who prosper in it

Another item of criticism offered against Plato is that any sharp division of citizens into classes would result in dissension within the

state Soldiers as a class in a state are very likely to become dissatisfied and intervene in the conduct of the government Aristotle advocated instead that there should be a rotation of function or duty among the citizens Any organization which placed equal responsibility upon all citizens would result in a situation that would tend to lessen the feeling of responsibility. It seemed to him that what was the business of all would degenerate into the business of none Furthermore, without rotation of function any strict division of responsibility would decrease interest in state affairs

In summary it may be said that the good state has as its object an organization designed to enable men to realize the *summum bonum,* that is, the realization of those capacities, strictly human, which make for freedom of spirit and which result in making men happy and contented Any deviation from this principle must result in a bad state Plato's ideal state tended to subordinate the individual to the whole in too pronounced a degree The state is for the citizen, not the citizen for the state Aristotle was an individualist, whereas Plato was quite definitely a collectivist in political and economic theory

### 7. *Aesthetics*

In Aristotle we find the first attempt in a systematic way to give an account of the nature of art, a first attempt to outline a philosophy of the beautiful Aristotle was mostly interested as far as aesthetics is concerned with dramatic art and poetry and attempted to give a definite answer to the meaning of these and their value He was of the opinion that all art is an imitation of things in life or of life situations and that its value is to be found chiefly in its ability to purify the vigorous emotions. By means of the dramatic portrayal of the stronger emotions, especially anger and fear, the listeners can be made to improve themselves through experiencing emotions under controlled conditions without risk of consequences They can in this way exercise pent-up emotions, avoiding the necessity of giving expression to them in real-life situations In this manner dramatic art acts as a sort of emotional safety valve

It was said that art is imitation There seems to be some doubt as to the exact meaning of the term *imitation* as Aristotle used it It has seemed apparent to many interpreters that art was not regarded as mere photography, but rather as a more idealistic presentation of things and events It reports nature more phil-

osophically and seeks to incorporate the essence of things within it. It does not tell merely what happens devoid of any trappings, but stresses those points and those features which appear to be the universal characteristics of all such similar situations An opposed view would contend that art expresses qualities not necessarily universal but rather those mostly missing in the lives of ordinary men.

It is also a fit problem for debate whether or not the purifying of the emotions or feelings is a just analysis of the meaning of art and poetry An alternative view would claim that art is intended to achieve a unification of feeling rather than a purification of it It would seem that poetry is written in order to present a well-ordered, well-clarified expression of emotion rather than for the purpose of exciting the emotions.

An interesting point to note in connection with the opinion offered by Aristotle on art is the difference in his attitude respecting its function as compared with that of Plato Though Aristotle believed that art afforded a very practical benefit he did not attempt to enslave it as Plato did for the sake of moral education One does not find Platonic strictness and close censorship in Aristotle, but rather an attempt to understand the meaning and essence of art, especially as portrayed in the dramatic roles From the time of Aristotle's *Poetics* onward, the philosophy of beauty played a more important part in the history of speculation

## DISCUSSION TOPICS

1 In what respects did Aristotle differ from Plato on the following subjects (*a*) the problem of matter, (*b*) the relation of Idea to matter, (*c*) the nature of God, (*d*) the function of art?

2 Outline the differences found with respect to the theories of state advanced by Plato and Aristotle

3 In what ways are the ethical positions of Plato and Aristotle alike? In what respects are they different?

4 Can you find in Aristotle's training anything which might account for his rejection of Plato's transcendental metaphysics?

5 Explain fully the significance of Aristotle's concept *entelechy*.

6 Outline Aristotle's reasoning leading to his concept of the ethical ideal

7 What is the doctrine of the *Golden Mean*? How is it to be used as a guide to conduct? How would you criticize it?

8 What is the meaning of the following kinds of reasoning (*a*) deductive, (*b*) inductive, (*c*) syllogistic, (*d*) immediate inference? Illustrate each

9 It has been said that Aristotle "has been one of the great misfortunes of the human race" How do you account for such a statement?

10 Distinguish and illustrate the Aristotelian *causes* How is the analysis of them different when referred to natural objects as compared with their application to manufactured things?

11. Give an account of Aristotle's theory of art

## PARALLEL READINGS

CUSHMAN, H E *A Beginner's History of Philosophy*, Vol I, Chap VIII
FULLER, B A G *History of Greek Philosophy*, Vol III
MARVIN, WALTER T *A History of European Philosophy*, Chap XIV
ROBIN, LEON *Greek Thought*, Book III, Chap V
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Sec II, pp 104–125
THILLY, FRANK *A History of Philosophy*, pp 75–94
WARBEKE, JOHN M *The Searching Mind of Greece*, Chaps XIX–XXVI
WEBER, A , and R B PERRY *History of Philosophy*, Sec 17

# Chapter VIII

# PHILOSOPHERS FOLLOWING ARISTOTLE

## 1 *General Characteristics of the Period*

The height of Greek philosophic achievement came to its close with the death of Aristotle in 322 B C In the period which followed, very little that can be called original, as compared with the speculations in the preceding period, may be said to have emerged The Academy and the Lyceum continued under the direction of the successors of Plato and Aristotle but were mainly concerned with amplifying or commenting on the work of the masters

This period is usually called the Hellenic-Roman It is ordinarily dated from 322 B C , the death of Aristotle, to about A D 430, the death of the great church father, Augustine It is a period much longer than the productive time of Greek speculation and is customarily divided into two parts The first 300 years, approximately, is called the ethical period, and the last 430, the religious period The present chapter will deal only with the first of the two divisions of the period

Greek culture and teaching during this time continued and assumed what one might call a semi-Roman setting Following the death of Alexander, his great empire fell into partitions, the head of each one politically antagonistic to the others The Macedonian empire was taken over and made a separate nation The Egyptian block of territory was ruled by Ptolemy, and the eastern division also came under separate rule Upon the Greek Peninsula political unrest was everywhere evident and civil war became the order of the day Outwardly, conditions were much more vexed than those during the several hundred years occupied by earlier Greek speculation The Roman conquest was complete in the year 146 B C and put an end once and for all to nationalistic aspirations of the Greeks.

There were certain significant results that came of the downfall of Greek nationalism and the rise of Roman power Among other

things, the city-states could no longer exist. Political careers, therefore, were no longer possible vocations The independence of the Greeks was superseded by foreign rule and self-expression was definitely limited During this period, the religious tradition was left to founder, owing partly to the lack of any official and governmental support and partly to the rise of a skeptical attitude resulting in disbeliefs of the religious myths and the efficacy of barbaric ritual Both political and religious authority weakened as the period progressed.

Other significant results followed in the wake of political reorganization One of them was that individuals were forced to rely more and more upon themselves for the goods and values of life Self-sufficiency increasingly became the primary objective This reflected on philosophy and science in such a way as to make them become more practical and useful There was a demand upon philosophy to supply that which the political and religious tradition was no longer able to give As for science, it was forced to abandon theory and make more specific application of its content Metaphysical speculation ceased to be worthy as an end in itself, it, too, being called upon to supply a practical foundation for a satisfactory philosophy of life Certain specialized departments of science arose, such as mathematics, geography, astronomy, and medicine, including anatomy. In this period science tended toward fact gathering, rather than originality, the facts to be used as support for principles already enunciated by the masters Originality stifled in the embrace of tradition

The practical aspect of philosophy took root in the form of an attempt to supply an ideal of conduct suitable to guide men through the intricacies of life situations It was a question of how to help the individual, dependent upon his own resources, to determine the most suitable kind of existence Its objective was to offer a satisfactory answer to the problem of what the wise man should do in order to achieve happiness or a satisfactory life To meet the growing demand for practical advice and guidance, new centers of learning began to arise in scattered parts of the Roman world The most important of these was Alexandria in Egypt Others were Pergamus, Rome, Antioch, Rhodes, and Byzantium

While at the beginning of the period traditional religions lost much of their former prestige owing to the disordered times, as the decades passed religious interest reasserted itself with even greater

vigor. While the intellectuals who associated themselves with the various philosophical schools were able to derive a measure of satisfaction from philosophy, there was a vast majority who found no such compensation for their losses at the hands of the Romans The more disturbed the era became the more futile they felt while undertaking to order their lives under circumstances wholly out of their control Faced with the problem of discovering some means to satisfy their craving for security and reasonable contentment and finding themselves inadequate to this accomplishment, thousands turned for aid to sources believed to be more powerful than themselves It was inevitable that there should develop much following after those religious cults, never completely dead during the period, which offered the most by way of promises of goods to be received in spite of present hardships The numerous cults of religion, therefore, grew in popularity as increasing numbers flocked to them. As far as philosophy was concerned, opinion arose that it was unable to supply the demand for a satisfactory solution of life's difficulties Opinions conflicted among those who offered solutions and life within the schools tended to be rather dull, perhaps a bit too rational, a bit deficient in emotional coloring Religious feeling and longing, having found no adequate means of expression earlier, gradually asserted themselves more and more, until, with the dawn of the Christian era, they became the dominant forces in the Hellenic-Roman world

The ethical period contained several dominant strains of thought The Academy and Lyceum found other and new schools competing with them in the intellectual market. Among these the Stoic and Epicurean were chiefly important Two more or less basic problems perplexed the thinkers of this period and gave rise to much of the active speculation of its philosophers. One problem was ethical and may be phrased as a question *What shall the wise man do to be happy?* The other problem was metaphysical in that it sought for a satisfactory analysis of *matter*. We shall discuss in turn the views of Epicureanism, Stoicism, Skepticism, and Eclecticism with reference to these problems.

## 2 *Epicureanism*

The propounder of this ethical view lived in the fourth and third centuries before Christ (340–270 B.C.). His school was located

in a spacious garden within the walls of Athens Here was gathered a heterogeneous assortment of followers, among them women and slaves, this indicating the liberality of the sect Epicurus himself must have been a man of considerable charm for he was held in high esteem and reverence by those who visited the gardens He prided himself on his self-education and believed that the best way to be a leader is to live a life sufficiently worthy to command respect from others His teaching was chiefly by example, and as long as he lived very little of reproach may justifiably be leveled against the Epicureans He wrote voluminously, over three hundred treatises being credited to his effort Few of them remain, however, owing to later hostility toward his teaching on the part of both polytheism and Christianity. The best available account of Epicureanism is that of the later Roman poet Lucretius in his famous poem· *De rerum natura* A few excerpts from the writings of the Epicurean leader are reported to have been discovered in the excavations of Herculaneum

The fundamental concept of Epicureanism is that happiness or pleasure is the highest good, while pain and unhappiness are the greatest evils For the most part it is a refined statement of earlier Cyrenaic teaching grounded upon the metaphysics of atomism But, rather than seek sensual pleasure, as the Epicurean predecessors advocated, Epicurus taught that the surest way to happiness is to be found in tranquillity or quietude, in a life that makes few demands and therefore affords greater possibility of satisfying them The disturbing influence of sensual pleasures must be restricted and subordinated to the joys of a calm mind.

Epicurus believed that he observed among all things a tendency for each to seek its own happiness as the chief end The only objective of human existence is that of living pleasantly, seeking tranquillity, and avoiding the excitement induced by sensual experience This appeared to him as an empirical fact capable of verification upon every hand It is a fact of such far-reaching significance that it can be used to account for most of man's basic activities as well as to define his highest good. The search for happiness is the cause, the standard, and the ideal of activity. Though the root of all pleasure is probably basically to be found in the flesh, at the same time, it is essential to curb or control physical pleasures in order that they may be more adequately enjoyed.

Duration, rather than intensity of pleasure, was the keynote of Epicurean ethics, and in this is found its chief improvement over the older Cyrenaic view If one is to achieve pleasure, it becomes a practical necessity to eliminate, in so far as possible, all those conditions which act in opposition to pleasures These opposing forces Epicurus declared to be in large measure the product of unsatisfied desires or aspirations, or due to the placing of too much reliance and value on worldly goods and pursuits Desires and wants are painful and are therefore evil Pleasure can result only after desires and wants have been eliminated Reason is useful only in determining which goods and pursuits are those which afford man the most lasting and enduring pleasures

All virtues must be interpreted as means to the end of pleasure seeking rather than as ends in themselves Virtue for virtue's sake is a meaningless doctrine. By avoiding excesses, cultivating foresight, seeking lasting pleasures, being virtuous, a man approximates the hedonistic ideal The virtue of wisdom, therefore, is laudable as insight into the selection of pleasures, self-control assists in a more thorough and lasting enjoyment of pleasures Friendship, perhaps the outstanding virtue, is also good only in so far as it promotes individual happiness. In fact, the entire determination of wise conduct is in terms of individual preference or self-seeking, all other things or activities being means to that end

The philosophy of Epicurus accepted the metaphysical theory of Democritus as affording a foundation for the sort of beliefs the founder held were true with respect to man and his world All that exists in the universe, ultimately, is summed up in the words atoms and empty space Of atoms all things are composed whether they be body, soul, or mind Atoms are original, eternal, indestructible, and uncreated Originally the atoms were in a state of downward motion induced by their solidity and weight. Owing to circumstances unknown, by chance probably, the downward fall of some underwent deviations from their courses Were this not so the world of things as we know it could never have come to be That there might have been conscious purpose involved, as in the event of a god's interference, was vigorously denied with many arguments presented to support the denial. The universe is purely a mechanical arrangement and in some instances the law of chance still operates There never was a creation, and there

never will be a destruction of the real Each atom and each conglomerate group of atoms in the universe is completely independent of every other Human beings as instances of groups of atoms are each without any dependence upon others of their kind The whole has no determinative exercise of force or influence of any kind upon the part The concept of universal law as accepted by Democritus is entirely omitted from the metaphysics of Epicurus. That all natural processes are the product of inner necessity inherent in the atoms after their original deviation from the downward rain of them he affirmed, but that things *have* to be as they are without exception as in the case of the operation of unconditional law he denied In addition to the foregoing anti-teleological doctrines of materialism and mechanism, Epicurus also adhered to the Democritan general theory of sense perception as the basis for divining whatever truths are possible of attainment

Epicurean metaphysics is fundamentally negative in its interest That any metaphysical foundation was given the view at all is explained by the desire of Epicurus to offer grounds which would serve the purpose of discrediting certain common beliefs about the world and man which supplied the chief obstacles to the pursuance of a life of pleasure In large measure his metaphysical exposition was aimed against common religious beliefs of the period Belief in the gods, creation, immortality, the efficacy of prayer and sacrifice, all engendered deep-seated fears and groundless apprehensions Only by accepting such a description of the universe as that given is it possible to do this Examine the many false religious beliefs in the light of materialism and mechanism and one by one they fall away

Suppose it is believed that the universe is not eternal, but was instead at some time created by a god or gods That there are gods of course is beyond reasonable doubt since everyone recognizes their existence But consider the implications of this belief The gods are perfect, supremely happy, and absolutely without need Now, *if they created the world, why did they do it?* It was certainly not for the reason that they felt a need for it to complete their happiness, since they are without need and perfect Furthermore, suppose that they did create the universe and provide for its regulation Being the creatures they are, the universe must perforce be perfect like them Who is there who would be willing to affirm, to say nothing of attempting a proof, that the world is

perfect? Pain, suffering, catastrophe, ugliness, disease are everywhere more or less prevalent. A perfect world would not contain them. And why should the gods bother to create for themselves a task such as overseeing the affairs of the world? Why should they make it their concern to guard over, to punish or reward each separate human being with all his petty desires, cupidity, cruelty, and senseless striving? The whole world bears witness that the gods have nothing to do either with its creation or with its governance. While they do exist, the gods are in some far-off place removed from man by so great a span that they are completely oblivious of him and his affairs It is, therefore, utter nonsense to fear them or make supplication to them for there is absolutely no means of communication with them Man must realize his own independence and recognize that it lies wholly with him to make of his life what he can He must become self-sufficient, rid himself of his theophobia, and strive daily to obtain what measure of pleasure he can from his own unaided efforts

Along with his fear of the gods, man likewise entertains fears concerning the fate of his soul after death It is not necessary to give up belief in the existence of souls to attain freedom from this source of unhappiness. Remember that everything in the world is made of material atoms The same fate lies in store for those nimble soul atoms as that which awaits the body—dissolution, not destruction. There is no ground for believing that soul and body may ever be separated, or that the soul viewed as an inhabitant of body retains its identity after the body dies All the evidence points to belief that the soul lives, suffers, and dies simultaneously with the body Disease and fainting show how the body affects the soul No one ever experiences the soul in process of taking leave from the body And suppose even that it did depart from it, what is there to fear? What could become of it? Who would reward it for good or punish it for evil done when the gods are oblivious of its very existence? Immortality is for the gods alone and not for man. Conduct cannot either save or damn it Living is for the now. It is not a preparation for a future state wherein present identities are retained. The soul can suffer or rejoice only as it is part and parcel of a body. There is immortality, yes, but an immortality that applies to all things and can mean no more than that the basic elements of the whole universe are indestructible. Particular things perish but their constituents never do. Fears which are

outgrowths of beliefs in immortality are perfectly groundless and the wise man will rid himself of them

Man likewise fears death yet he can never be touched by it. He does not fear a state of nothingness following death so much as he fears the presence of death while he is still alive. Now life and death are as opposite as the poles There cannot be a state of death as long as there is life, and conversely when death arrives life cannot be aware of it. If, therefore, when there is death there cannot be awareness of it, there is no ground for believing it to be an evil Likewise, as long as there is life and feeling then death is not present and that which is not present and, therefore, does not exist cannot be a reasonable ground of fear. Where we are, death is not, where death is, we are not Why then worry about that which can never be a part of our experience? Seek out the pleasant state we can enjoy the most heartily for the greatest period of time and with the greatest assurance of its continuance

With regard to the status of the individual in a society, Epicureanism took a definitely utilitarian stand Following an approach already familiar to the reader from the account of the Sophists, Epicurus defined the political state as a device employed by its organizers to aid them in the realization of ends The purpose of a state is to render service, to aid men in the satisfaction of their desires. As such it has no claim upon the blind loyalty of those individuals living within the precincts of its jurisdiction The relationship between citizen and state should be carefully considered before one gives way to the appeals of patriotism and other forms of mass sentimentality The Epicurean should be guided always by the questions What can society furnish me as an independent person in the way of greater personal pleasure than I already enjoy? To what extent am I to obey the laws faithfully and heed the duties of a citizen, if in so doing I do not, thereby, place myself in a position to enjoy more pleasure than I have? The ultimate criterion must ever be the prospect of continued or increased individual pleasure No social ties can be binding upon the wise man unless he sees in them a means to pleasure He must exercise great caution that he does not become enmeshed in social affairs that curtail his liberty or that place him under obligation to act against his personal wishes In general, the wise man will remain aloof from political life and the obligations of a citizen Unless he can be sure of greater pleasure through marriage and the family life

following, he should avoid them Most of the dominant physical needs of man may be satisfied rather simply without incurring the duties and responsibilities attending them under the rather strict prohibition and prescriptions of organized society. The wise man will heed this truth and govern his life in accordance with it All the social virtues will be looked upon merely as instruments useful to practice if they produce the necessary measure of positive personal pleasure or an insurance against probable pain Friendship is the most agreeable of them all for it is a means of bringing together individuals of culture and refinement at a time when solitude may become monotonous It involves one in no obligations and may be as casual as the individual desires To this virtue alone the Epicureans were able to lend zealous support With this exception all social, economic, political, and religious obligations were swept aside as obstacles in the way of an egoism bent upon pleasure All duties are toward one's self, altruistic motives are the product of complex human relationships which are both unnatural to man and detrimental to his highest good

It should be noted at the last what is the nature of that pleasure so earnestly sought by the true Epicurean Though he is the lineal descendent of earlier Cyrenaic philosophy and reasserts the necessity of pursuing the hedonistic ideal for the good of life, his theory yet differs considerably from that of Aristippus Living in a more refined age than prevailed at the time of the Cyrenaics, Epicurus was able to perceive that the cup of pleasure would be sweeter were it drained with sips rather than with a single gulp The immediacy of pleasure alone is a dangerous measure of it for so often pain follows upon overenthusiastic indulgence. With the Cyrenaics in mind, Epicurus declared that the joys of a calm and contented life are superior to those obtained from immediate sensual indulgence The support of this thesis is to be found in the fact that mind less than body is subject to the vicissitudes of life Though pleasures of the body are not to be denied, marked care must be exercised to prevent painful consequences The body is too much influenced by outward conditions of health or wealth to be relied upon as the ultimate source of pleasure In fact, it is only after demands of the flesh have been mostly negated that the Epicurean is able to experience the lasting joys of a calm mind. Wants, ever the source of pain, must be reduced or eliminated, and the body as a source of many of them must be held under strict surveillance

The sage must concentrate his energies upon the problem of obtaining duration rather than intensity of pleasure One pleasure that lasts for a lifetime is far better than a thousand that last but an hour. A mind that is able to emancipate itself from desires precarious of fulfillment achieves a complacency unattainable in any other way The cultured man whose mind is free from want achieves a state of enjoyment that is the ethical ideal of Epicureanism

### 3. *Stoicism*

The Stoic school which thrived contemporarily with the Epicurean also sought a solution for an ideal of life, but developed one which in many respects differed from that of the Epicureans. This new philosophical tradition was established by Zeno, approximately 300 B.C One tradition states that he visited Athens the first time as the result of an accident, his ship being wrecked on the coast Zeno forthwith proceeded to take advantage of the educational opportunities of Athens and spent several years studying under such men as Theophrastus of the Lyceum, Crates the Cynic, Stilpo the Megaric, and Polemo of the Academy. His period of formal study completed, he followed the example of others before him and founded a school of his own within the city of Athens, at a place known as The Painted Porch The Greek term, *stoa*, meaning porch, finally came to be adopted as the name of the school Here lectures were given, the contents of which were largely derived from the teachings of various of the schools Zeno had attended Stoicism, as first sponsored by Zeno and afterwards continued by his successors, proved to be highly eclectic in nature, containing many paradoxes and contradictions traceable to the varied sources of Zeno's education Its chief philosophical influence was doubtless that of the Cynic school, and in a general way Stoicism is a more sophisticated and reasoned expression of fundamental Cynic principles Among the pre-Socratic philosophers, it was Heraclitus who was most influential Zeno's reaction to the teachings of the Academy and the Lyceum was largely negative.

Ultimately he interpreted the world materialistically as did the Epicureans, but the two materialisms were of a very different sort The Stoic chose to consider reality as a complete whole or unit rather than as constituted of innumerable independent, isolated atoms of stuff united only by chance concurrence. This interpreta-

tion made it necessary to deny the distinction made by the Academy and the Lyceum between form and matter To the Stoic these are merely two aspects of a single material reality The detailed development of this type of materialism was the work of many individuals over a period of centuries, and the theories of the earlier leaders of the school, such as Zeno, Cleanthes, and Chrysippus, were frequently altered or neglected by the later Stoics, who included among their number Seneca, Epictetus, and the Emperor Marcus Aurelius

The period immediately preceding the organization of the school of the porch was a troubled one indeed, and, following the trend of other contemporary philosophical interpretations of the world, Stoicism endeavored to present an analysis of the world which would clarify the meaning of man's place in it It was an attempt to meet a demand typical of the period—a need for some solid foundation upon which man might organize his life during an era when instability of institutions was almost universal It aimed to show man how, by the exercise of his reason, he could maintain an independence and an aloofness from the world of turmoil and gain thereby tranquillity of body and peace of mind. Zeno was convinced that achievement of such a goal would be impossible if the interpretation offered by the Epicureans was sound He felt that the Epicurean world was one far too impersonal, too indifferent to human welfare There was too much of chance, of caprice, in the atomistic materialism of this group to satisfy the demands of living Another interpretation of nature was not only demanded, but was also quite capable of defence

By considering the world to be a completely interrelated whole with man a part of that universe, it is possible to infer the practical and natural principles suitable to guide human life in ways that should prove ultimately the most satisfying The Stoic universe is completely purposeful, nothing happens by chance, and all is guided by a divine, rational intelligence which permeates all In this world man is a vital part, an entity with a capacity to reason and, therefore, to obtain by the practice of reason an understanding of his world and his own place in it He is in some degree in tune with the All, for he is in reality constituted of the same stuff as everything else As part of a complete whole, man must find his destiny through seeking his proper place in it He must understand his relationship to all other things, and through accumulated wisdom

discount all other plans of living but that one which is dictated to him by his understanding of the universal laws of nature. Subjectivity of attitude or action must be replaced in Stoic life by an objectivity that sees all things in their proper places and evaluates each thing in terms of its place in the cosmic picture. The end and objective of the Stoic pursuit is, to repeat, that of obtaining for man an adequate and satisfactory point of view or attitude which will enable him to circumvent or transcend the trivialities and the complexities of daily existence.

The universe man inhabits is one wherein no sharp distinctions can be made nor dichotomies drawn Mind and body are aspects of the same identical reality No fundamental distinction can be made though each may be "spoken of" as separate entities Mind is merely a finer, more active manifestation of fundamental matter, body is the more substantial and passive aspect of it Combining religious motives with scientific ones, the Stoic referred to the universe as God and made no distinction between God and nature It is further stated that the world as we experience it, as we see it or touch it, is the body of God, whereas the activity manifested in the world is called the soul of God, or the world soul It is to be remembered, however, that this distinction is not clearly drawn, for both soul and body whether of God or of man are composed of the same identical material substance of reality. That the world is God, that it is guided by a divine intelligence, seemed to be indicated to the Stoic by the experience of perfection and beauty discernible in the universe. To talk of immaterial entities is to talk of nothing, for the world is all of one cloth though its patterns may be endlessly variegated Heraclitus was right "God is day and night, winter and summer, war and peace, satiety and hunger. But he assumes various forms, just as fire when it is mingled with different kinds of incense is named according to the savor of each "[1] Thus, though many so-called particulars are distinguishable in the world, the fact of their apparent distinctness must not be mistaken to mean complete independence or difference of substance.

This doctrine holds certain important consequences for such a problem as immortality. If the soul is material, it may achieve immortality that a religious point of view would conceive to be desirable. The Stoics held that, when the body dies, the soul does

[1] Bakewell, Charles M , *Source Book in Ancient Philosophy*, Chap III, Fragment 67. By permission of Charles Scribner's Sons, publishers

not perish with it but instead may eventually return into the soul of the world out of which it came, to be at some later time created or reformed in the event of a new universe No soul is probably absolutely immortal, that sort being reserved for God alone. The Stoics, however, had no fixed beliefs or doctrine regarding the soul's immortality

Stoic cosmology was prone to accept *palingenesis*, or the belief that the world reproduces itself in successive periods, each occurrence being identical with that which preceded it From time to time the world is swallowed up in a conflagration out of which emerges a new world, but one which repeats, event for event, the one which immediately went before.

Since the entirety of nature is a vast material World Being divine in nature and alike in all its parts, it follows that every part is, metaphysically at least, equal in value to every other part Because the World Being is God, it is necessarily perfect and good In the face of a world that to all appearances was full of strife, of suffering, poverty, hardship, and uncertainty, this may seem to be rather a strange and contradictory thesis that the Stoic offers It is even more surprising in the light of Stoic insistence that it shall be experience, sense experience, which is to supply the materials of knowledge Ordinary experience appears to offer counterevidence to the proposition that the world is throughout perfect and good This cosmic optimism of Stoicism was a favorite object of attack by its enemies and many of its sponsors gave their energies in an effort to supply a convincing supporting argument. As might be expected, Stoic conclusions were by no means unanimous. Those who adhered most strictly to metaphysical optimism and its constant attendant, cosmic determinism, found it increasingly difficult to find arguments to support the favorite Stoic principle of moral freedom on the part of individuals If all is good and perfect, then man, as part of the whole, cannot be evil, and there is no point in arguing that he should strive to be better. If cosmic determinism is true, how is it possible to support arguments for freedom on the part of some of the parts of that same cosmos? On the other hand, the Stoic who, being mainly interested in the problem of human betterment, is led to argue for the reality of human freedom in the choice of his behavior thereby makes it more difficult for himself to support simultaneously the principle of cosmic determinism in proportion to the strength of his argu-

ments for moral freedom That is, since the two principles are contradictory, the more precise his arguments for the one become, the more impossible it is for him to support the other He is caught upon the horns of dilemma, and many are his intellectual struggles to extricate himself from his predicament.

There is no universal Stoic answer to this problem except that Stoicism wishes to keep its cake and eat it too Both principles are tenaciously held, and they remain integral aspects of Stoic teaching. Man must be free to develop from what he is toward a state that marks an improvement upon the past, and at the same time nothing in all the world can deviate from the inevitable unfolding of cosmic law and order The difficulty involves what is ordinarily called the problem of evil If all is good, then no improvement is possible and the eradication of evil is a meaningless problem A typical procedure in meeting this issue is to introduce the concept of *relative* evil A thing may be called relatively evil if it is not understood in terms of its true place within the total scheme of things Evil in the world is the product of subjective judgment on the part of human beings and is the result of man's incapacity to obtain from his finite point of reference a cosmic view. Were this possible, every event, no matter what, would be seen to be an essential part of a single whole that is by its essential nature perfect, beautiful, and good Parts of an artist's masterpiece when seen in isolation from the entire work may appear to be ugly, but when seen as parts of the complete work they reveal themselves as necessary contrasts without which the whole would not possess its obvious beauty Man is prone to mistake his limited and superficial view of nature for the latter's true essence This he must guard against and strive toward the cosmic view that is in its completeness possible only to God The cosmic picture is without blemish, for where all is good there can be no evil. Cosmic optimism is complete.

When the Stoic undertakes an evaluation of man as a part of the complete whole, a note of pessimism may be detected. A hint of this has already occurred in the answer given to the problem of evil. Human weakness was held responsible for the concept of evil, and it is human frailty in general that gave the Stoic some of his most knotty problems. Man is more or less constantly an obstacle to himself during his endeavor to understand nature While reason searches out the pattern of existence emotion obscures the

issue Passion drags at our coattails, urging us aside from the path of our rational objectives either obscuring them partially or befogging them completely Reason and passion direct us in opposite directions This is bad since the active agency in man, his soul or reason, is a spark of the divine world soul and should have, upon the human level, the same function that the soul of God does throughout the cosmos—that of guiding and directing. When passion has the upper hand, conduct cuts across the grain of right and natural behavior This being so, it is of particular importance to consider the problem of controlling the passions in the interest of a better life Nor can it be merely a matter of controlling the passions They must be eradicated in so far as it is possible Dominated by passions man is no better than a fool and he is more or less a fool according to the completeness of his domination by them To be virtuous, and therefore also wise, the Stoic must free himself from passions and achieve by this extirpation a state of complete calm This is a task to which the Stoic cannot give merely casual attention His whole life must be concerned with it, and simultaneously with the problem of directing his life in accedence with the universal laws of nature The two problems are delicately interwoven As man learns the ways of nature and orders his life accordingly, he strengthens his ability to avoid the pitfalls of private passion because he has achieved an adequate understanding of them which enables him to see them in their true context This gives perspective to his life, for reason achieves order and guides life in accordance with the divine *logos* or law of the universe

If the Stoic must strive to be the master of his emotions in order to achieve a higher state of being, it is implied that human freedom in a degree at least must be a reality. One part of the whole, the human part, is not completely dominated by the cosmic determinism of Stoic metaphysics To this Stoic puzzle some attention has already been given Their study of emotions marks the Stoics as students of human psychology Their analyses of emotions as motivating agencies of conduct were often highly complex and not devoid of keen insight and subtle discrimination A typical classification of them offered a fourfold division under pleasure, pain, desire, and fear Subdivisions of these were often varied and complex, the number of lesser passions distinguished, described, and named running as high as seventy

Man is to the universe as a drop of water is to the ocean He is a part of the whole, but a very infinitesimal part His soul is the active agent of his behavior This is material in nature, is the seat of his reason, and is the means by which he comes to know his world The securing of knowledge was a very important problem for the Stoic because it was only by means of his knowledge that he was able to find his place in the total scheme It is pronounced to be the Stoic ideal that each discover this place and live thereafter in accordance with it Knowledge assumed a place of importance for the Stoic to a degree greater than that found in most of the other contemporary schools The Stoics are well known to the history of thought as contributors to the science of logic and grammar, for these were essential ingredients of the procedure of organizing a body of practical knowledge It is only experience of the world that can teach man that the world really is. There are no ideas already implanted, as Plato had taught, but rather the mind is completely empty—a blank piece of paper upon which things may be written, that is, experiences recorded These recordings of experience when retained by the mind over a period of time constitute our memory, and sensation plus memory enable the learner to obtain general ideas or notions which serve to organize his experience in the form of science To the Stoics these general ideas were of considerable importance, for they believed that experience reveals the same generalizations or notions to all those who exercise their powers of observation correctly Particular experiences they grouped under general principles, the reason being the means for the formulation and the organization of such notions

The Stoic accepted what is commonly referred to as the correspondence theory of knowledge By that is meant that the truth of a judgment depends upon its correspondence with the actual entity or event from which it is derived The percept must correspond to the thing The way in which it is known that this correspondence exists is through the self-evidence that attaches to the experience or to the comparison When one compares his idea with the actual thing from which it is derived, he knows immediately that the object really does exist and that his concept is like the object Truth is dependent upon the self-evidence of judgments. The process of comparison involves the necessity of convincing one's self of the normalcy of his sense organs, of the clarity of the

percept, and of the fact that repeated observations bear out the truth of the comparison. This done, it is found that all men share in a common knowledge which assumes the form of general ideas Man first experiences a feeling of ascent to a judgment, followed by comprehension of it, and finally he learns to fit that judgment into the general scheme of all other judgments, the total body of such judgments being what is commonly known as science Science, then, is a body of judgments logically ordered They may be used to assist man's practice of living, and, therefore, the logic of deduction is of marked importance The Stoic, for this reason, gave much attention to the principles of deductive reasoning, and many of the terms familiar to logicians today are traceable to the work of various Stoic logicians Grammar, too, is seen to be necessarily of considerable significance to the clarity of thought, and the organization of grammatical rules into a systematic body is chiefly to be credited to the work of this school.

A proper understanding derived by the processes just described convinced the Stoic that there is nothing in the universe that happens capriciously Natural law is to be recognized as an essential and necessary part of the whole of things, the entire universe having its foundation and organization in these laws We call them laws of nature, but to the Stoic this was synonymous with calling them laws of God, for God is nature From this it was inferred that teleology or purposeness permeates the entire structure of things Chance plays no part. Everything happens for a good and sufficient reason Things happen necessarily since all events are the unfolding of God's nature Man, however, handicapped by his finite vantage point, cannot understand completely, and because of his incomplete knowledge he must guard against the belief that things may happen without purpose An adequate view of the whole will show that such an idea is without foundation. On this point the Stoics were at out-and-out disagreement with the Epicureans who thought that whatever purposiveness may be thought as existing in the universe is due to the tendency of man to read it into nature The order and regularity in nature together with its symmetry and beauty suggested to the Stoic a materialistic pantheism, wherein necessary natural laws follow from the divine intelligence of God, whereas the Epicurean found it more congenial for his purposes to posit a mechanical interpretation of physical forces as the source of uniformity. The Stoic found it essential to his general position to affirm

the reality of teleology Thus though both are materialisms, they differ markedly in detail, and it may be said that Stoicism sponsored a teleological materialistic monism, while Epicureanism developed a mechanical materialistic atomism.

The Stoic laid abundant stress upon the pursuit of knowledge but it must not be supposed that this laborious enterprise was prosecuted for the advancement of disinterested science. The object was to know nature not for any aesthetic satisfaction in knowledge for the sake of knowledge, but entirely for the practical purpose of enabling man to live a better life Every pursuit of the intellect, such as the study of logic, metaphysics, or the sciences, is valuable only as a *means* to the realization of the good and virtuous life Every pursuit that does not aid in making man better, and every endeavor that has no influence upon practical action in the art of proper living, is to be ignored on the ground of its inconsequence or avoided as bad because it misdirects human energy To be a good scholar is to be a virtuous Stoic; and to be virtuous is to have reached the pinnacle of Stoic perfection. Whereas the Epicurean argued for moral development as a *means* to the ultimate achievement of pleasure, the Stoic defines morality as itself the *end* and the goal of the practice of living. Being virtuous is for no other purpose than being virtuous.

It should be clear that the objective of the whole of Stoic philosophy is to present a solution for the problems of life It remains, therefore, to attempt a description of the behavior of the Stoic sage. His life is to be one guided and directed by the laws of nature and having as its chief end the practice of virtue. The highest good is acting in accordance with good will, having as it were the right attitude toward nature Virtue is not utilitarian in value but intrinsic instead, since it is the goal and final end of all activity The notion may be otherwise expressed as the command to do one's duty because it is one's duty to do so All things in life, such as honor, pleasures, health, luck, or fortune, are of no particular value except in so far as they may be used to assist the realization of the ideal, *virtue for virtue's sake* One thing in all the world is an end in itself and that is virtue In themselves all other things are either indifferent or bad, and the wise Stoic must never be misled into believing them to be the final goal of activity.

In fact, so far as it is possible, the wise man should attempt to eradicate as many impulses, desires, and strivings as he can, for

they are enemies of the reason and the virtuous life They disturb his peace of mind and make him dependent upon circumstances beyond his control Happiness must not be defined in terms of pleasure or any other of the many worldly aims, but rather as a state of freedom from emotions, during which virtue is sought disinterestedly and for its own sake The achievement of this conception enables one to reach a state of freedom and self-sufficiency, undisturbed by pleasure or pain, fortune or misfortune—a state of imperturbability or apathy

The Stoic sage will not simply appear to be good but actually will *be* good through and through That is, he must develop habits of conduct and a predisposition of the soul, as it was expressed, to do good simply because it is proper to do it The wise man will give strict attention to the general rules of conduct, for it is the worthiness of the rules and not the significance of the consequences of acts based upon them that is his chief concern His behavior is good so long as it follows explicitly the principles of honesty, courage, justice, and temperance Whatever may result for the individual himself or for others from specific acts so prompted must be regarded as of no importance. There is no place for hypocrisy in the life of a good man It is essential for him to develop a thoroughgoing habit of good will which will serve to direct his conduct completely If he knows the rules and always abides by them, there will never be any occasion for doubt as to his best procedure

This marked emphasis upon a rigid and formal moral code led some Stoics to insist upon the complete virtuousness, on the one hand, or the complete viciousness, on the other, of all mankind, to be virtuous means to be virtuous in *all* respects "The man who is a hundred furlongs from Canopus and the man who is only one are both equally not in Canopus" On this basis, it is apparent that either we hit the target of morality or we miss it completely, and it matters not how far we miss it, since the fact of its being missed at all marks one as completely lacking in virtue From this it would follow that there can be but two classes of men the ones who are thoroughly good, and those who are thoroughly bad Because of the sharpness of this moral dichotomy, later Stoicism was forced to soften the view and to admit the realization of degrees of goodness It was clear to many of them that no man could be completely virtuous, and experience indicated that no man, no matter how bad, was totally lacking in all virtuous qualities

If the sage is unable to resist the unnatural temptations offered by life situations, he is, in so far as he can, to deny assent or allegiance to them and hold himself aloof from participation in them There is one final answer the Stoic has to the question of how this resisting of unnatural temptations is to be accomplished He must recognize that all things in nature are in a sense neutral entities so far as he is concerned They are not neutral in the sense that they are devoid of good or purpose, but rather they are just what they are, and they should be recognized as having no vast significance as particular things in the life of particular men The Stoic must adopt the right attitude toward the phenomena of nature, and it is in this practice of the right attitude that the Stoic ultimately is to find his highest good The source of human difficulties lies chiefly in the fact that human beings adopt erroneous and shortsighted attitudes toward nature. The secret of successful living lies in realization that the grievances and misfortunes of life emerge chiefly out of finite human viewpoints, especially the tendency to judge all things in terms of our imagined good If we insist upon this subjective attitude toward nature, we never shall be able to know reality in its true essence This is, of course, exactly what the Stoic wishes to achieve He must constantly, therefore, be on his guard against subjectivism and so conduct his life that he orders it according to the general plan of all things Judging nature from the standpoint of the finite individual results in the excitation of desires and aversions, pleasures and pains, which becloud the rational approach to an understanding of nature To overcome this situation and to attain, thereby, an aloofness and independence of situations which excite desire and want is to refuse to judge things or goods as either desirable or undesirable If he can only achieve a state of mind which would prevent his judging anything as wholly good or wholly bad, he has achieved a state of independence not in any other way to be attained Since it is the emotions which serve to becloud and befuddle man's correct thinking in these matters, a part of the Stoic ideal becomes that of achieving a complete freedom from them This together with his complete understanding of nature permits the Stoic sage to achieve a condition of apathy and complete imperturbability, that is, he has achieved a condition which completely frees him from the excitations of life and directs him along the path of living according to the law of God The sage will give assent only to the thesis that the

sole good is virtue, and vice the sole evil, all other things are of no consequence.

The wise man pursuing this ideal will need no particular state or social organization to assist him in its realization Particular states and institutions, even including the family, may under certain conditions be hindrances to the ideal life This, however, is not to be taken to mean that Stoicism in general disclaimed the necessity of entering into some form of social organization The Stoic chose to look upon himself as a citizen of a world-wide society This society they asserted to be the only justifiable one because of the fact that all men are parts of one complete and perfect universe It would be, therefore, improper to regard people as basically or by nature unequal so long as each man's soul is identical with that of all other men, being all of them parts of the soul of God Any artificial boundaries, any tendency to separate mankind off into groups, must be to violate a fundamental law of nature This theory may be taken to mark the Stoic as having high civic ideals or as being rather indifferent to political issues because of the very attenuousness of his theory. All Stoics were prone to stress the importance and the duty of each member to join with and participate in some form of social organization This would seem to indicate a very high form of social consciousness on the part of the Stoic However, when it is investigated further, it is discovered that what the Stoic really means is that he shall have a vital interest in social organization in the largest sense The Stoic should be as interested in the civic affairs or social problems of Timbuctoo as in those of Rome This very general interest really amounts to a definite dilution of interest or to absence of any at all, since if one's civic interests are to mean much at all they have to be displayed in one's own particular environment, in his own city or county Stoic cosmopolitanism, as this view has been designated, afforded a fine opportunity for the Roman to accept the general principles of Stoicism as a support and explanation of the activities of Roman imperialism This is, in part, the reason why Stoicism during its later period was almost entirely confined to Rome

The concept of highest good as derived from conforming to nature gave rise to later problems of an ethical and political character. It has been the effort of many men to ascertain exactly what is the nature of things to which man is to conform. There have been many who have devoted their energies in an attempt to understand

what is the nature of man himself It is valuable to conform to natural ways, but there can be little point in admonishing one so to conform unless it is possible to know exactly the nature of things to which there is to be conformity Then *perhaps* it would be of considerable benefit for man, if he can, to conform However, there is a great vagueness centering about the term "nature" In modern thought the concept comes to play an important role in political and social theories underlying modern institutions and government These theories of society organized upon the basis of inherent natural right are perhaps best illustrated by such men as the Englishman, John Locke, and the Frenchmen, Montesquieu and Rousseau

Stoicism was both a philosophy and a religion It was a way of life and a way of salvation The Stoic God was not an indifferent one, but rather one who was believed to have a vital interest in mankind. Beneficence and omniscience characterized him. These are expressions that are clearly derived from theistic concepts of God. Legitimately the Stoic cannot speak of his God as separate from the universe, and it is only by recourse to verbal figures of language that he can affirm any qualities of such a being other than those qualities which would be applicable to nature in general. He has attempted to amalgamate religion and ethics and has succeeded rather well in confusing the issues involved in both In a sense Stoicism was built upon the ruins of ancient polytheism. In many respects it retained the outward form and language of ancient religions While from the philosophical standpoint there is no genuine place for such concepts in the system, the Stoic's aim and objective were, in the practical sphere at least, largely fulfilled. It presented an ethical teaching that had backbone, whereas other views, such as the Epicurean, lacked vigor It offered a concrete, strait-laced way of life to which one could conform and achieve virtue It had a vital appeal, therefore, for all those who saw in moral conduct more than relativeness and in nature more of beauty and purpose than of sordidness and aimlessness

### 4 *Skepticism*

Ancient skepticism claims as its founder Pyrrho, who lived in the latter half of the fourth and first quarter of the third centuries B C The school was founded in Athens shortly after the death of Aristotle. It gained many ideas from contemporary thinkers

during the long period of its existence, and the best statement of the principles of the school is to be found in the writings of Sextus Empiricus, who wrote about A D 180 to 210

The conceptions of the Skeptic school grew chiefly from an ethical attitude of quietism which advised the individual to do nothing at all, because the complexity of the world and of life prevents one from knowing what is best to do There is no possibility of predicting the outcome of activity, and this uncertainty is sufficient ground for doing nothing at all The ethical view, as developed by the early skeptics, such as their founder Pyrrho, was gradually developed into a more theoretical attitude It pointed out that the business of science, as defined by itself, is to investigate the nature and structure of the world in order to discover what actually takes place, with the hope, thereafter, of being able to predict what will happen This, then, should enable one, in a measure at least, to place man in the scheme of things and determine his true status The skeptics pointed out that it is impossible to get at the truth of nature. Therefore, the scientific goal is both illusory and impossible.

The grounds of this theoretical skepticism are found to inhere in the two main criteria suggested by science, sense experience, and reason In the opinion of skepticism neither of these criteria was able to substantiate its claims The multiplicity of contradictory viewpoints among philosophers was sufficient evidence that the reason is unable to give a satisfactory account of what is real The contention of the skeptic was that, if reason could give the truth, there should be more agreement among those who use it

Doubt as to the ability of the senses to give truth was as old as philosophy The Protagorean theory of sense perception had repeatedly been shown to be unable to supply objective truth Nor was it clear that reason is able to correct sense experience sufficiently to give rise to truth It was pointed out that perceptions vary among different men according to the customs and beliefs of their groups Perceptions also differ among individuals and in the same individual at different times, according to bodily conditions and mental attitudes of the individual and to all sorts of conditions in the medium separating the perceiver from the object perceived It is nonsense, Sextus Empiricus pointed out, to believe that science can find causes operating among phenomena All that can be noted, says he, are the sequences of occurrences as they are pre-

sented to the senses In other words, all that is possible is an awareness of the succession of events In this succession there is nothing that one with certainty may call cause

What, then, shall the wise man do to be happy? Obviously, he cannot find reliable guidance based on scientific knowledge The only sure experience that he does have is whatever states of feeling he happens to have at a given time, induced apparently by situations which surround him The things themselves which excite these feelings cannot be known Since one cannot know, it is impossible for us to establish our proper relationship to them and predict the consequences of actions

The Socratic ideal of guidance through knowledge was repudiated As a result, the wise man must take all precautions possible to avoid the seductions of opinion and actions arising out of judgments He must withhold all judgment and restrain all action He must withdraw himself from society, from practical pursuits, and, in so far as it is possible, suspend his judgment, refuse to act or believe, and find thus a state of imperturbability, peace of mind—*ataraxy* If he must act, it is best to follow the tradition of his group There is no way of judging this tradition to be either good or bad Necessity forces action, and the emergency must be met by acting according to ways that are most widely accepted

## 5 *Eclecticism*

The perplexities of the Stoic philosophy led the later members of the school to include in their system ideas and principles not always consistent with one another The fundamental dilemma of metaphysical monism and ethical dualism was one rather specific perplexity that led to diverse interpretations Other thinkers as well, when no single system completely met their need, were inclined to incorporate in their scheme of thought such elements from divergent views as were satisfying to them This picking and choosing of philosophical elements from heterogeneous sources is what is called eclecticism. It is not a philosophical system but rather a type of philosophical method The eclectic tendency found its way, in time, even into the Lyceum, and, more obviously still, into the Academy

In a way, eclecticism is very closely allied to skepticism It is skeptical in its conviction that no one viewpoint or system is ade-

quate to give a satisfactory answer to the problems of philosophy The solution it proposes is a process that selects such elements from various philosophical points of view as are congenial to the group of the individual who makes the selection The difficulty with eclecticism is that inevitably many of the selections made do not fit logically into a single coherent scheme of things Conclusions adopted from opposed philosophical interpretations inevitably must conflict The eclectic is not particularly bothered by this and proceeds to the formation of that system which seems to fit with his special interests, hopes, or beliefs. From a strictly philosophical angle it marks a sacrifice of logic to feeling

It was, in this particular period of speculation, a symptom of intellectual misgiving It may appear in any period of thought in which the dominant philosophies seem unable to offer the satisfaction that is demanded from them Regarding some problems the solution of a given system of thought may be nearer to the experience of many people than those of other systems, while at the same time such a system may offer solutions of other problems not at all so helpful as the treatment of such problems by other philosophies When this occurs in a marked degree there is a movement to combine the conclusions of the various systems into a working philosophy without regard for the contradictory character of the premises from which such conclusions are derived This may be accompanied by a general attitude of skepticism toward metaphysical first principles It was such an eclectic movement increasing in strength during the ethical period that served to hasten the advent of a dominantly religious point of view to overshadow the philosophical

## DISCUSSION TOPICS

1 Discuss the political situation in Greece during the period following the death of Aristotle Of what significance was this for philosophy?

2 What was the skeptic's attitude toward (*a*) science (*b*) metaphysics (*c*) practical conduct?

3. What resemblances are there between Epicureanism and the earlier Cyrenaic teaching?

4 What sort of metaphysical theory did Epicurus adopt? In what respects was this theory congenial to his general beliefs?

5 What likenesses and differences do you find in the Epicurean and Stoic ideals of conduct?

6. Discuss the attitudes of Stoicism and Epicureanism toward social and political institutions On what grounds were these attitudes based?

7 Compare and contrast the materialism of Epicurus with that of Zeno and the Stoics

8 It may be said that for the Epicureans virtue was instrumentally valuable while for the Stoics it was intrinsically worthy What is the meaning of this statement?

9 The word *stoical* comes to us from Stoic philosophy In what respect did Stoic philosophy advocate a *stoical* attitude? What advantages followed from it?

10 Describe as completely as you can the Stoic ideal of wise man.

11 What is the meaning and significance of electicism during the period covered by this chapter?

12 Comparing the ethical theories of the following men, which do you personally prefer (*a*) Plato, (*b*) Aristotle, (*c*) Epicurus, (*d*) Zeno? Justify your choice by giving reasonable arguments

## PARALLEL READINGS

CUSHMAN, H E *A Beginner's History of Philosophy*, Vol I, Chaps IX–XII
MARVIN, WALTER T *A History of European Philosophy*, Chaps XV, XVI, Secs 1–4
ROBIN, LEON *Greek Thought*, Book IV, Chaps I–IV
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Secs 12–16
THILLY, FRANK *A History of Philosophy*, Secs 11–14
WARBEKE, JOHN M *The Searching Mind of Greece*, Chaps XXVIII–XXX

# Chapter IX

# PHILOSOPHY AND RELIGION

## 1 *Religious vs Natural Interests*

The reasons for the revival of interest in religious problems and the supernatural generally are to be found in two sources One of them was the internal character of the ethical philosophy of the period and the other was the influx of new religious cults into the Greco-Roman world prior to the beginning of the Christian era In the first instance it seemed evident to many men of the period that the viewpoints of Stoic, Epicurean, Skeptic, or Eclectic were unable to give the satisfaction and assurance needed in the business of living contentedly These schools, each claiming to teach self-sufficiency, had given different answers to the question of what the wise man should do, and often perplexed rather than clarified the thoughts of the seeker for practical guidance To those dissatisfied with the solutions of the schools, it seemed apparent that men were not able to find within themselves, with the assistance of philosophy, the fountain of contentment and spiritual help so needed in a period of turmoil and uncertainty The growth of a conviction that men are not by themselves capable of solving the problem of human existence inevitably led to an appeal to the supernatural for assistance and salvation If man could not find the solution of life's problems in worldly goods or within himself, perhaps he could find it in a power beyond himself A growing skeptical attitude toward philosophy, then, is to be noted as a contributory cause in a revival of interest in religion

Another factor which was of significance in this new development is the fact that some of the schools of the ethical period still contained considerable elements of a religious nature The Epicurean, it has been shown, was out and out hostile to all religious beliefs and concepts It was, however, the only school that adopted this antagonistic attitude The Skeptics neither denied nor affirmed the existence of God They held that such matters were beyond the

possibility of ascertainment The Stoic view contained definite elements of a religious nature, and in one sense it may be said to have been an outgrowth of the polytheistic religion of the Greeks. It used religious terminology in calling the world being God. It spoke of immortality. It taught that all men are alike, as having souls derived from the soul of the world, or God The Platonic dualism of the phenomenal world and the world of Ideas remained an ingredient of the teaching of the Academy The Platonic stress upon the supersensuous world of Ideas was congenial to the religious stress on the world hereafter Plato's disparagement of the natural world was akin to the religious notion that this world is barren and deficient in significance, as compared to the world beyond The Lyceum, too, espoused beliefs favorable to the rise of religious concepts Aristotle had talked about the perfect God, or pure Form, the Unmoved Mover of the universe, and had located him outside of space and time He had said that all things manifest a tendency toward God His whole teleological metaphysics terminated in religious phraseology verbally like that of young Christianity even though it did not actually mean the same The interest Aristotle had was strictly metaphysical, but that did not prevent a religious significance from being attached to the Unmoved Mover, especially since Aristotle himself had called the supreme being God

The local religions had tended, with the exception of a few Orphic cults, to fall much into abeyance during the ethical period, but the interest in religion apparently had never died, though it had not found very adequate external expression With the entrance of new religious viewpoints, just prior to the Christian era, this pent-up longing for supernatural assistance found adequate and diverse means of satisfaction The Greco-Roman world became a veritable battleground for competing cults The grossest superstitions were accepted by many as genuine revelations of God. Anything and everything that smacked of religion found followers either in small or in large numbers The Egyptian Osiris and Isis competed side by side with the Fertile Crescent's Mythra and Magna The most important religious influence, however, was the teaching of Jesus Popularized in the beginning by men who had been witnesses to His crucifixion, the Christian doctrine possessed sufficient backbone and authority to enable it to stand the test of time The impact of this religious movement upon philosophy produced the system of Plotinus called Neoplatonism.

## 2 *Neoplatonism*

The pagan religious movement culminated in the mystical pantheism of Plotinus On this system the Greek world made its last stand against the rising tide of Christianity. It was an effort to find a philosophical answer to the increasing demand for satisfaction of religious feeling, a demand that had begun in the first century B C. and had become more insistent with the passing decades Of all the pagan cults, Neoplatonism was by far the most significant and influential It was developed by a man familiar with both the Platonic teaching and the mystery cults of the east. Plotinus was a native of Lycopolis in Egypt who studied at Alexandria during the early third century A D By this time Alexandria was the meeting place of Oriental and Greek scholars, and the mingling of their cultures gave rise to the first attempts to unite elements of them. The work of Plotinus is definitely to be regarded as an amalgamation of Plato's philosophy and Oriental mysticism

Plotinus did his studying at Alexandria, his teaching at Rome. He arrived at this city about A D. 244 and was immediately successful in gaining converts among the Roman aristocracy. Men from all professions of state including the emperor, Gallienus, and the Empress, Salonina, gathered around him So powerful was his influence that at one time he nearly engineered the founding of a city near Rome modeled after Plato's ideal state, to be named Platonopolis Plotinus became a rallying point for leaders of the Roman world who rejected Christianity and who desired its failure The Neoplatonic philosophy was not set down in writing until Plotinus was past fifty It was then expressed in fifty-four treatises, which were later combined in six groups of nine each by Porphyry of Tyre, the most distinguished pupil of Plotinus

Plotinus used the concept of a completely transcendent foundation for his religious philosophy [1] God is substance, that which is prior to all things and dependent upon nothing. No words can describe him, for any predication would only limit him. Any comparative designation such as beauty, perfection, intelligence, goodness, can be taken merely as finite human concepts falling far short of the essence of God Any designation limits him and one must be content in the realization of his complete transcendence.

[1] Windelband, W , *History of Philosophy*, p 237.

The world is not to be thought of as God's creation It is not produced by an act of will, but is the result of a miraculous and incomprehensible overflowing of the divine, an emanation out of God It is of the nature of God so to express himself, and the overflow partakes of his essential nature It is, however, a separation or falling away from the source and thereby some of the original perfection and reality are lost in the process. The first emanation gives rise to another and each successive one loses some of the original reality, until the final emanation has entirely lost it This final stage, or absence of being, is linked to God by a continuous series of emanations, the entire substance of things being God but being so in different degrees. The emanations occur in such fashion that they may be analyzed into three stages (*a*) pure thought or *intelligence*, (*b*) *soul*, and (*c*) *matter*.

The first falling away, or overflow from the Godhead, has as its content Ideas. Ideas are the same here as for Plato except that God is prior to them and the "cause" of them. Plotinus also goes further than Plato in maintaining that there are Ideas of particulars as well as genera or classes There are as many Ideas forming the content of divine intelligence as there are individual entities *Why* or *how* this first stage occurs is too deep a mystery for Plotinus to undertake an explanation The first emanation is, figuratively, one step removed from the perfect excellence of God but yet is of the same spiritual stuff. It, too, feels the impulse to create, to overflow, and the result of this dynamic impulse is the soul

The Soul, as the second emanation from the divine, is produced by the Ideas' impulse to actualize themselves. Just as intelligence was like God but inferior to him, so too, Soul is like intelligence but inferior to it As the Soul looks toward the realm of Ideas which gave rise to it, it beholds the Ideas, as it turns about it feels the urge to become creative The world of bodies is the product of this latter motive The Soul is intermediate between the phenomenal world beneath it and the world of Ideas above it Soul is called by Plotinus World Soul when it contemplates the world of Ideas, and Nature when it feels the urge to act upon matter, giving form to it. The human soul is part of the world soul and as such has as its true function the yearning love of Ideas. Its true nature is intellectual and its goal the return by the stages of its fall back to its original source It feels also the desire to improve matter and so

voluntarily becomes enmeshed in a body, where it is swayed by two counter forces, the necessity of physical processes and the freedom of pure thought

The formative power of the Soul cannot be exercised without an object to work upon, something that lacks form or reality Since this is not at hand, the Soul "creates" Matter as the third emanation Matter so produced is indescribable for it has no character or quality It is complete absence of form, is nothingness, emptiness, impotency Any word used to describe it predicates qualities of it, characteristics which it does not have Without shape or extension Neoplatonic Matter must be regarded as immaterial corporeality It is matter in a sense far removed from the hard, definite substance of Democritus. It is apparently much the same sort of matter that Plato had in mind when he wrote the *Timaeus*

Though it is the principle of corporeality it is an immaterial substratum, something that makes bodies what they are, yet which is at the same time incorporeal This substratum as the third emanation is the one upon which the Soul imprints the Ideas, producing thereby the world of sense phenomena Matter makes this sensuous representation possible as well as simultaneously supplying the measure of limitation Bodies, or things, contain both form and matter, reality and unreality Spatiality or extension is supplied to objects by matter but their essence or true being is the form or Idea exhibited by them All beauty, goodness, regularity, or merit of any sort found in the phenomenal world owes its being to the soul of the world while all the evil, ugliness, or sordidness is traceable to the impotence and unreality of matter

Physical science in its concentration upon the sensible world seeks truth in the wrong place Only by turning away from this world toward the intelligible world of thought, seeking union with it, can the genuine essence of the universe be found The world is not of the nature to support the scientific enterprise

> In place of regular, casual connections appears the mysterious, dreamily unconscious weaving of the world soul, the rule of gods and demons, the spiritual sympathy of all things expressing itself in strange relations among them All forms of divination, astrology, faith in miracles, naturally stream into this mode of regarding nature, and now seems to be surrounded by nothing but higher and mysterious forces this world created by spirit, full of souls, embraces him like a magic circle [1]

[1] Windelband, W, *History of Philosophy*, p 219 By permission of The Macmillan Company, publishers

What, then, is the place of man in such a scheme of things? He is the union of soul and body At the birth of human bodies souls depart freely from the abode of souls to take their places within corporeal figures Then either of two things may follow Either the soul will regulate the body, conducting its affairs in such manner as to permit the soul to gaze skyward toward its former place, or the matter of the body will overcome this impulse and cause the soul to turn toward sensuality In the case of the former alternative the soul strives to ascend by the same steps of its descent in order to reunite with the world soul and finally with the divine intelligence and God In the case of the latter alternative the soul becomes immersed in matter and must be incorporated in bodies repeatedly until the desire to unite with the divine overcomes sensual desires The ideal of life is final and complete merging of individuality in the beauty and goodness of God It is thoroughly other-worldly in nature, teaching a doctrine of salvation that involves the disparaging of worldly goals and activities It is to be remembered in this connection that the Neoplatonic mysticism is directly traceable to Oriental influence upon Plotinus, so that after all it cannot be said to be an Occidental development

In its human habitation the soul profits from its acquaintanceship with the evil of matter by learning to avoid it and experiences a profound satisfaction arising from its exercise of power in the shaping and forming of matter All this time, however, the soul is by its nature separate from the body as proved by the active opposition of the soul to the cravings of the body By the continued striving of the soul against matter it becomes purified, and this is the aim and end of life.

The essential characteristic of the soul is its intellectual capacity. The pursuit of knowledge is a fit object of endeavor but is not to be taken as an end in itself Philosophy is the shortest and quickest way to ecstatic union with God The wise man will learn to avoid the pleasures of the body and to concentrate instead upon the life of the intellect, by means of which the soul is able to transcend its material abode and lose itself in contemplation of the divine At the height of intellectual activity the soul may dispense with its earthly tool, the reason, and feel deeper and deeper into the absolute beauty and reality of God Such complete experiences of the divine are rare among mortals and fortunate is he who is privileged to glimpse the perfect vision. Plotinus claimed to have

attained the state of mystic ecstasy but very few times during his lifetime

It is not to be understood that Plotinus, though he was sure that no earthly ideal can be final, believed the world to be entirely evil or without merit The whole of things is after all equal to the emanations from the Godhead and so it bears the stamp of its nature There is, however, a marked gradation of goodness, beauty, and power extending from God downward to the final emanation, matter, which is the embodiment of impotence and nonbeing These are excellent in so far as they are real Throughout nature in varying degrees the beauty of the divine shines through its material medium This is the beauty, the reality, that the artist searches after Aesthetics is grounded in the absolute beauty of God as revealed in nature By this avenue, which is really a part of the same road followed by the philosopher, the artist approximates the genuine contemplation of God

With Neoplatonism the pagan effort to find a satisfactory solution for the religious craving of the time came to a close It was a way of life based upon individual feeling rather than upon historical authority Though Christianity engulfed and swept over it, its mark was left upon the thought of the time as witnessed by the revival of mysticism during the Middle Ages It was not without influence on the development of Christianity itself Following Plotinus and his pupil, Porphyry, the thought of the school underwent some marked changes, especially with reference to the number and kind of stages separating man from God The Syrian Jamblichus (330) was the leading figure in this activity. After a decline the school was revived in the fifth century A D by Proclus in Athens and was continuing under the leadership of his followers when the Emperor Justinian closed all the pagan schools in the year A D 529.

### 3 *The Rise of Christianity*

It has been shown that, as the three-hundred-year period following Aristotle drew to a close, there was a marked tendency toward skepticism and eclecticism An air of defeatism pervaded the land as philosophy failed to fulfill her promises The skeptical attitude was expressed by many as a policy of giving up, as a resigned helplessness Such men might be caught saying that there are three basic problems first, the metaphysical, which inquires into the nature of the real, second, the ethical, which asks what is

the "good"; and third, the practical, which seeks to discover a guide to action. To these three problems three answers are possible. the real we cannot discover; what the good is nobody knows, and the thing to do is to remain completely indifferent.

The world appeared to offer small possibility for the attainment of lasting peace and philosophic calm. Even Neoplatonism, the last bulwark of pagan philosophy, repudiated the world of nature to fixate upon the upper world of true being The influx of cults found ready believers, graspers-after-straws of salvation What to believe became a real problem, and for many it was a matter of indifference whether worship was of Isis or Mythra Few of the cults really promised much or returned much to their followers. The general tendency was to worship fate or fortune, that goddess, as someone has aptly said, who promises nothing, asks much, and remains absolutely unpredictable It was into this situation that Christianity came with a promise, a central idea, a form of organization, and, significantly, a group of earnest teachers who believed what they preached

How deeply the skeptical attitude toward philosophic reasoning had penetrated is exemplified in the thinking of the Christian convert, Tertullian, in the third century Of Christianity, he declared: it is credible because it is foolish (because of contrariety to contemporary ideas), it is certain because it is impossible (judged by current standards), it may be believed because it is absurd (since to believe anything to be certain by reasoned processes is foolish) But there were other and more durable grounds for belief than skepticism. The stories told by the Apostles were claimed to be eyewitness accounts of the life and death of Christ The propagandists of Christian teaching were sure of the resurrection as a historical event The central fact of their teaching was the incarnation. They held that, as a matter of demonstrable fact, Jesus lived on earth and died a martyr's death for man that His spirit might dwell among them and they be saved for eternal life hereafter

The God of the Christian faith was not a creature aloof from human cares and joys. He was described as One deeply concerned with human life, a father who loved all mankind, One whose love was so great that He was willing to give His only son to secure their final happiness Nor were the benefits of Christianity confined entirely to a future life Though this is the highest promise and the ultimate reward, it is possible to secure contentment and satisfac-

tion here and now on earth, troubled and perplexed though that unfortunate orb may be Bliss is possible both here and hereafter Because of the acceptance of this teaching, the early Christians were characteristically a cheerful, happy, smiling group standing in marked contrast to other men of the time, who were a bit world-weary and embittered at the failure of their quest for lasting well-being The very cheerfulness of the early Christians did much to win converts for their cause.

The earliest converts were from the lower classes, including the slaves There was no need for higher learning, for God was believed to speak a simple language of love within the comprehension of even the most humble. The early Christian remained hostile toward culture as a nonessential product of paganism It was not until Christianity was forced to render its teachings into coherent and logical form that learning came to be sought and put into practice. Worldly goods, a famous name, membership among the élite of human society, were not the keys to heaven In some respects they appeared to stand directly in the path opposing truth, goodness, and the ultimate reward of immortality On the judgment day, nothing but a pure heart could admit one to the gates of heaven Pureness of heart is within the reach of all Wealth cannot buy it and is, therefore, not of much concern

For those who had been denied the goods of the world, Christianity offered solace and a promise of a brighter future Still, though membership in the new sect was recruited from the peasants of the country and the poor of the cities, the process was slow and hostility was by no means lacking. Christianity denied the reality of the gods of the traditional polytheism and condemned the barbaric amusement of the Roman circus Many wished to continue the older tradition and voiced their disapproval of the rising sect Only after the third century did growth in membership become steady and rapid It has been estimated that by the year A D 100 but one-half million persons had accepted Christianity, while by the year 311 more than thirty million were members.[1]

The Christians were antagonistic not only to the culture of paganism but also to the rival cults flourishing within the Roman Empire, refusing to grant concessions regarding points of merit in other sects. They rebelled against the recognition of religious services and duties pertaining to the official religion of the Empire.

[1] Cushman, H E, *A Beginner's History of Philosophy*, Vol I, p 303

Their uncompromising attitude and intolerance of the state religion seemed to the Roman officials sheer obstinacy and treason, meriting punishment of such a nature as to discourage further opposition The persecutions only served to develop a strong Christian morale that enabled the followers of Christ to undergo hardships of whatever sort that might be heaped upon them The ultimate success of Christianity is in no small part due to the persistence of its hostile attitude toward the other competing sects of the Empire.

With the passage of time, it became necessary for the propagandists of Christianity to make their teachings reasonable and acceptable to men trained in the philosophic schools As these in increasing numbers claimed Christian membership it was inevitable that philosophic conceptions and solutions should be applied to the task of making Christianity a reasonable doctrine The Hebrew teachings had been introduced to the Western world in anything but coherent form Upon many points controversy flourished and by no means all the *Apologists*, those who wished to explain the teachings, were in agreement Among the most ardent opponents of the fundamental system of Christianity was a group called the *Gnostics*, and later a group of religious thinkers, the *Manichaeans* This latter cult was Persian in origin and adopted the thesis that, in the beginning, not one but two supreme powers existed side by side These were customarily referred to as God and the Devil The beliefs of the Manichaeans were definitely in opposition, therefore, to the fundamental thesis of Christianity that there is one God and that the entire universe is his creation Opposition to this group, as to the others, aided in shaping the Christian dogma into semifinal form, in the philosophy of St Augustine

### 4 *Development of Christian Dogma*

The center of the earliest movement to make the Christian doctrine a unified body of knowledge was the Egyptian city, Alexandria. Here at the famous museum the literature of the ancients was collected, and to this mecca of learning came students from throughout the Western world It was in this city that the Oriental cults, including Hebraic Christianity, first found adherents, and here the battle of the cults first raged most furiously With the growing demand for guidance in the choice of beliefs, keen competition developed to supply the most adequate authoritative backing for them. There were extensive interpellations of the older

views of such men as Plato and Pythagoras, the idea being to attach a semblance of ancient learning to new ideas. In the works of Philo and others it was suggested that the inspiration behind the philosophies of such men as Plato, Socrates, and Aristotle was the same as that behind the Old Testament leaders. Philo also suggested that there had been a considerable amount of borrowing from the ancient Hebrew codes by philosophy This belief in the existence of a common ground underlying pagan philosophy and Hebrew theology led to an application of philosophic interpretation and analysis to the latter creed

The New Testament was a final outgrowth of comments made by the earthly followers of Christ The narratives were not always obviously consistent one with the other and figures of speech added to the obscurity To circumvent the difficulties, the device of *allegorical interpretation* became popular This was not a new type of construction, since it had long been in use among the people of earlier civilizations in explaining the meaning of myths It was employed by Philo to draw a distinction with reference to the scriptures, between a *literal* word-for-word interpretation and an *allegorical* interpretation, understood only by the learned who were able to discover the hidden meanings beneath the phraseology The science of Christianity was held capable of development only by those especially endowed individuals using the inner meanings of the scriptures as fundamental

It was held by Philo and others that if God's commands had been directly given they would not have been understood Because of this intellectual shortcoming, characteristic of most men, the word of God was given them in the form they could grasp. This information, however, must be looked upon as an oversimplification, not always to be taken as literally true Dogma in Christian theology had its beginning in this problem of interpretation It was very early realized by the Christian fathers that a consistent doctrine must be taught and controversies arising from individual interpretations must be decided with finality The success of the church through succeeding centuries was due in large measure to carrying out this program successfully. The revolt of Luther and the rise of Protestantism may be interpreted as a movement to reopen theological problems which had for centuries been closed to individual interpretation. The work of the *Patristics* caused church dogma after the second century to become an infallible body of

doctrine to the masses comprising the church membership. Individual interpretation of scripture was replaced by *official* interpretation, and the church organization and priesthood became a necessary aspect of Christianity Individual religious authority persisted up to the modern period only among a limited group of Christians influenced by the Neoplatonic mysticism.

It was Philo, also, who first attempted to unite religion with philosophy The concept of a transcendent God, and one at the same time responsible for the whole creation, was a troublesome problem for him To meet the difficulty he suggested that a relationship between God and the world was established by means of intermediate agencies called Ideas, forces, or angels The farther apart from the world the divine God was believed to be, the more became the necessity of bridging the gap between them After positing intermediaries of varying excellences in this fashion, Philo applied to the totality of them the Stoic term Logos Divine thought, reason, or spirit are the meanings attached to the term The older concept Nous was revived and applied to individual souls conceived to partake of the character of Logos Similarly as the Stoic had believed the Logos to permeate and order the entire universe, so, too, Philo conceived the Logos as God's agency, to be everywhere present. The Logos doctrine assumed greater and greater proportions, finally becoming central to the discussions of some of the most important church councils, where the final dogmas of Christianity were settled

Philo had suggested that the Logos, as divine reason, was the first-born son of God through whom the affairs of creation are regulated It is not wholly clear, but early speculation apparently regarded the son as an emanation from God, analogous to the later emanation theory of Plotinus It is not to be assumed, however, that the Christian Apologists adopted an emanistic theory to account for the creation At this point there is a sharp opposition between the Christian and the Neoplatonic views. For Christianity, God stands to the world as its absolute creator On this point there was opposition from the followers of the Persian Mani, with his dualism of God and the devil ruling side by side, the worlds of light and darkness, and contending upon earth for the domination of men. In time, the power of Christianity's basic concept of the divine personality of God overcame this dualism, though the mark of the devil remained upon the ultimate teachings. The world, as God's

creation, remained, in spite of its origin, an unfit object for man's complete devotion It remained a fundamental thesis that man must turn away from the world (*contemtus mundi*) toward God if he would make secure his final reward

The interpretation given the Logos by Origen contains a strong impulse to unite it with the philosophy of Plato Origen used the term "begot" to describe the coming to be of the Logos from God, and described the content of the Logos as the sum total of God's thought By means of the Logos, God begot the entire concourse of "free spirits," some of which remained with God, owing to the persistent desire for Him, while others, feeling an impatience with the true knowledge of God, or assuming false pride, were cast out of the blessed realm to be punished in the world of matter provided by the creator for this purpose

The critics of Christianity were vigorously opposed by a large group of conservatives, the Apologists, who sponsored, for the most part, the basic dogmas which in the course of succeeding centuries became official church teachings They held that the same God spoke through both Old and New Testament revelations, though the latter were held to be more up-to-date God they declared to be the author of all, and the whole creation intended for the glorification of man God himself "transcends want, life, and being, the sublimity, power, wisdom, goodness, and greatness of God are beyond all human notions, beyond all description"[1] This expression of God's nature became the favored one and is usually designated by the term "negative theology" Though the world was created for man's sake, it is not, therefore, the end of man's essential nature His complete destiny can be realized only in the life hereafter, after each has worked out his salvation here, according to the will of God Man is free to act and may elect to obey or disobey God and on the judgment day a final separation of the blessed from the damned will be made

The codification of belief as a problem became increasingly pressing as the second century advanced, owing in part to the pressure of conflicting groups of interpreters Among the most influential of these groups were several that went by the general name of *Gnostics* These thinkers gave to Christianity a separate and distinct place and chose to contrast it with the religion of the

[1] Thilly, Frank *A History of Philosophy*, p 141 By permission of Henry Holt & Company, publishers

Jews, instead of trying, as most of the Christian Apologists were, to show that it was an outgrowth from the religion of the Jews It became the traditional thesis of the Christian fathers that the teachings of Judaism and those of Christianity were fundamentally alike This was one among other points that the Gnostics chose to deny They claimed to be following Paul in so far as their basic beliefs were concerned, and for the most part this contention may be verified by comparing their beliefs with Paul's However, they differed in a marked way in that their beliefs inclined them toward an aristocratic interpretation of salvation Only the few who were blessed with knowledge given secretly by God could hope to share in the blessings of heaven Only a few men were endowed with the capacity to receive such knowledge, the masses of men possessing in addition to base animal bodies also animal souls which perish with the bodies

The Gnostics made a great deal of the Pauline dualism of spirit and body and went to greater lengths than Paul in making clear this distinction The body they regarded as wholly material and evil, whereas spirit was completely good The upshot of such an interpretation led them, as it had Paul, to assert that man's true salvation lies in the denial of the flesh in order that a life of the spirit may prevail For the most part the problem of salvation was uppermost in importance and their basic ethical-cosmological beliefs support their position concerning the ways and means of salvation They were all more or less in agreement that the world and man could not possibly have been created by the one perfect deity. Instead it was necessary to recognize that the creative god is not the same as the true God, but rather one of much lower rank, analogous to the demigod of Plato's *Timaeus*. This latter deity, either against the will of the Almighty or in ignorance of the supreme God, created the world with the use of base material, and therefore the world, instead of being perfect, is the very reverse of this, a completely evil place We, as men, are creations of the demigod It is only by virtue of God's magnanimous nature that it is possible for benighted man to achieve salvation By himself man could not do this Their interpretation of the world as the product of a lesser deity led the Gnostics to identify the demigod with Jehovah, the God of the Jews Others chose to reject the God of the Jews entirely as a myth Likewise subject to their rather radical interpretations were the Old Testament writings. The Old Testament purported to

reveal the word of God to the Jews, but, as a matter of fact, according to the Gnostics, it consisted of revelations delivered by the creating god or demigod and not the one true God Therefore, the Old Testament along with Jehovah should not be followed In addition to these beliefs there were others also which caused Christian Apologists considerable trouble Among them was the thesis that salvation is of the spirit only and not of the flesh, that Jesus was not a man in reality, that he was not born of the virgin Mary nor crucified as a man, for he was too grand and divine a person to have undergone such experiences. The Gnostics did not distinguish between the divinity of Christ and the divinity of God

Commonly numbered among the Gnostics were the followers of a rather influential man who arrived in Rome about A D 140 This man was Marcion In general his beliefs were identical with those of the Gnostics He differed from them only in his more democratic interpretation of the possibility of salvation, it being his opinion that heaven is to be achieved not through secret ritual and esoteric knowledge, but rather through faith and love Therefore, salvation is a thing that all may achieve This more democratic interpretation is much more in keeping with the fundamental teaching of Paul than were the teachings of the general group of Christian Gnostics However, as many of the beliefs of Marcion were identical with those of the Gnostics, the Christian Apologists made no distinction between them It was against these two groups, Marcionites and the Gnostics, that the early Christian fathers, beginning approximately with Justin Martyr, began to launch their attacks Out of this activity grew some of the fundamental principles of Catholic dogma, and in this early development of principles no man is more outstanding than Irenaeus, the Bishop of Lyons, in Gaul His work was carried on chiefly during the second century of the Christian era, and as a result of it by the time of his death the church organization had in its possession a very effective method for dealing with doctrines contrary to those held by certain officials among the many churches

After more than one hundred years of diverse interpretations respecting the meaning of Christianity and the events believed to have transpired in Palestine, it became obvious even to less important men than the highest officials of the church that something should be done in the way of bringing about order from chaos It became imperative that some standard or criterion be set up against

which all beliefs might be measured in order to determine the truth of them It was such a standard as this that Irenaeus proposed when he asserted that all Christian beliefs must be in harmony with the teachings of the twelve apostles and Paul. The theory lying behind this proposal is that God gave to the disciples directly a *knowledge* which was intended for the salvation of man, and therefore the principles that should be held by all good Christians should necessarily come directly from these specially endowed people It was not, however, particularly obvious just what the beliefs were which had thus been handed down by the apostles, and to make the criterion more specific Irenaeus later suggested that the beliefs of Christianity should be in accord with the *writings* of the apostles only. This announcement was followed by a veritable flood of anonymous and pseudonymous epistles and tracts of one kind or another purporting to be the work of this or that one of the apostles It was quite possible still under these conditions for those against whom Irenaeus was leveling his attack to deny the authenticity of many of the writings proposed for acceptance. It was likewise possible for the Gnostics and Marcion to argue that even the accepted beliefs, if they were held to originate from the writings of the apostles, were yet open to varied interpretations To answer this objection Irenaeus proposed that a statement of fundamental beliefs be offered to make it clear just what a Christian is His first offering was apparently an adaptation of the baptismal symbol of the church of Rome, and while it omits much that seems obviously a part of fundamental church teaching, such as mention of the kingdom of God, the Messiahship of Jesus, His divinity, His preexistence, the purpose of His death, and the like, the symbol did succeed in stating certain beliefs in exact opposition to fundamental theses long sponsored by the Gnostics and Marcion This statement of fundamental belief is the original apostles' creed and read something like this: "I believe in God Father Almighty; and in Christ Jesus His Son, who was born of Mary the Virgin, was crucified under Pontius Pilate and buried, on the third day arose from the dead, ascended into heaven, setteth at the right hand of the Father, whence He cometh to judge living and dead, and in Holy Spirit, resurrection of flesh "[1]

[1] McGiffert, A C, *A History of Christian Thought.* Vol I, p 157 By permission of Charles Scribner's Sons, publishers

A careful analysis of this creed will show it to be little else than a statement that all those who do not subscribe to the theses enumerated cannot claim to be Christians Since all the beliefs presented, or most of them, were diametrically opposed to those of the Gnostics, the latter were automatically anathematized This solution of the difficulty was by no means final, however, for the Gnostics proceeded to point out that the symbol in the form given was no older than the middle of the second century, and therefore was not capable of being regarded as a writing of any of the apostles Irenaeus, in order to answer this objection, altered the interpretation of his criterion No longer is it the official writings of the apostles alone, but also the voice of the living bishops, the successors of the original apostles who founded the various churches All interpretations of an ecclesiastical nature might thus be solved by the living bishops One final move yet had to be made in this matter of organizing the criterion, owing to the fact that the bishops seemed not always to agree among themselves as to the infallible truths of Christianity It was thus necessary to propose that the combined opinion of the bishops hereinafter shall be considered the final word in the matter of interpretation of beliefs, and any and all other men whose beliefs are not in accord with such opinion shall be disqualified from church membership and their teachings be declared heresies

This procedure on the part of Irenaeus and the acceptance of it by the church led to some rather significant developments within the church One of the most pointed of these was that of prescribing that the whole future of the church shall be guided and directed by the sayings, real or alleged, of men who existed in the first two generations of the Christian era Once and for all new interpretations without the official church sanction were outlawed An official machinery had been set up not only to deal with heretics, but also to determine the extent of church dogma and the form to be taken by church ritual Finally, it also made possible the formulation of new creeds and doctrines by the church itself as these might from time to time be needed Hereafter all the perplexing problems of interpretation faced by the early fathers of the church were thrashed out in the councils prescribed by Irenaeus

In this manner an arrogant and uncompromising front was made against the enemies of the true God while decisions upon controversial issues were settled at the great church councils.

The work of two such councils may with profit be discussed to illustrate the more important types of problems thereby disposed of to the satisfaction of the church fathers These problems concerned the natures and relationships of God, the Son, the Logos, the man Jesus, and mankind To the layman these problems and their solutions were unintelligible To their naive thinking, God, the Holy Ghost, and the Son were somehow separate beings yet at the same time one. Belief in the Trinity was not controverted, but exactly what the essential relationship was of the Father to the Son and of both to the Holy Ghost called forth a long drawn-out debate between the Arians and the Athanasians, the dispute finally being settled at the Council of Nicaea in the year 325

The followers of Arius contended that God made or created the Logos in the figure of a man, endowed him with the nature of God at creation, in order to use him to redeem mankind The supporters of Athanasius interpreted the relationship to mean that the Logos was not created or made by God but was "begotten" of the same substance and nature as God, and therefore possessed of identical qualities At the same time the Logos is identical with God and a separate person In the instance of the historical Christ the Logos and a man became united by the will of God for the purpose of redeeming the souls of men for God The Holy Ghost is still another being of the same substance and essence as God All three, God, the Logos, and the Holy Ghost are separate as beings yet one in substance—the Trinity At the Council of Nicaea more votes were cast favoring the Athanasian creed, and Arius and his followers were banished from the church for their heresies and their doctrine condemned Into the Nicaean Creed the phrase was written "begotten, not made, being of one substance with the Father." Thus the theological difficulties of the concept of the Trinity were obviated by selecting a single interpretation as official and outlawing all others as heresies

It was not made clear at Nicaea just what was the nature of the incarnation, the relation of the Logos to the man, Christ This, the Christological problem, was settled about 125 years later at the Synod of Chalcedon in the year 451 At this council not merely two main factions were represented, but many of them, and from among the diversity of interpretations one was chosen to be official It was the ultimate judgment that Christ had, simultaneously, two totally different natures externally united with each other in such

fashion as to make possible their acting as one yet without confusion or intermingling of the separate parts One nature was identical with that of God, the other with man, both completely harmonized and joined together in one person—a complete incarnation The term "person" was proposed by the bishop of Rome to break a deadlock in the argument, and carries with it the technical meaning of an "actor" on the stage The Chalcedonian symbol states it so Though final for what was to become official dogma, the solution did not satisfy the more radical points of view These continued as a side current of Christianity, the present-day Armenian Church and the practically extinct Nestorian Church being descendants of two of them

### 5 *Philosophy of Augustine*

Of all the church fathers prior to the Middle Ages, Augustine, Bishop of Hippo, was outstanding as a creator of church dogma In him, the various threads of Christian teaching were woven together into the most consistent and comprehensive pattern of church doctrine that antiquity produced He was born at Thagaste in northern Africa in the year 354, the son of a Christian mother and a pagan father From the outset, he exhibited remarkable powers of intellect and showed an early interest in philosophic problems He received part of his education in the city of Carthage, where it is reported by himself in his *Confessions* that he led, as a youth, a rather interesting and hilarious life If the *Confessions* were not overdrawn by Augustine, one would gather that a person knowing him in his youth would hardly have guessed that finally he would become a bishop of the church and later be canonized as St Augustine

It has been suggested that possibly he was not quite so bad as he made himself out, that by showing how bad he was in youth and how complete was the change that overcame him he could thereby more easily glorify the church he came so much to cherish. He came first under the sway of Christian teaching through the influence of his mother and later through the eloquent preaching of Ambrose at Milan. A significant aspect of his education was his acquaintance with pagan philosophy, especially that of Plato through the medium of Neoplatonism He was a man of tremendous energy and after his conversion devoted his entire life to the promotion and clarification of Christian dogma. He may be taken as an

example of the best sort of man the church produced The thoughts embodied in his writings, especially in his theological treatise, *The City of God,* he developed to a considerable degree out of his controversies with the Manichaeans and Pelagians In his writings are gathered together the conclusions reached by various ramifications of Patristic thought, and in the form he stated them they were passed on to the scholastic philosophers of the Middle Ages.

A contribution by Augustine, not often observed, was his pointing out that the mind, as it knows, is not merely a passive organ There is no such thing as a mind merely acting in a receptive capacity He differed, therefore, from all radical empirical theorists who claimed the mind to be a *tabula rasa,* a blank upon which sense impressions are made He emphasized the active part of the mind, being most interested in the activity of willing He was in accord with modern thought in denying that the will is a separate part or faculty Mind was conceived to be a unity having distinguishable functions, such as will, reason, and memory. During activity it acts as a whole. Among the active aspects of mind in its knowing capacity, he remarked upon the necessity of attention in order to know anything at all Without attention the world reveals itself as a bustling confusion One must concentrate upon one aspect of it at a time in order to learn, he pointed out. Memory also was regarded by him as active It had hitherto been regarded as a passive container of all sorts of content of experienced elements, which from time to time might be used He did not deny the function of the mind as a container of past experience, but held that every particular memory was controlled by an active intention to remember something specifically, rather than just anything

It may also be mentioned in connection with these observations, which appear to be rather modern in character, that Augustine held it to be unproductive to use the scriptures as a complete and scientific guide for understanding nature He claimed that one must go to the particular things of the world in order to know them scientifically. This observation, which finally came to be the thesis of science in the modern period, was rather thoroughly covered up by other more theoretical interests and was soon forgotten in the period following Augustine The mention of it at all in the Augustinian writing is probably traceable to his early interest in pagan philosophy, for it is possible to trace through the writings of this man two basic interests and tendencies, one of them an interest

in this world and its affairs, the other, the one which finally came to predominate, an interest concentrated on the world of the hereafter, upon the promised land of the scriptures. As an early writer, Augustine's interests can be seen to fluctuate between these two realms He is often led into inconsistencies because of this. As an older writer, his theological interests rather thoroughly got the better of his scientific interests As a theologian few if any have surpassed him, had his interests been strictly philosophical, there are such authorities as Windelband to claim that he would have ranked with Aristotle and Plato.

Augustine's early acquaintanceship with the dualism of Manichaeism led him, in the course of his intellectual development, to reject it as too crude a metaphysics. His ultimate thought on the problem developed a scheme of the universe that left God the sole supreme being upon whom the entire creation depends and in whom all things find their true significance. Augustine rejected the Neoplatonic explanation of the world as an emanation, and refused to accept the thesis that the creation was a necessary consequence of God's nature. He fixed the fundamental Christian interpretation by declaring the creation to be an act of God's free will, the universe being made out of nothing at God's desire Without identifying God with His creation He is to be thought of as everywhere spiritually present In the effort to conceive the supreme being, human reason discovers its limitations No words can adequately describe Him, the reason must recognize its shortcoming in this respect Some things can be understood only after one believes them, and still other things are beyond reason entirely and must be accepted on faith In attempting to understand God the reason finds itself involved in contradictions God

> is good and yet without quality, he is great, without being a quantity, he is the creator of intelligence, and yet superior to it, he is present everywhere, without being bound to any place, he exists and yet is nowhere, he lives eternally and yet is not in time, he is the principle of all change and yet immutable [1]

The entire universe has its unity in God In every respect God is superior to the world and man, the most striking things in the entire scheme of things are the absolute power and goodness of God and the complete helplessness and evil of man.

With God established as the absolute creator of all things *ex nihilo*, the problem of evil was left in particular need of explanation.

[1] Weber, A, and Perry, R B, *History of Philosophy*, p 189 By permission of Charles Scribner's Sons, publishers

The earlier Greeks, such as Plato and Aristotle and, later, Plotinus, had laid the blame for evil at the door of matter. On the basis of a dualistic interpretation of the universe it was logical as well as convenient to discover evil in the baser element But when church doctrine became crystallized in Augustine's God-created universe the problem of evil became more complicated The existence of evil in the universe might be denied as a fact or be regarded as a part of God's creation The Stoics had attempted the first alternative but evil seemed really too obvious and persistent to Augustine for him to dispose of it by declaring it to be nonexistent. Neither was it compatible with the essence of God to regard evil as his creation The fact of evil at least as the absence of good could not be denied. The goodness of God would not permit him to create evil What, then, can be the source of it?

Augustine found the solution in his concept of the human will Evil is not a substance but the product of an act made possible by a gift of free will to the first created man Adam was endowed with the richest gifts of God, among which was the power to choose or not choose the good Adam saw fit to disobey God and thereby contaminated the entire human race Mankind lost its freedom in the sin of Adam and all men are born in a state of original sin from which God alone can save them if He chooses. Evil in the world is traceable not to God, according to Augustine, but to man, His creation In this manner, one could think of evil as real, the universe as the immaculate creation of God, and yet not be forced to accept evil as God's creation But if the will is the source of evil, and God foresaw that it would be, why did He not bestow a will that would will only the good, this being within his power? Augustine answers, in substance, that if a person is to be good he must be given the opportunity to be bad It is impossible to make people good merely by removing all temptations and laying down certain rules to govern conduct One can build a good character only by being permitted to exercise right choice in the presence of other and evil alternatives of conduct Adam's inability to will the right and obey God condemned the entire human race. All men sinned in Adam, all men are predestined to a life of perdition.

The Augustinian doctrine of original sin was the result of opposition to an interpretation of free will offered by the followers of Pelagius Augustine had about thirty years yet to live when this monk came to Rome preaching the nontransmission of sin from

Adam and the actuality of free choice on the part of each of God's human creatures By this view man is not beyond self-help Each may choose to follow God if he wishes and thereby determine his fate But he may elect to follow the ways of the devil and be lost forever Adam's action, though not transmissible, is one apt to be imitated, and the will must strive against the temptation According to the Pelagians, the goodness of God makes it impossible for him to allow human nature to be essentially evil Acceptance of Christian teachings revealed in the scriptures, membership in the church, and faith in God lend fortitude to the good will and are indispensable means of getting to heaven Even though free will is a divine gift to all, God knows who shall abuse it and who shall use it for the glory of God Thus He is able to determine in advance the rewards and punishments destined to attend each life

Augustine's solution of the problem of evil not merely avoided to his satisfaction the suggestion of God's responsibility for the evil in the world, but paved the way for a convincing argument for the need of redemption Man, bound by his complete sinfulness, cannot, by himself, become otherwise than wicked. God alone is able to help him, to lift him out of his sinfulness The incarnation was indicative of the partial forgiveness extended to man for his transgressions Some, but by no means all, may be saved, but it is entirely up to the discretion of God as to who shall be the fortunate ones It befits human beings to be humble before God, to regret their sin and seek salvation within the church The complete helplessness of man throws into relief the omnipotence of God and the need man has for Him Those who would be saved must have faith in His wisdom and number themselves among the citizens of the city of God on earth—the church This, however, does not guarantee their redemption All those saved will be those within the church, but not all those within the church will be saved Before man is born, from the beginning of time, God knows whom He shall save and ordains it. With his first breath each man is predestined to be saved for membership in the heavenly city of God or be given over to eternal damnation Nor is there any ground for complaint that it should be so Man had his chance to be good and threw his chance away This God foresaw and provided suitable punishment No man *deserves* to be saved, but the inscrutable goodness of God caused him to forgive, to sacrifice his son to expiate the

evilness of men God, the exacter of justice, is partially swayed by God the loving father

Augustine believed that cognitive processes proved the existence of the soul That which thinks must be held to have existence All content of thought may be doubted but the act of doubting proves the existence of the ego or soul That the soul exists does not inform one as to its substance It is apparently unlike every material substance and in essence incorporeal. What the origin of a soul is or how it comes to be in the body of a man, Augustine was unable to say Of its immortality, by the grace of God, he was convinced Though the body is not exactly the prison house of the soul, the ultimate destiny of the soul is heaven True blessedness is unattainable in the world of flesh Augustine expressed boundless optimism concerning the heavenly city of God, but just as boundless a pessimism regarding the earthly world of human concourse

With Christian theology coming to a fairly well-determined body of doctrine in the work of Augustine, there emerged a basically new philosophy of history For the Christian, history became something more than a mere chronicle of events. The facts of history assumed a significance and newer meaning, as episodes in a cosmic scheme of creation, fall, and redemption With the incarnation as a central fact the history of the world received a coherent objective and a unifying thread of meaning The reality of the world took on a new significance as the product of God's handiwork What in Greek speculation had hitherto been interpreted simply as processes of nature became events whose metaphysical importance is relative to the historical fall and progress toward redemption, events conceived to take place once only

> There is perhaps no better proof of the power of the impression which the personality of *Jesus of Nazareth* had left than the fact that all doctrines of Christianity, however widely they may otherwise diverge philosophically or mythically, are yet as one in seeking in him and his appearance the *center of the world's history* [1]

The five centuries following Augustine are known in history as the Dark Ages, during which the Roman Empire was swarmed over by the invading barbarians As the Empire weakened, the church more and more took over its form of organization and active authority until, with the final collapse of the Empire, the church

[1] Windelband, W, *History of Philosophy*, *op cit* p 256 By permission of The Macmillan Company, publishers

became the sole bearer of the ancient culture and sponsor of order. The invaders, despite their lack of culture, exhibited in the main a profound respect for the men and principles of the church Although nearly swamped by sheer force of numbers, Christianity was able to hold its own and gradually win over the tribes and their leaders to the faith of the church By the tenth and eleventh centuries the church had emerged as the dominant force for order and chief dispenser of wisdom Dogma became fact and philosophy a process of drawing inferences from theological premises no longer doubted. The ensuing period of thought, historically the Middle Ages, is the period of medieval philosophy During the several hundred years between Augustine and the emergence of Scholasticism a few names should be mentioned as the carriers of traditional learning. During this period only England, a small part of Italy, and the region of the eastern Mediterranean were active as centers of learning Through a pseudonymous Christian, Dionysius the Areopagite, Neoplatonism was given a Christian coloring and the view was passed on indirectly to Scotus Erigena, considered by some the father of Scholasticism Commentaries upon Aristotle were published by Simplicius In the sixth century Plato and Aristotle were translated into Latin by Boethius Others were Capella, Cassiodorus, Isidore of Seville, St John of Samos, Photius the Patriarch of Constantinople, Alcuin, and finally Scotus Erigina, to be mentioned in the ensuing chapter

## DISCUSSION TOPICS

1 What, in the philosophy of the ethical period, contributed to the widespread growth of religious philosophy?

2 What elements of pagan philosophy were congenial to the doctrines of Christianity?

3 What promises were made by Christianity that had a strong appeal for people living during the early centuries of our era?

4 Who were the following (*a*) Gnostics, (*b*) Apologists, (*c*) Manichaeans, (*d*) Patristics?

5 Compare the Neoplatonic explanation of *matter* with that of the Epicureans

6 What difference is there in the type of authority basic to the religious philosophy of Neoplatonism as compared with that of Christianity?

7 Explain the following (*a*) *Allegorical* and *literal* interpretation, (*b*) *esoteric* and *exoteric* doctrines

8 With the aid of supplementary reading beyond the text account give an explanation of mysticism In what part of the world is this philosophy a dominant type?

9 Pertaining to the development of Church dogma, of what significance are (*a*) the Christological problem, (*b*) the concept of the Trinity?

10 In what fundamental respects did the views of Augustine differ from those of the Manichaeists?

11 Compare the views of Pelagius and Augustine on the problem of free will

12 What is the doctrine of original sin? What arguments could you offer for or against the doctrine?

13 Explain the meaning of *negative theology*

14 Who was Philo? What were his basic ideas?

15 Explain the role played by the concept *Logos* in Christian theology Trace its meaning back through Greek philosophy

16 Explain the part played by Irenaeus in shaping the code of Christianity

17 Discuss the modern aspects of Augustine's philosophy

## PARALLEL READINGS

BARTON, GEORGE A *The Religions of the World*, Chap XVI
CUSHMAN, H. E *A Beginner's History of Philosophy*, Chaps XIII–XIV
MARVIN, WALTER T *A History of European Philosophy*, Chap XVIII
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Secs 17, 18, 19
THILLY, FRANK *A History of Philosophy*, Secs 15–19
WEBB, CLEMENT C J *A History of Philosophy*, Chap IV
WEBER, A , and PERRY, R. B *History of Philosophy*, Secs 25–29

# Chapter X

# MEDIEVAL PHILOSOPHY

## 1. *General Characteristics*

The era of the Middle Ages has been pointed to as a period dominated by a single gigantic prejudice A religious coloring was given to all knowledge and human living A religious zeal furnished the impulse to all philosophical endeavor Nothing significantly new came out of the entire period, though some of the keenest intellects applied themselves to the problems confronting the age The philosophy advanced by the medieval thinkers goes by the name Scholasticism The Scholastic view sought to amalgamate religion and philosophy by declaring the aim of both to be the same In this they were following the reasoning of St Augustine The outstanding characteristic of Scholasticism was the application of deductive logic to the problems of theology, out of which practice was to grow a science, or at least a philosophy, of religion that could stand the test of criticism A basis for the deductive process was supplied by the fundamental dogmas of the church Such dogmas were accepted on faith as true and incontestable The chief objective of Scholasticism became that of inferring from the dogma, used as syllogistic premises, whatever truths were therein contained and of showing how dogma could be stated rationally without contradiction If a hint of contradiction was suggested the Scholastic philosophers preferred to claim that the situation was due to the limitations of human reason when applied to the revelations of faith, rather than to any error in the subject matter of revelation

The period preceding Augustine had been busy with the codification of creed In Augustine this Patristic effort found summary and systematization It was this body of doctrine that the Scholastics inherited and sought to weld into a philosophy Knowledge became confined to church dogma and individual initiative in intellectual pursuits was discouraged in so far as it might question tradition. Any opinions that differed from that dogmatic tradition

were branded as heresies and their perpetrators were punished by ecclesiastical order Heresies included, in many cases, not merely facts or practices contrary to dogma, but activities and opinions that were indifferent to it Scientific pursuits were discouraged as a waste of time that might otherwise be spent in the glorification of the church

The narrowness of this attitude is eloquently exemplified in the contents of a letter sent by Pope Gregory the Great to Desiderius, Bishop of Vienna, which stated in part

> A report has reached us which we cannot mention without a blush, that thou expoundest grammar to certain friends, whereat we are so offended and filled with scorn that our former opinion of thee is turned to mourning and sorrow The same mouth singeth not the praises of Jove and the praises of Christ Think how grievous and unspeakable a thing it is for a bishop to utter that which becometh not even a religious layman If hereafter it be clearly established that the rumor which we heard is false and that thou art not applying thyself to the idle vanities of secular learning, we shall render thanks to our God who hath not delivered over thy heart to be defiled by the blasphemous praises of unspeakable men [1]

To the modern mind the narrowness of such a view is little short of astounding It could have flourished nowhere except during a period dominated by the conviction that the total truth was at hand and that the only fit pursuit was the contemplation and propagation of that truth

The length of the medieval period is close to a thousand years It begins with the dark centuries following the period of Augustine and ends with the Renaissance, though the influence is felt deep into the modern period It is usually divided, for convenience of study, into an early and a late period on the basis of the degree of emphasis upon Platonic or Aristotelian thought The early period is the longer and during it Platonic realism was the dominant philosophic attitude Though elements of Aristotelian thought were known to this period, their weight was small at first It was not until the twelfth and thirteenth centuries that Aristotle became extensively known and studied From this time on into the period of the Renaissance Aristotle superseded Plato, becoming the official philosopher of the church in the system of St. Thomas Finally the surge of scientific interest swept aside the Scholastic

[1] Poole, R L, *Medieval Thought and Learning*, p 7 By permission of The Macmillan Company, publishers

philosophy and caused it to restrict its sphere of operation to theological problems It withdrew within the precincts of religion and is to this day the official philosophy of the Roman Church

The philosophic effort of this long period is perhaps best stated in the form of attempts to solve a limited number of basic problems All the more important men of the age—Scotus Erigena, St. Anselm, William of Champeaux, Abélard, Roscellinus, St Thomas, Duns Scotus, William of Occam, and others—discussed them. Among the problems, three are of outstanding importance and will occupy the remainder of the chapter They are. The problem of universals, which inquired into the metaphysical status of genera and species, the problem of God's existence, which involved the attempt conclusively to prove that God exists, and the problem of faith and reason, which sought to determine the validity and priority of truths based upon one or the other as an ultimate criterion. It must not be supposed that this enumeration exhausts the significant subject matter of the Middle Ages A more extensive account would necessarily include a discussion of such controversies as the priority of will or intellect, the opposition of mysticism to historical authority, the social and political influences of Christianity, and perhaps still others

### 2. *The Problem of Universals· Realism and Nominalism*

Historically, the credit for first raising the problem of universals is generally given to Socrates, who sought for common properties exhibited by particular cases. Socrates had observed that men employ singular terms to apply to a number of particular things and wished to know why or how this was possible His ceaseless search led him to the final conclusion that all knowledge is to be traced back to these common elements as the foundation of it This view was further developed by Plato, who maintained that reality is to be attributed only to these defined ideas or concepts that entered into the Socratic quest. From them particulars were held to obtain whatever degrees of reality they possess. The difficulty with this realistic view had been pointed out by Diogenes, who had said to Plato I am able to see this or that horse but not horseness as such, which is said to be the truly real Plato had answered that the difficulty for Diogenes was that he had only eyes to see, and not intelligence to understand, and for this reason was forced to continue in the errors of sense perception bound up with

particulars. It is the reason, according to Plato, that is able to grasp the universals or Ideas and not sense perception. Aristotle had continued the tradition but only after altering the fundamental position of Plato to admit of the reality of Platonically disparaged particulars as well as the reality of universals, or Forms His solution was to unite or merge Forms with matter or locate the universal within the particulars perceived by the senses, declaring them thus both to have genuine reality Pagan philosophy got no further than the Aristotelian solution of the problem.

The problem of the reality of Forms, as discussed by Aristotle, or the reality of Ideas in the language of Plato, was inherited by the Middle Ages through a limited amount of knowledge of the ancients, chiefly through Latin translations of some of the least important Aristotelian logical treatises and commentaries of earlier men, particularly of Boethius The problem was further complicated during medieval times by the church's insistence that both particulars and universals are real Christianity placed a tremendous emphasis upon the individual human soul, which, to the church, defined an individual's unique importance as a personality This emphasis upon the particular individual moved him into the forefront of importance However, the Scholastics also maintained that there is but one church and one faith that is able to save men. This entity stands between man and salvation and through it the keys to heaven are obtained There may be many parishes but there is one church represented in all of them Christian teaching also held that the sons of Adam are all alike as participants in his original sin, and that only by partaking of the universal character of God, as incarnated in Christ, is it possible for them to achieve salvation. The emphasis of the church upon the three persons of the Trinity, which are conceived still to be one, further accentuated belief in the reality of universals The church held that God had made the world according to a pattern, that He had ideas which determined all the particulars The reality of things was regarded as being dependent upon these universal ideas that were employed by the creator in fashioning the world as it is As a matter of positive fact, universals were held to determine the nature of particulars. The more universal the truth, the more real it was declared to be, the more universal, the greater the perfection.

With the introduction of genuine Aristotelian philosophy during the medieval period, the problem of universals became even

more accentuated Aristotle, who had declared that the real is ultimately a plurality of substances, or particulars, had also said that, though the individuals or particulars are real, the only object of science or knowledge is the universals or the Forms Thus, the two sides of the medieval problem were seen to be contained in Aristotle whose work finally became authoritative for the church It was a problem that divided the thought of the Middle Ages broadly into two views, usually designated as realism and nominalism It asked whether or not species or class designations exist in the mind only, or whether they have a real status independent of particulars Otherwise stated, the problem of the universals asks why it is we impute similarity to two or more distinct individuals which we conveniently put in classes.

What is it that causes us to classify all animals in one class, all plants in another, or specifically, all cats within the class, cats, all dogs within the class, dogs? It asks if it is a *fact of existence* that causes us to group particulars in this way or if it is merely the giving of a convenient name to a group of particulars each unique and independent—a name which has subjective status merely That they have no status other than names applied to groups of particulars is the thesis of nominalism Reality is a property rightly ascribed to the particular objects encountered in experience, but the common properties or qualities that are said to be possessed by them have no metaphysical significance Realism adopted the view that universals or general species possess a significance and enjoy a reality separate at least from and perhaps prior to the particulars It is thus a reassertion of the interpretation offered by Plato The more abstract or general the concept, the greater the reality Nominalism, on the contrary, maintained that universals are merely abstractions and are the product of human minds which study particulars

The Middle Ages passed through several stages of interpretation with regard to the nature of universals. The earliest and most extreme interpretation, called subsistent realism, was advanced by Scotus Erigena. Universals he declared to be independent of and prior to particulars (*universalia ante res*) Their existence was held to precede the natural order of particular things. They are the models or designs after which the universe was made They would exist even if the universe were destroyed, since they had existed before the creation and are thus beyond the limitations of the space-

time world As the most universal and enduring of all things, they are therefore the most real

The opposite view opposed to this doctrine of Platonic realism was that of extreme nominalism Its chief exponent was Roscellinus, who supported the conviction that the particular only is real, the universal being merely a sound or word which is used because it is a convenient way of dealing with particular objects. The universals, on this view, are given no real status

A modified form of nominalism, or an attempt to reconcile the extreme views, is discovered in Abélard He held against Roscellinus that universals cannot be merely names, since otherwise principles of classification would be lacking, as they apparently are not. Against Erigena, or, in Abélard's time, chiefly against William of Champeaux, he maintained that evidence is lacking to substantiate a claim for the absolute priority of universals His analysis indicated that the individual is real, but that the something similar or common in the way of qualities which forces one to group them together in classes must also have more than subjective reality The reason it happens that things are similar in character, thought Abélard, is because the world was in the first place made according to a pattern existing in the mind of God The elements of that pattern have been impressed on things and constitute a genuine part of them Three positions relative to universals were contained in this view Universals exist before things in the mind of God (*universalia ante res*) Universals also exist in things, not as singular substances, perhaps, but at least as characteristics similar in many particulars (*universalia in rebus*). Universals also exist in the minds of men who study particulars, who know certain concepts as predicates acquired in their experience of particular things (*universalia post res*) Abélard's interpretation desired to correct the extremeness of both realism and nominalism and at the same time to give each its due in the compromise effected

St Thomas offered a still more comprehensive scheme of things, based on Aristotelian philosophy, whereby he hoped to overcome the difficulties of the problem by uniting elements of Platonic and Aristotelian realism He rejected extreme nominalism completely He believed with the extreme realists that there were pure forms, transcendent and perfect, but he also believed that there were forms enbodied within matter according to the Aristotelian interpretation He described the universe as a gigantic hierarchy, involving

matter at one extreme and pure form at the other. Pure forms included God and extended downward to include angels and man Immanent forms, or those in matter, culminated in man. Man's soul, he held, was the lowest of the pure forms and the highest of all forms and the only one encompassed by matter As a member, so to speak, of both realms in this scheme, the soul of man serves the purpose of bridging the gap between nature, composed of forms in matter, and the heavenly world of pure forms, including God The fundamental tenet of realism was hereby retained in the recognition of both transcendent and immanent forms or universals.

There was a revival of nominalism in the fourteenth century by William of Occam By this time the increasing interest in the phenomenal or scientific world had led to the placement of greater emphasis upon the particular aspect of the world In the mind of William it appeared needlessly to complicate matters by retaining the thesis that universals are real and as such are explanatory principles Only particulars can be objects of scientific pursuit and, hence, are the sum total of the entities the reason is capable of dealing with Therefore, all entities or devices hitherto used to assist in explaining or deriving knowledge, over and above the criteria of experience, are not needed and should be given up. This is the famous position designated usually as "Occam's razor" In substance, it calls for a slicing off or elimination of needless explanatory principles. It is a forerunner of the modern scientific law of parsimony, which insists that of all possible explanations the simplest shall be considered true

It is not difficult to understand why the church vigorously opposed the doctrine of nominalism Contained within it were tendencies of thought explicitly opposed to Christian theology In the first place, nominalism involved a denial of the real existence of certain fundamental entities of church dogma If only particulars are real and universals are mere names, it can be said only that there exists this church and that church but no universal church The doctrine of the Trinity falls before the same analysis The sinning of man in Adam becomes a mere myth, the incarnation a pretty story without significance

In the second place, the nominalistic emphasis upon particular things led directly away from the traditional problems of theology and concentrated attention upon learning about the world of sense experience. Nominalism lay within the scientific tradition which

by the thirteenth century was beginning to show remarkable signs of vigor. It was congenial to all progress in the direction of establishing a body of knowledge distinct from the theology and having as its object the natural world It added force to the labor of those, who, in the name of reason, sought to set apart the realm of the supernatural from that of the natural and who, when this was done, preferred to devote their efforts to an understanding of the world of human habitation rather than to a glorification and contemplation of a world of grace

### 3 *The Problem of God's Existence*

The church philosophers or Schoolmen retained, perforce, the fundamental tenets of realism Accordingly, the most universal elements of creation were legitimately declared to be the most real and perfect The most universal of all universals was held to be God, the creator of the entire universe This religious-metaphysical setup was perfectly adapted to an extensive application of deductive logic as a device for rounding it into a coherent system. From the most universal propositions or truths revealed to faith, all the certain and significant knowledge should be available by means of syllogistic procedure. Propositions obtained from revelations were guaranteed by God and therefore were true above all others Logic became a tool whereby theological doctrine could be made scientific and convincing by the use of the universal propositions warranted by God as fundamental premises for deduction

It is clear that the entire scheme thus depended upon the realness of an existing God to substantiate the doctrine If God's existence could be demonstrated beyond doubt, the remainder of the Scholastic program would be a mere matter of routine application of syllogistic logic To convince the unbeliever and convert him to the faith afforded an additional incentive to the cause of demonstrating God's existence Practically, no member of the faith doubted His existence, but from a theoretical angle the thing desired was a clear and convincing *proof* to use as a weapon against the opponents of Christ The time and labor expended to prove the existence of the Deity was not, therefore, designed to convince or bolster up the believer, but rather to induce unbelievers to believe.

St Augustine, though not a Scholastic by several centuries, was the first church thinker to offer such a proof. He began by proving

the existence and continuance of subjective conscious experience and then advanced to a position that claimed reality for entities indicated as the cause of ideas of beauty and perfection present in the human mind His conclusion was founded upon the principle congenial to realism and Aristotelian metaphysics that the less can only be derived from the greater, never the greater from the less. A finite mind, therefore, could not be the originator of so sublime an idea as the absolute beauty and perfection of God He also adhered to the principle that it is impossible for an idea to be present in consciousness without an adequate cause to account for its being there Ideas of absolute beauty, goodness, and perfection are beyond the scope of subjective creation, and, furthermore, cannot be derived from experience since nowhere are such ideas found actualized in nature Still, they are present in consciousness and must be accounted for To St Augustine their subjective existence proved the reality of existing absolute beauty, goodness, and perfection as their adequate cause Their cause so indicated could only be defined as God and His existence is thus demonstrated

Anselm of Canterbury, in the twelfth century, offered a proof that has come to be called the *ontological argument* for God's existence It was an argument substantially the same as that of St. Augustine nearly eight hundred years earlier. Realistic metaphysical presuppositions underlie both, and the chief difference is probably found in the more precise statement of Anselm To the bishop of Canterbury it seemed that Augustine had relied too much upon subjective feeling for his proof In pursuing the same task as his ancient predecessor Anselm sought a sound objective metaphysical foundation for his argument, such that could withstand the test of logical analysis He started with the idea of God as *that being than whom none greater can be thought* If one supposes that such a being does not exist, then the being thought is not the being than which none greater can be thought, for obviously an existing being is greater than one that does not exist God, the perfect being, must be thought as existing, for otherwise the name of God is contradictorily applied to an inferior being The thought of God implies the object, God as the most perfect being *must* exist Therefore, God does not exist merely as a content of consciousness but as a real, in fact the most real, existing being

"Anselm proved only that *if* God is thought (as most perfect being), he must be thought also necessarily as being or existent,

and cannot be thought as nonexistent "[1] For Anselm, his reasoning was convincing and no doubt soul-satisfying Tradition and training behind him afforded the compulsion to think in terms of God, and hence if God is to be thought at all he *must* be thought of as existing It does not follow, however, that a similar compulsion exists for others and the argument, though faithful to realism, has probably on its own merit convinced but few people.

Critics of Anselm's proof soon arose The most famous of these was his contemporary, a monk by the name of Gaunilo. This man pointed out that the argument proved too much, for it could apparently be used to prove the existence of an enchanted island, the idea of which presented itself to mind.[2] Furthermore, if God can be conceived only as existing, how does it happen that a fool or an unbeliever can conceive Him nonexistent? Finally, it seemed to Gaunilo that Anselm had presumed to offer altogether too explicit a definition of God when as a matter of fact that Being is really inconceivable

To Gaunilo's objections Anselm made answer In reply to the objection that the argument might be used to prove the existence of a magic or perfect island, he claimed that existence is not a necessary characteristic of such an island, while in the case of God it is A perfect island has, as its characteristics, qualities that are contingent and dependent, whereas God's character is independent and absolute It is possible, therefore, to think a perfect island without implying its existence, but such an act is not possible in the case of God Responding to the second objection, Anselm explained that the confusion of the fool or unbeliever is to be traced to an ambiguity in the meaning of the term "conceive" The fool conceives God in name only He does not conceive the real, existent God One can imagine fire as cold and water as dry, but he cannot actually think *real* existent water and fire are respectively dry and cold In the third place, if God were completely inconceivable there would be no cause to censor the fool who denies God's existence for he is talking about that which cannot be conceived or thought As a matter of fact, thought Anselm, a minimum definition and knowledge of God are available to man That being than which nothing greater can be thought he regarded as a minimum rather than an exhaustive definition of the supreme being

[1] Windelband, W., *History of Philosophy*, *op cit* p 239

[2] The argument would appear also to prove the existence of the devil as that being than which none worse can be thought.

### 4. *The Problem of Faith and Reason*

By the time the church fell heir to the remnants of Western civilization the dogmatic truths of Christianity had come to be accepted as a final statement of creed. The certainty sought by the fathers of Christianity was to their satisfaction furnished by the foundation of revealed religion accepted on faith The desire and necessity for religious propagation made it essential to restate this dogma, given through revelation, as cogently as possible. Any objections that might be offered on rational grounds had to be met with arguments that would meet the objectors on their own terms Obscurities of language and meaning which frequently were found in the revealed word had to be clarified and made unequivocal In this enterprise reason served the end of making revelation understandable, and on some occasions of doubt the end of supporting belief with logical arguments The churchmen who employed themselves as propagandists of the faith were more and more forced to become rational theologians devoting their efforts to a restatement of divine revelation in cogent terms for rational objectors

At the beginning of the Middle Ages reason functioned as the humble servant of faith since religious truths accepted on faith were regarded as ultimate criteria, while reason served merely to put such revealed truths in a form to be grasped by reasoners One of the earliest expressions of the relation of reason to faith was that of Tertullian many years before the period of medieval thought His opinion was substantially that of many others and claimed that reason is a possible criterion of truth, but one completely superfluous to faith. If reason can be used to promote church doctrine, well and good, but it cannot be considered a *necessary* function of the mind, for the truths of Christianity are established by faith

A greater recognition of the value and function of reason is found in Scotus Erigena He maintained that, though the fundamental doctrines of the church are derived from revelation, the figurative language used to express them necessitates the use of reason in the *interpretation* of them. According to Erigena reason is still largely the handmaiden of faith but its use is made more extensive. Faith and reason stand side by side without strife or contradiction.

Long before Erigena's time, however, the majority of churchmen saw clearly that too liberal an application of reasoned analysis to revelation might result in diverse interpretations Accordingly, specific interpretations had been adopted at the councils. It is not unexpected, then, that when Erigena insisted that his personal interpretation was as good as any other, we should find the church condemning his work. It was dangerous to church dogma to give reason so prominent a place, and it was equally dangerous to recognize the right of individual interpretation of revelation. These conditions plus a pantheistic religious philosophy served to call down the wrath of the church upon Erigena, and, as someone has aptly said, his teachings went out like a lamp in the darkness

It was not until the twelfth century that a man had the boldness to declare himself ready to give reason a substantial place beside faith in the analysis of church doctrine Peter Abélard is one of the most interesting of the men of Medieval times both from the standpoint of his personal life and his intellectual efforts as a man of the church His earliest treatises on the problem of faith and reason indicate that he was in sympathy with the traditional Scholastic subordination of reason to faith In an early work on the Trinity he expressed his position by quoting from Gregory the Great "There is no merit in a faith whereof human reason furnishes the proof "[1] He added, however, to explain the purpose of his treatise, that it is only possible to meet objectors to the faith by using the same arts they employ in attacking it In the course of his life, the critical impulse led him farther away from the traditional attitude until at last it caused him to be brought before the church councils of Soissons and Sens to answer for the heresies his reason had led him to expound

In Abélard reason seems finally to have become the judge of faith. Reason would appear to regard faith as satisfactory in its proper place The event of God becoming Christ at the incarnation, the resurrection, and other accounts basic to Christianity, reason would regard as good stories embodying much valuable moral teaching but rather too far-fetched to be accepted literally For the church such an attitude was dangerous It had been the authoritative historical account of Christianity that had caused its far-flung acceptance. Now, if the authenticity of the history were to be doubted, there is grave danger of a growing weakness of faith and a

[1] Poole, *op. cit.*, p. 138

spread of heresy The safety of the church demanded the persecution of Abélard

With additional knowledge of Aristotle coming to light during the late twelfth and early thirteenth centuries through Arabian channels a new interpretation of the significance of reason was made possible The Aristotelian influence was profound At first, however, the church was hostile and condemned the teaching as it arrived with Arabian pantheistic trappings When more of the original works were at hand, it was found that pantheism was not a necessary interpretation, and in time the Aristotelian philosophy was taken over in large part to assist the church Aristotle's emphasis upon the power of rational knowledge forced the church to give reason a more specific role The fact that philosophy was not in all respects bound up with religion forced the church to find a way to reconcile Aristotle, the authority in science, with the church as authority in faith This was accomplished most ably by the great church doctor, St Thomas of Aquinas, by making use of the doctrine of the two realms, that of grace and that of nature, together with his doctrine of the twofold truth.

St Thomas maintained that there is but one truth revealed by God but that it has many aspects Some of these may be understood by reason, others by faith only In reality there can be no disagreement for, in the first place, but a single truth is manifested, and, in the second place, faith and reason deal with two provinces that are separate, the truths of one not being subject to the criterion of the other Reason deals with the realm of nature while faith has as its province the realm of grace Taking his cue from Aristotle's thesis that knowledge is derived through a process of reasoning from the general to the particular in syllogistic fashion, St Thomas was able to pronounce the most general principle or truth from which all particulars are deduced, to be God He argued that reason could not grasp the meaning of God, thus making faith necessary in establishing the most general and significant of all truths The truths of reason are obtained after an arduous mental effort that is beyond the capacity of most men. But the truths of salvation, by far the most important of all truths, are accessible to all alike through faith. If salvation and knowledge of God depended upon reason alone, few indeed would be saved For St Thomas, then, faith is first in sublimity and significance It is the starting point for reason. If properly employed with nature as its subject matter,

reason exhibits truths that stand side by side with the truths of faith because nature as a part of God's creation cannot fail to reveal His truth Reason is a valid criterion so long as it does not presume to legislate in the realm of grace, but its truths are more limited in universality than the truths of faith and less important in the lives of men

The separation of faith and reason and the assigning to them of separate spheres of authority was the move that led to the final and complete separation of theology from science during the later Middle Ages. The original purpose behind the separation had been to make religion secure through restricting the scope of reason to physical events. This same desire dominated the thought of Duns Scotus, who on some subjects was the most ardent opponent of St Thomas Duns Scotus, and with him William of Occam, agreed, however, with St. Thomas that reason does not properly apply to theological issues The thing to do, therefore, is clearly to restrict reason or philosophy to the natural world The problems of immortality, the creation, incarnation, the Trinity, the sacraments, all must be accepted on faith, reason must not attempt to understand them

With various problems properly allotted, the understanding of nature through the use of reasoning and the acceptance of theological principles on faith could go on simultaneously without harm being done to either. The doctrine of twofold truth might even exhibit contradictory interpretations without damage. What is shown to be true according to reason may be false in terms of the higher criterion, faith Almost any statement might be declared true under the banner of reason even if it contradicted accepted principles of faith providing the one offering it added that of course it was not really true[1] according to the higher criterion of faith.

With interpretation advanced to this stage it was but a step to the practice of some, who were hostile to the church and interested chiefly in applying rational principles for the advancement of science, to propound theories and observations of a scientific sort that contradicted religion In this way, by subtle steps, a body of scientific knowledge uncontaminated by religious principles gradually grew in volume The vast majority of those who engaged in this liberal tendency were at heart devoutly religious but were discontented with the restrictions placed upon their thought by the

[1] Windelband, W, *History of Philosophy*, p 323

church Many of them preferred to accept the dictates of reason rather than faith when discrepancies arose between these criteria. With the waning of the medieval period there arose increasing numbers of those who refused to agree with St. Thomas that there are truths we must believe yet cannot understand There were fewer to accept the principle that things true according to faith may be false according to reason The scientific interest and enterprise gained in momentum from the time Greek science was first introduced into the period of the Middle Ages.

For a time after this introduction it seemed as if the gap separating religion and science might be spanned with the concept of universal religion, together with the conviction that nature and revealed religion spring from a common source and ground Still, in order to keep its skirts clear of contamination, the church found it progressively more necessary to avoid confusions and contradictions arising from interpretations of dogma inspired by an earnest desire to substantiate the thesis that the same truths are revealed in nature as in scripture The nearer the two realms were drawn together the more obvious became the elements eventually to split them wide apart Though the conviction was widespread that no contradictions really existed between them, it became more and more difficult to cover up or explain away "seeming" discrepancies. Faith and reason as authoritative criteria were forced to draw apart, their proponents to confine each to its separate sphere of application The church continued its refusal to recognize any fundamental disagreement on the ground that some truths lie beyond the scope of reason and must be accepted on faith But the lines were too firmly drawn to be erased by such arguments Those who accepted the division and devoted their energies to learning from nature grew in numbers and importance And with this development came the inevitable antagonisms between churchmen and the philosopher-scientists In the ensuing struggle the church came off second best and the modern period was born in the rise of the new physical science and the revival of humanistic literature.

## DISCUSSION TOPICS

1. Define the boundaries of the period of medieval thought and compare its length with the Hellenic-Roman period and the period of Greek thought

2. What is the outstanding characteristic of the medieval period? Of what significance for this period was the work of the Patristics?

3 Trace the historical background of the problem of universals.

4 Distinguish between the phrases *universalia ante res, universalia in rebus, universalia post res*

5. Explain why the church was so violently opposed to the doctrine of nominalism Distinguish nominalism from realism

6 Trace the controversy between realism and nominalism through the period of medieval thought

7 Why was syllogistic logic a useful tool for the churchmen of this period? Of what importance was the proof of God's existence for the application of logic?

8 What is the meaning of the term *scholasticism?*

9 Explain how nominalism made for the advancement of scientific interest and knowledge.

10 Distinguish the differences of interpretation with regard to the criteria of faith and reason as offered by (*a*) Tertullian, (*b*) Erigina, (*c*) Abélard, (*d*) St Thomas, (*e*) Duns Scotus

11 What is the meaning of *Occam's razor?* What is a modern expression of it?

12 What is meant by the doctrine of the *twofold truth?*

13 From outside sources ascertain (*a*) What is meant by the ethics of Christianity, (*b*) the argument used by the church to support its claim to political sovereignty

## PARALLEL READINGS

BOAZ, GEORGE *The Major Traditions of European Philosophy*, Chap IV
CUSHMAN, A E. *A Beginner's History of Philosophy*, Vol I, Book II.
POOLE, R L · *Illustrations of Medieval Thought and Learning*
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Secs 20, 21, 22
THILLY, FRANK *A History of Philosophy*, Secs 20–35
WINDELBAND, W. *History of Philosophy*, Part III

# Chapter XI

# NEW IDEAS FOR OLD

## 1. *Symptoms of Disruption*

The world inhabited by Europeans of the medieval period was complex and awe-inspiring and at the same time full with meaning and purpose It was God's world and men were God's children and nothing was out of place or beyond the pale of belief for the true follower of Christ If miracles happened, they were God's miracles If unexpected catastrophe struck, it was merely beyond the understanding of man but well within the province of God's power and entirely compatible with divine omniscience The Christian philosophy of history, pronounced chiefly by St Augustine, had become familiar and acceptable to all those who associated themselves with the church The entire universe was pictured as a drama in which man was conceived to play a central role as the inhabitant of a world specially created. His life here on earth was of minor importance as compared with his future existence in the life hereafter Most of the problems that had puzzled thinkers during preceding centuries had become nonexistent All things were for the best as part of the complete and perfect plan The problems of utmost significance were those which concerned the procedure necessary for speeding the human soul to its ultimate heavenly destination Answers to all those problems had been given, and put in stereotyped form by the official church All truths were complete No criticism was necessary In this world there were no events which could not be accounted for in terms of the fundamental religious viewpoint of the age. The average man was content with the traditional ecclesiastical interpretation of the relationship between himself and his world and his God, for that point of view was such that it gave him the favored place in all creation It promised him the thing he most wanted—a life in the blessed hereafter. This systematized religious interpretation of the cosmos served as a framework upon which the whole of human experience

could be fitted It gave stability, consistency, and meaning to the sequence of physical events. It directed, interpreted, and evaluated the entirety of human actions There were no loose ends to creation, nothing that was incoherent—at least to God

Though this was the typical attitude held by the man of common sense toward his world, there were conditions which encouraged trends of thinking along different and opposed lines Not all men, as has already been shown, were content to accept on faith the principles laid down by the church, nor were those men satisfied with the restrictions placed upon their thinking by dogmatic interpretation. It was a long struggle before liberal thinkers were able to make much of an advance against the tremendous force of tradition But by the time of the Renaissance, their numbers and influence had increased to a point where their type of thinking was able to become a dominant force The conditions favorable to a less dogmatic view of the world emerged as the products of a constantly growing reaction against the forces that for centuries had been the strongest supports of Catholic solidarity and dominance in Europe

Throughout the long period of the Middle Ages a strong tie that bound all peoples together was a common language Communication and discourse were simplified, and diverse people of different origins were able to be united more easily through their use of Latin Church dogmas could be much more easily spread and popularized However, even during the early centuries of the Middle Ages, there were growing signs of a disruption of this unity Though Latin was the official language of the church and state and remained the official language decades after the Renaissance, it was not completely universal. The vernaculars began to gain in popularity throughout various parts of Europe, beginning with the speech of the poorer and less influential strata of society and gradually filtering into the usage of more intellectual groups. In this respect it is significant to note that Dante's *Divine Comedy* was written in Italian rather than in Latin. Petrarch and his disciple, Boccaccio, too, are to be remembered for their use of the people's language This growth of the use of vernacular languages was an important agent in breaking down the unified authority of the church during the rise and development of European states. The timely invention of the printing press during the middle of the fifteenth century contributed the indispensable means for

spreading new ideas, which, for the most part, were printed in the vernaculars

Nationalism, as we know it today, had its inception simultaneously with the development of vernacular languages Though this movement began at least as far back as the eleventh century, it was to receive its most influential philosophical apology from Machiavelli Machiavelli was convinced of the necessity for separating state and church authority so that the state could rise to power and significance unrestricted by ecclesiastical authority He thus marked himself as a nationalist of the first order He has been offered in history as the classical advocator of unscrupulous practices, of the end-justifies-the-means policy in government, procedures not unfamiliar to twentieth-century dictators According to Machiavelli, if a state is to be strong, if success is to attend its growth, power must reside in the hands of a strong, even despotic, ruler This ruler must have the freedom to employ all the resources of a state in order to advance or maintain that state's position among the family of nations. These are fundamental premises of a sound theory of nationalism Automatically justified, therefore, are any and all procedures certainly and efficiently capable of realizing the end, a strong state If murder, plots, treachery, deceit, general unscrupulousness function in this capacity, they should be held as virtues rather than vices. A strong state being dependent upon a strong ruler, any device to achieve the end is thereby given its passport to the category of acceptable practice. Much later, in the work of the German Nietzsche, we are to discover a restatement and reapplication of this underlying philosophy of power.

More and more did conditions of the medieval period work toward a separation of the civil and ecclesiastical authorities Up to the middle of the thirteenth century the church authority over political institutions was absolute and its maximum of power was reached under Innocent III. A decline began thereafter, the decisive break coming when Philip IV of France was able not only to defy church authority but to remove the seat of the papacy from Rome to Avignon, in the early fourteenth century. This seventy-year Babylonian captivity, as it is known in history, not only served to break down the authority of the church in the matter of political control, but it was instrumental in dividing the authority of the church itself This was inevitable in view of the fact that for some

forty years following the captivity two popes reigned simultaneously, one in Rome and one in Avignon The claim of each to absolute infallibility created a situation a bit too absurd to be countenanced even by many of the genuinely orthodox supporters of the church The divided authority of the church was accompanied by a division of allegiance among the nations. Some supported Avignon while others favored Rome. To obtain civil support the divisions of the church made concessions and abandoned much of the previously exercised right to interfere in national affairs New sects arose, symptoms of the declining power of the church, leading finally to the Protestant revolt with Luther as its central figure Such men as Peter Waldo, John Wycliffe,and John Huss had already become dissenters, and Calvin added the weight of his influence to the revolt brought to a climax by Luther's open defiance of the church These, one and all, obtained aid and protection of varying degrees from leaders of the rising nations of Europe They had in common the conviction that the Bible should be the exclusive guide for the conduct of life directed toward the ultimate goal of salvation The reverberations were so tremendous that a reformation within the church ensued. The Council of Trent sat for nearly twenty years (1545–1563), during which time the declaration was made that the church was as much an authority as the Bible and that the Pope alone was God's representative Liberal thought in Italy ceased to exist for centuries after the public burning of Giordano Bruno in 1600 As the control of the church decreased in the other parts of Europe, the ecclesiastical foot was planted all the more heavily upon Italy Though it was in Italy that the Renaissance first started, this movement was continued by the more northern sections of Europe

With respect to life and his world, the medievalist adopted an attitude of naive common sense. All things were as they appeared. The troublesome problems of perception did not cast their veil between things as they are and things as they seem The senses revealed to man the world as it is, and, if he became puzzled by their evidence, final knowledge could always be had of its ultimate nature and meaning by the simple procedure of acquiring the truth from the parish priest, since the church had its answers ready formed. God in his infinite mercy and justice and goodness could be relied upon to have constructed an abode for his chosen creatures that could not be otherwise than the best Confusions of

experience could be accounted for either as trivialities due to human carelessness or as the result of human inability to grasp the complete organization of things directed by divine omniscience Things were to be taken at their face value as manifestations of God's will, not to be challenged or criticized Faith, rather than curiosity, was the dominant mental set of the age

This faith of the masses was sufficiently strong to discourage any very widespread desire to exercise the reason in opposition to revealed truths With the waning of the period this naiveté of the masses came gradually to be more shaken by the remarkable results of those few unusual men who gave their attention to a critical study of things and events as strictly natural occurrences These preferred to investigate what was at hand, to be contented with the self-contained results of experience, rather than to rest satisfied upon stereotyped solutions dependent upon ecclesiastical first causes This critical interest is outstandingly illustrated in the work of the remarkable scientists of this period, Copernicus, Galileo, Tycho Brahe, Kepler

Another expression of the temper of men dissatisfied with old ideas found outlet in the numerous voyages of exploration that, during the fifteenth and sixteenth centuries, widened the horizon of Europe a thousand fold In the field of navigation, there were also men who had the temerity to test ancient beliefs at the risk of their lives and thereby to show the absurdity of belief without other sanction than age. For example, Magellan's voyage proved beyond doubt the roundness of the earth, a hypothesis indicated empirically by the rising ships of the Mediterranean viewed through Galileo's telescope While the students of celestial mechanics were enabled to extend their grasp of the heavens by means of the telescope, the navigators were aided immeasurably in their self-appointed task of discovering and mapping unknown regions of the globe by the invention of the mariner's compass It is impossible to estimate just how great an influence upon the mind of Europe these celestial and terrestrial explorers exerted, but that it was enormous seems obvious enough

Throughout the medieval period the practice of the church most justifiably to be criticized was its persistent hampering and persecution of those men who engaged in the pursuit of natural science. Though the reasons for this obstinate opposition are apparent, it remains a fact that it was the chief source of retardation to

scientific progress and an obstacle to the spread of learning. Almost the only field of creative enterprise not constantly subject to close scrutiny was that of art, although here, too, the subject matter tended to be confined largely to Madonnas, Holy Families, and scenes from church history, since the church saw only benefit for itself accruing through the use of religious subject matter Much of the feeling found in the art works of this period may be interpreted as the outpouring of the fervent religious experiences of the artists who created them Illustrious names run through the period from the thirteenth to the sixteenth century, in Italy especially It produced such men as Giotto, Donatello, Fra Angelico, Botticelli, Signorelli, Leonardo da Vinci, Raphael. Michelangelo Here in the realm of art, achievement ran high, but it took science 350 years to produce a Galileo, whose work was condemned by the church fifty years after Michelangelo was dead There is little reason to believe that science would not have kept pace with art had it been left unencumbered by religious prejudice It affords an excellent contrast with artistic progress in this period and speaks for itself as a case against ignorant attempts to predetermine the content of future science [1]

## 2 *Revival of Ancient Authority*

The first impulse of those who inquired into the phenomena of nature was to turn backward to the Greek authorities of pagan centuries Aristotle was orthodox for the church, but it was still possible for other authorities to be proposed and accepted, authorities who were quite opposed to traditional Aristotelianism. This movement in the direction of a revival of ancient authority is an aspect of what is commonly known as Humanism. With more of the original works of all manner of ancient authorities available with the arrival of the fifteenth and sixteenth centuries, there arose diverse new schools of thought during the early Renaissance It was natural that the first schools should rise in Italy, since she lay directly in the path of trade and travel between the eastern Mediterranean and the rest of Europe Demand for an understanding of Greek, so that knowledge of additional ancient authorities could be obtained, brought Greek teachers to Italy in the early fifteenth century. The fall of Constantinople added many others after the middle of the century Here, especially at Florence

[1] See Russell, Bertrand, *The Scientific Outlook* Chap V.

and Milan, flourishing schools arose seeking to make known the products of ancient culture The Florentine Academy was perhaps the best known and the most influential of them. Here Plato was taught through the medium of Neoplatonic mysticism The influence of the school was strong enough to cause the Vatican for a time to vacillate between Plato and Aristotle as ultimate philosophical authority basic to their dogmas Stoicism once more became the philosophy of the urbane and hence the official world view in many cultured circles Skepticism was revived in the work of Erasmus in Germany and Michel de Montaigne and Pierre Charron in France The work of these men clearly aided in disrupting the hidebound authority that had been the chief characteristic of the centuries immediately preceding the Renaissance Ultimately, however, most influential of all these ancient authorities was Aristotle, who had become officially recognized by the church during the thirteenth century None the less, all was not in the best of order within the house of Aristotle.

The Thomistic interpretation of Aristotle, deeply influenced by the solution of the problem of universals offered by Abélard, by no means wholly stifled other interpretations of the famous founder of the Lyceum It was clear to some that the "official" church solution was as arbitrary as any other, its acceptance being due chiefly to the cleverness of St Thomas rather than to the truths involved in its statement A movement asserted itself in the direction of a return to the original Aristotle and its object was to short-cut the maze of popular commentaries on his work, thereby obtaining a firsthand insight unencumbered and uncolored by tradition. An outstanding leader of this endeavor was Pietro Pomponazzi, who wrote during the opening quarter of the sixteenth century.

Pomponazzi was stimulated to pursue his new venture chiefly because of the controversies existing with respect to whether or not Aristotle had taught a positive doctrine of immortality The pagans, best represented perhaps by Alexander of Aphrodisias, were disinclined to construe Aristotle as arguing for personal immortality. The same attitude was held by Averroes and the Arabian school With the latter, immortality was possible only according to the meaning of it as involved in pantheism The merging of individual souls with the world soul, with the All, is a view that has never held much consolation for orthodox

believers and has been the object of ecclesiastical attack, as in the case of Scotus Erigena The Scholastic interpretation, or adaptation of Aristotle by St Thomas, alone offered a positive claim To settle the issue for himself Pomponazzi moved to return to the source of the arguments, the original works themselves That his final judgment carried him with Alexander rather than with St. Thomas is less significant than the procedure he followed which led to his ultimate conclusions It was an example of a tendency, growing more widespread constantly, of returning to the ancient classics for inspiration and guidance It is not surprising that his humanism should first have served to increase the prestige of ancient authority. It is more striking that out of the weirdest of the older interpretations, the Neoplatonic and Pythagorean, should emerge finally the basic impulse and method of modern science.

### 3. *Rise of the New Science*

It has been indicated in the previous chapter that left-wing interpretations of both the problem of faith and reason and that of universals contained within them the roots of modern thought. Though in the minority until near the close of the Renaissance, those who held to the priority of reason over faith and insisted upon the nonreality of universals continued and nourished the rising tradition of nominalism With these the provinces of religion and science came to be more explicitly differentiated and delineated. This persistent opposition to Scholasticism was abetted by no less ardent efforts on the part of the mystics, both Pythagorean and Neoplatonic. One of the most significant outgrowths of this latter interest was theosophy, that limbo of dark mystery suspended between theology and science.

Both the scientific interest as exemplified in Occam, Roger Bacon, Telesio, Tycho Brahe, Copernicus, and Kepler and the interest of theosophy converge upon nature. Both desire to know about it, to discover its secrets, to amass knowledge, to control it effectively in the interest of practical ends. Beyond this point the paths draw far apart The assumptions are different and therefore basically so are their methods. Their common objective and hunting ground alone bring theosophy and science together. Long before coherent principles of scientific methods emerged, theosophy was in the field as a dominant force. The

period model of it is traceable chiefly to the Neoplatonists Nature is to be studied not disinterestedly for what it may be discovered to be, but in order to find the mysterious secret of its manifestations. Behind events and things lurks a hidden supernatural force or plan, the function of which must be discovered if nature is not to remain a riddle It is not caprice that rules the world but agencies beyond phenomena whose secrets must be divined through magic formulas The enterprise becomes one of search for secret doctrines, mysterious practices, the "key of Sesame," the philosopher's stone Alchemy and astrology grow as basic investigations Nature must give up her secrets In this undertaking best known, perhaps, is the Swiss physician, Paracelsus

The fruitlessness of magic as a source of authoritative knowledge inevitably became more apparent to men undertaking a study of nature unencumbered with fantastic presumptions about the order and structure of events Yet in spite of the barrenness of most results of the search for magic formulas, a few facts could not help emerging from investigations of alchemists and astrologers. The alchemists were bound to uncover some truths about earth elements while studying them for a secret method of changing the base elements to precious ones Likewise, the efforts of astrologers to predict future events and prognosticate character traits by the positions of stars and constellations were, by their use of star charts, in a position to supply unknowingly a foundation for disinterested astronomy So it was that while the assumptions of astrologers and alchemists were wrong and their conclusions fantastic, they served to assist the emergence of true sciences of stars and chemical elements Regardless of the fact that the philosopher's stone remained undiscovered, and from lead gold and silver could not be made, much indeed was learned about stones and gold and silver as such Whatever the doubtful value today of theosophy, the mother of much pseudo science, it did, at the dawn of the modern era, make a contribution to science, even though an unconscious one

More accurate and practical knowledge of nature, accumulated through the efforts of those who studied nature objectively, gradually lent prestige to the criterion of experimentation and observation to the discredit of magic As an example of such students, Leonardo da Vinci should not go unmentioned Had he written, Leonardo da Vinci might well have advanced the

modern era a hundred years His private notebooks reveal a temper and technique thoroughly in accord with the fundamental principles of science as they became clarified a hundred years later by Galileo There were other men perhaps less talented than Da Vinci but who served better than he to popularize the new method in spite of ecclesiastical opposition To these unnamed scientists the modern age owes a considerable debt, for they helped make possible the wonderful advances in science and knowledge that are historically associated with the Renaissance.

The foremost single influence in the later Renaissance was the work of Copernicus, who succeeded in supporting, against Aristotelian Scholasticism and common sense, the heliocentric theory of the solar system. Six years of study in Italy offered him an adequate opportunity to acquaint himself with the scientific treatises of ancient thinkers Among them he found occasionally a suggestion that the earth might be in motion. Among Pythagorean writings, especially, he found this suggestion offered from time to time. Along with this and other hypotheses, the Pythagoreans had employed a mathematical interpretation of the universe. Impressed, Copernicus argued that, since others before him had ventured to permit the earth to move as a hypothesis, he, too, might enjoy that privilege, especially since by its use he hoped to prove the greater glory of God A source of perplexity for him had emerged from the mathematical charting of the solar-body movements according to Ptolemaic assumptions By this hypothesis the universe was described as an immensely complicated pattern not obviously in accord with what might be expected from thoroughgoing mathematical scheme of things Planetary motions should be more regular, harmonious, and simple Since God was responsible for the entire creation, it was not unlikely that, knowing the principles of geometry, he would have geometrized at the time and created according to the beauty of simplicity If this hypothesis is reasonable, then perhaps some mathematical description other than the Ptolemaic may be better, since it may be a more accurate picture of the arrangement of God's creations

These were hypotheses familiar to the thinking of Copernicus. He was highly gratified when, at the end, his calculations indicated that, if his theory were correct, the solar system operates in a manner less than half as complicated as that indicated by Ptolemy. This was a revolutionary advance and beyond it Copernicus

feared to go He still retained the concept of a sphere of the fixed stars and the universe remained for him finite However, it would appear that Copernicus from the beginning would have been in sympathy with the Spanish prince who remarked, while studying the Ptolemaic system "If I had been present when the universe was made, I should have seen to it that it was made more simply "[1]

Though Copernicus urged his new theory upon the leading mathematicians of his time, few accepted it and not until after the work of Galileo and Bruno did the theory become widely known and either accepted or opposed At first, even the church, under Clement VII, placed its stamp of approval upon it, in the year 1530 By 1600, however, the church reversed its opinion, silenced Galileo in 1616 Not until 1822, as someone has said, did the sun obtain official consent of the papacy to be the center of the solar system

For at least three reasons the Copernican theory made slow progress for several decades following its announcement in 1530 In the first place, it contradicted the centuries-old authority of Aristotle Aristotelian astronomy and teleological physics were so firmly ingrained in the thinking of sixteenth century Europe that no single theory, especially one which thoroughly contradicted the accepted view, could hope to gain much foothold The explanation of this condition is to be found in the fact that Aristotle had become authoritative in the matter of acceptable conclusions concerning the world of nature Owing chiefly to the efforts of St Thomas Aquinas, the church had in the thirteenth century placed its official stamp of approval upon the scientific treatises of Aristotle The church, as the dominant force during the medieval period, was able to establish what authority it saw fit, and the union of Catholic theology and Aristotelian science remained intact as a dual barrier to new thought until its hold was eventually loosened during the later Renaissance and early modern period

In the second place, the theory contradicted accepted beliefs guaranteed by Scripture Religious laymen looked upward when they gazed toward the Christian heaven and pointed downward when they talked of hell To such, it must have been no end disconcerting to realize that, twelve hours after morning prayer

[1] Burtt, E A, *Principles and Problems of Right Thinking*, p. 319. By permission of Harper & Brothers, publishers

when they had lifted faces to heaven, should they repeat the performance they would then be gazing toward hell If the earth be conceived to move, then the whole scheme of things is topsy-turvy The earth in its revolution about the sun would come very close to blundering right up to the pearly gates themselves, all of which indicated the palpable absurdity of the new theory No self-respecting Christian could be so great a fool as to take the view as anything other than another farfetched notion of some misguided and no doubt deluded scientist After all, is not man of greatest importance in all creation? Were the earth and all things on it not created for his enjoyment? Was the sun not made to shine for him? It was not in accordance with the divine plan of things to believe that man and his world are not absolutely central in the cosmic show To believe otherwise would be degrading to both man and God

Thirdly, the theory contradicted common sense A number of everyday observations did not seem to fit into the Copernican scheme of things at all For example, it would be the case that, if the earth spun upon its axis, people and things would be thrown off, as is the case with ordinary objects on rotating surfaces It is also common experience that an object when tossed straight into the air will fall exactly at the point of its projection. Now, if the earth moved on its axis, surely such an object would be discovered to fall at least a little to the west of its point of projection The fixed stars, too, would obviously change their positions as the earth revolved in its great orbit around the sun However, regardless of season, this is not experienced to occur Furthermore, the sun actually appears to rise in the east, cross the sky, and set in the west It would be much simpler to suppose the sun to do the moving rather than the earth These common-sense arguments were enormously convincing then and formed no mean obstacle to overcome When general acceptance of the Copernican viewpoint did come eventually, it is little wonder that it revolutionized human thought. It

> seemed at first merely to overthrow the authority of Ptolemy, in reality it swept man out of his proud position as the central figure and end of the universe, and made him a tiny speck on a third-rate planet revolving about a tenth-rate sun drifting in an endless cosmic ocean [1]

[1] Randall, John H., *The Making of the Modern Mind*, p 226 By permission of Houghton Mifflin Company, publishers

It was Galileo who really brought to focus and formulation the principles somewhat obscured in the thinking of Copernicus Before turning to the work of this man, however, one should note the contribution made by Kepler The latter is an excellent example of one who thought with the medievalists but produced results the consequences of which were antischolastic. Kepler is best known for his formulation of three laws of planetary motion, but for the present purpose the procedure his thought followed is of more importance No better example of the type of underlying hypotheses that guided his thinking can be found His efforts were stimulated by a desire to show that God is the author of all creation, that in creating he always geometrized, and that the product of his craftsmanship is a universe beautiful in its simple, harmonious functioning Thus his basic interests were religious and scientific By science he hoped to prove the greatness of the works of God That he was a man of the past is indicated by the fact that his search was for the *why* rather than the *how* of events. The modern scientist seeks descriptions of how events occur He does not know nor is he often interested in the problem of why events occur as they do The philosophy of the church and of many scientists such as Kepler involved a search into the final causes or the why of all physical events His three laws pleased him because they appeared to verify his fundamental religious assumptions He, along with Copernicus, on the philosophical side, adhered to ideas involved in the ancient Pythagorean mysticism of numbers His astronomical work grew out of his interest and belief in astrology The sun, the realm of fixed stars, the everywhere-present ether, appear in his analysis as, respectively, the Father, the Son, and the Holy Ghost God's glory may be heard in the music of the spheres.

With Galileo all these mystical religious trappings fall away He was not concerned to inquire *why* the universe is so organized or ordered as it is, even supposing it to be possible to make such a discovery. Man lives in a world which presents itself to the senses in ways that man cannot control, and the more practical attitude to take is that of seeking to discover *how* events take place Whether or not it is assumed that the universe was created by God and that man has a peculiarly important role to play in the order of events is of small objective significance. Wherever he got them, he has capacities and talents suitable to carry him a long way

toward an understanding of the world as it appears to him Whether as a creature of God or merely as an animal endowed with intelligence, it is his duty and should be his privilege to learn as much as he can about his world This approach to knowledge is just as revolutionary in theory as were the results of the Copernican analysis It amounts in substance to substituting an inductive approach for the traditional deductive one It asserts that whatever far-reaching conclusions are to be drawn about the universe should be at the end of investigation rather than at the beginning of it The church had long argued from first principles derived from revealed sources For example, from the proposition that God created the world and man, the Schoolmen proceeded to draw whatever conclusions appeared to them to follow from that first principle Galileo's proposal was the reverse of this First study the world as revealed to experience and from this data formulate the general principles descriptive of it This is clearly a giving up of the entire medieval search for final causes and a declaration for empirical research No discovered fact need be nor should be measured on a Procrustean bed of preconceived ideas or standards

Terrestrial dynamics were virtually created by Galileo, and it is in this field that his greatest scientific contributions were forthcoming. Here his most striking break with the Aristotelian tradition was demonstrated at the leaning tower of Pisa For those who would believe their eyes, he showed the absurdity of the hypothesis that the speed of falling bodies is correlative to their weight. He went on to show that the rate of acceleration cannot be correlated with distance, but rather with the *time* of fall His famous experiments with the inclined plane and the pendulum may serve to remind us of the extensive use to which the empirical criterion was put Through them emerged the foundational laws of motion inherited by Newton, who was born the day that Galileo died The telescope Galileo invented served to verify many of his own conclusions and supported empirically the Copernican hypothesis. It made possible *Siderial Messenger* and was instrumental in depositing him before the scowling Inquisition.

Two items of special philosophical interest grew out of the discoveries of Galileo For one thing his experiments for the first time synthesized the two inseparable aspects of scientific method, induction and deduction To find out *how* bodies move is essentially

an inductive process of going to the events themselves to discover the principles Formulated, roughly at least, the principles form the basis for deductive application By Galileo these were used in conjunction with constant effort to obtain conciseness through quantitative measurement This application of mathematics to the development of scientific method, so abundant in Galileo, is strikingly absent from the philosophizing of his famous English contemporary, Francis Bacon It has often been remarked that the later philosophies of rationalism and empiricism are to be regarded as growing out of the work of Galileo and of then splitting apart over the issue of which is more significant ultimately in the search for truth, deduction or induction However this may be, at least it is obvious from subsequent developments in science and philosophy that Galileo was just about the first of the truly modern men

The other influential contribution made by Galileo has to do centrally with theory of knowledge Through him the problem of sense perception passes over from the ancient atomists to the modern British school, which begins with Bacon and Hobbes The critical spirit dominant in Galileo is indicated by the complete break he made with medieval thinking It is commendable that the same critical insight should be turned upon the fundamental criterion of experience he used The later distinction between primary and secondary qualities so clearly made by Descartes and Locke is just as clearly made by Galileo Bodies have by their own natures certain properties essential to them, but they have the power to produce manifold effects which mistakenly may be thought to be intimately part of them This is brought out definitely in his assertion

> I think that those tastes, odors, colours, etc , on the side of the object in which they seem to exist, are nothing else but mere names, but hold their residence solely in the sensitive body, so that if the animal were removed, every such quality would be abolished and annihilated [1]

The naive realism of the Middle Ages is here thoroughly rejected in favor of a theory of subjectivity of sense perception, and Galileo is in accord both with the ancient atomist and with the modern empiricist

[1] Quoted from Galileo by E A Burtt, *Metaphysical Foundations of Modern Science*, p 75 By permission of Harcourt, Brace & Company, Inc , publishers

## 4 *Giordano Bruno*

No man who lived during the sixteenth century more thoroughly caught the spirit of the new age nor was more eager to defend and popularize it than the fervent and emotional southern Italian, Bruno In the history of thought, he is to be remembered more as a propagandist for the new ideas than as an original thinker He saw in the Copernican view the possibility for a broader, more far-reaching interpretation of the cosmos, one that would shatter the sphere of the fixed stars and replace the finite world of Aristotle with one of infinite proportions. Bruno thus built for himself a new philosophy upon the foundations of the new science. Not that his was strictly a naturalistic philosophy, for Bruno was still too close to the past respecting fundamental religious beliefs to divorce his thinking entirely from the tradition against which he was revolting His mind was much less free in this concern than that of Galileo He pointed the new way, however, and was clearly a man of the period of transition from medieval to modern thought

The tie that bound Bruno to the past is traceable to his early training in the Dominican Order Though he came to violent disagreement with the church, he remained throughout his life at heart a Catholic and he possessed a rich religious experience that seemed only to be stifled by Scholastic dogma He spent his lifetime seeking to free his thought from prejudice on the basis of this principle Of the men who have died in defense of the principles in which they believed, few have come to so violent an end as did Bruno He was in trouble all his life, beginning with the time he entered a monastery at the age of sixteen There he had difficulties with the authorities over religious and personal affairs He was religiously ascetic and incurred the disapproval of the monks through his insistence upon retaining only a crucifix upon the wall of his cell His habit of speaking his mind at all times served further to increase his unpopularity He despised being ordered about and held himself in readiness for open revolt against it. Added to this, he was immoderately satisfied with himself and his opinions, an ardent egoist who made of his life a series of stormy episodes He was openly contemptuous of all who held opinions at variance with his and found little difficulty in discovering many to disagree with him. Whenever there were authorities,

Bruno was sure to be quarreling with them: with the Oxford authorities in England, Calvin in Switzerland, Luther in Germany, the Pope in Italy

Refusal to accept the orthodox Catholic interpretation of transubstantiation and the Immaculate Conception led to his leaving the church and his order to become a Protestant But he found here only other dogmatic beliefs He thereafter desired in his own way to reunite with the church if it would only alter certain of its fundamental dogmas He traveled from university to university in France, England, and Germany, seeking a living by his lectures or looking for a publisher for his books More often than not his sojourn at any one place was terminated rather abruptly by the authorities there It seems likely that the chief reason for Bruno's return to Italy in 1592 was to make his peace with the church He had, however, already said too much he could not unsay His host betrayed him to the Inquisition and, when he could not meet its unreasonable demands, Bruno was delivered into the hands of the secular authority to be executed "without the shedding of blood." He died at the stake before the eyes of Rome at the Field of Flowers in front of the theater of Pompeii in the year of our Lord 1600

What beliefs had this man that were so serious as to cause the church to take such drastic steps to silence him? Basically they were directed against the foundation masonry of the official and, therefore, true interpretation of the world and man supported by Scholastic theology More important, perhaps, than the beliefs themselves was the ardor of him who carried on the attack A less noisy person with even more radical beliefs might easily have escaped being burned alive. Against official dogma he supported arguments for an infinite universe identical with God The infinity of the universe was conceived to be an inevitable consequence of the Copernican view And this infinity furthermore bespeaks the wonder, the beauty, and magnificence of a God who, though responsible for the whole of creation, is yet not separate and apart from it The church itself proclaimed the omnipresence of God and to Bruno this must mean that God cannot be separated from the world. For the official church there was too much pantheism in the view to be acceptable.

The concept of a finite universe came about, it was argued by Bruno, from a propensity on the part of human beings since

Aristotle to believe that infinitude implies imperfection This reasoning, he held, does not follow if God is the agent of all creation It is unreasonable to believe that God, with unlimited power, would have created less than he could. For this reason the universe is unlimited There is an infinite number of worlds, of solar systems, and the universe stretches in all directions. What is its center? That depends upon the place of the observer and is relative to him On the earth we judge motion and distance from our point of view, on a different world, on the sun or a distant star, the center shifts accordingly. From a larger view, the sun is seen as the center of this particular solar system, but there are as many systems as there are suns or stars Therefore, there are no absolute limits to creation, no absolute up or down, east or west

Such being the case, is it reasonable to give to man, as the inhabitant of but one minor celestial body, so great an importance as Christianity claims for him? May there not be other worlds and inhabitants of them? Are the creation, the fall, redemption, true with reference to our world's inhabitants only, or is the process going on in a thousand different places all at once? Bruno's answer was that "man is no more than an ant in the presence of infinity. . A star is no more than a man" He held it no longer possible to interpret man and his world and God in the old manner of orthodox Christianity. There is no heaven beyond the infinite universe God is not a creature separate from his creation. The universe and God are one All nature is a beautiful, well-ordered, living being which may be viewed two ways On the one hand, God is the active creative force, on the other, there is the perceptible world which is the product of that force. As active principle, God was referred to by Bruno as *natura naturans;* as the world of things and events, the product of the immanent principle, *natura naturata* The whole universe is the *macrocosm,* a part of the whole, the *microcosm,* is a small replica or "miniature" of the *macrocosm* God and the *macrocosm* are one and the same No less a view could do justice to God The very grandeur and beauty of the cosmos reveals his greatness It is man's duty and business to learn as much about God as possible through a study of the universe, a part of which is the world. This is possible, since all parts of the whole are in essence the same and each in its way a mirror of the whole. To designate the parts, Bruno employed the term *monad* as a variation of the older concept, *atom,* without the connotation of

materiality Monads are forces or, at least, they are active and alive This marks a return to Milesian hylozoism, but it is attended by a vastly increased vision and range of comprehension

But how is one to study nature and, therefore, God, if our judgments are dependent upon observers and their points of view? Bruno met this challenge, contained within his own argument, by declaring that, though our point of reference in an investigation is indeed limited, insight is possible by supposing that the rest of the universe, which we do not see, functions like that which we do observe This principle is familiarly known as *uniformity of nature*, one of the most fundamental of the basic postulates of all science The productiveness of it is demonstrated with striking clarity in the work of Newton, the heir of Copernicus, Galileo, and Kepler It is the basis for the whole of extrapolation For Bruno, it was a statement of his belief that the general plan and structure of the universe are exhibited in all its various parts As one understands a limited field, the universe unfolds its secrets before his eyes This task is explicitly that of science and no restrictions should be placed in its way The spirit of individual inquiry not only must be guaranteed but also must be more widely encouraged in all departments of research Man must be permitted unlimited freedom to pursue the course of his studies

Herein is voiced a protest against the arbitrary limits set by institutions, especially the church, a cry that still must be sounded in our world of affairs in the twentieth century The restless spirit of Bruno chafed under all restrictions, and, in this larger field of science, to confine investigations within medieval limits seemed to him particularly obnoxious Especially was this so since he believed that scientific study was not in fundamental conflict with the church His concept of an infinite universe seemed more in accord with the nature of God and investigation could only reveal further His glory and power Therefore, let individual inquiry continue unrestrained Cast aside all obstacles to it whatever their origin may be whether in folklore, religion, or in any other traditional institution

## DISCUSSION TOPICS

1 What is the Christian *philosophy of history*?

2 What were some of the unifying agencies of the Middle Ages?

3 What were the fundamental principles of Machiavelli's political philosophy?

4 Why did the official church offer such persistent opposition to science?

5 Discuss the movement called *humanism* Who was Pietro Pomponazzi?

6 What is the meaning of (*a*) alchemy, (*b*) astrology, (*c*) divination, (*d*) theosophy?

7 What effects did the Copernican theory have on the traditional thought of the late Middle Ages? What conditions made for the slowness of its general acceptance?

8 Why was the work of Galileo of importance for philosophy?

9 What influence did the development of science have upon Bruno's attitude toward the church?

10 What were Bruno's arguments for an infinite universe?

11 Explain why Bruno is called a pantheist

12 In Bruno's philosophy, what is the meaning of (*a*) macrocosm, (*b*) microcosm, (*c*) *natura naturans*, (*d*) *natura naturata*, (*e*) hylozoism, (*f*) uniformity of nature, (*g*) monad?

## PARALLEL READING

CUSHMAN, H E *A Beginner's History of Philosophy*, Vol II, Chaps I, II, III
FULLER, B A G *A History of Philosophy*, Vol II, Chap I
SINGER, E A *Modern Thinkers and Present Problems*, Chap I
THILLY, FRANK *History of Philosophy*, Secs 36–41
WEBER, A, and PERRY, R B *History of Philosophy*, Secs 41–49
WINDELBAND, W *History of Philosophy*, Part IV, Chap I.

# Chapter XII

# THE MODERN PERIOD EMERGES

## A FRANCIS BACON

### 1 *Life and Work*

Bacon, like Bruno, is to be remembered as one of the early modern men to argue enthusiastically for a new way of thinking that should supplant the old He was more within the scientific circle than Bruno and less interested in advancing a cosmological interpretation of the universe For many years the development of scientific induction has been attributed to him. This is doubtless an overdrawn statement of the case It is rather more true that he popularized an old way of thinking and gave impetus to the growing popularity of inductive science His works were written for the most part in the English vernacular. He was himself not a scientist but he was more or less familiar with the science of his time and thoroughly aware of its possibilities as an instrument for making the world a better place in which to live

His life is an interesting one, for it reveals a man adept in self-promotion as well as one earnestly wishing to employ the fruits of learning for the benefit of mankind It is not, certainly, uncomplimentary of his ability that since his time there have been those who argue that it was Bacon rather than Shakespeare who was responsible for at least some of the work generally believed to be that of the English poet. He was educated for the bar but his interest in science served to divert his energies considerably during his leisure time He became more and more engrossed in the systematization and spread of general learning.

For much of his life he was close to influential people. Essex was a close friend, and through his influence Bacon secured a place in English politics retained for the most part throughout his life His friendship with Essex is not entirely above reproach, for Bacon returned the affection of his friend by conducting the prosecution when Essex returned in disgrace after the disastrous Irish invasion,

not, to be sure, out of personal antagonism, but rather in defence of the crown Again he was Essex's accuser when the latter was involved in a plot to seize the queen It was probably Bacon's speech which served to convict Essex and cause him to be executed in 1601 Under the rule of James I, and between the years 1616 and 1620, Bacon became successively Lord Chancellor, Baron Verulam, and Viscount of St Albans After he had presided for several years at the chancery courts, he was accused of bribery. To this he confessed, was tried, and was sentenced to imprisonment in the Tower of London during the king's pleasure He was forbidden to hold state offices or to appear in court or before the parliament. In addition, he was ordered to pay a fine of $200,000. The sentence was, however, only partially executed He was in prison four days, paid no fine, received a general pardon, was permitted to return to court The remainder of the five years of his life was spent in writing He died in 1626.

Bacon published in 1605 the first philosophical work of wide appeal printed in the English language It bore the title *The Advancement of Learning* and was designed, according to him, to spread learning among the average citizenry of England He maintained that very early in life he had come to the conclusion that he was meant to be a servant of mankind His first great aim was that of inventing a new method by means of which all other inventions might come into existence His second aim or purpose in life he held to be the rendering of service through the civil government. His third aim was to help men if he could to save their souls All this he maintained apparently in all sincerity and without egoism.

### 2. *Objections to Traditional Learning*

Bacon is numbered among those who, in the sixteenth and seventeenth centuries, were in more or less open revolt against contemporary learning In his opinion philosophy had reached the stagnation point It was concerned, he argued, with many problems or questions concerning which there was much furor and controversy with negligible results That learning had reached this pitiful condition he believed was due to its having been founded upon false principles. In many cases style and phraseology were given more importance than the meanings which were thereby expressed. This he believed was indicated by a certain dilettantism prevalent throughout the Renaissance, making for a lack of

seriousness of thought This "delicate" type of learning must be discouraged in order that *genuine* learning might advance The philosophy of Scholasticism in general was much involved with problems and abstractions which yielded results having no practical bearing on life Such arguments took men farther and farther away from an understanding of nature They pursued final causes to the neglect of a search for natural causes in the physical world, an endeavor which alone could be of real practical significance This type of learning was labeled by Bacon as "contentious" Again, many errors commonly accepted as fact rose out of the practice of certain false sciences such as alchemy and astrology, or from this or that magic formula, or from overreliance upon ancient authority, especially of the mystical sort The products of this supernaturalism were, according to Bacon, as barren as virgins

As a result the world of supposed knowledge is full of error. No more striking misconception is to be found than the usual view held with respect to the purpose and function of knowledge itself. Nearly all men search for knowledge for a variety of reasons, none of which is either logically sound or for practice adequate. Some men seek knowledge merely to obtain a reputation, social prestige, or wealth, to be able to debate with success, or merely to satisfy their vanity The only really justifiable reason for accumulating knowledge is to use it for "the profit and use of humanity" Knowledge of nature should be employed as the servant of man's needs, not to make him rich or vain but to make his living more comfortable and meaningful

Man is able to exercise the talents of his mind in the task of controlling and using the goods of the world Knowledge is a veritable storehouse of power and should be disseminated that all may enjoy its fruit Learning should aim to be more profitable not to a chosen few but to all, it must be universalized In his *New Atlantis* Bacon gives us the picture of a civilization progressive through systematic usage of facts obtained by means of applied science In this society the members of "Solomon's House" are seen to produce works anticipating by centuries the modern telephone, microphone, submarine, and airplane If we are to make such a vision real, it is necessary first of all to rid the mind of a great number of misconceptions which have their roots in the past The prejudices and prejudgments that we should be concerned to eliminate were classified by Bacon under four heads or *idols.*

These, one and all, must be shattered before a fresh start with the new method can be made.

*a. The idols of the tribe* are prejudices all of us have as men owing to our common human nature We are disposed to regard things from the viewpoint of their relationship to ourselves and their similarity of function to our purposes and interests This anthropomorphism makes for a lack of open-mindedness We are therefore frequently apt to assume a greater degree of order and simplicity in things and events than the facts justify. We tend to read teleology and final causes into nature when our own actions reveal us as agents in a dynamic world We are prone to neglect facts contrary to the beliefs we happen to hold and to pay more attention to affirmative than to negative evidence We make hasty judgments and become impatient with the demand on the part of clear thinking to suspend judgment until it can be supported by certified data We are unknowingly incompetent and unable to distinguish the true from fanciful evidence supplied by the senses For most people speculation ceases where uncritical sight stops

*b The idols of the cave* are prejudices we have as unique individuals They are the sum total of personal likes and dislikes traceable to differences of experience, the narrowness of fields of study, or the varied nature of our interests They are due to what might be called personal idiosyncrasies, which color interpretation and are the source of various tendencies to judge subjectively rather than objectively They result from the fact that some minds are more impressed by the differences of things than by their resemblances, from the tendency on the part of others to analyze and reduce things to their elements while still others are more engrossed with totalities, from the propensity of some to be impressed by the achievements of the past while others are more enchanted by possibilities that lie in the future

*c The idols of the market place* are the many misunderstandings attributable to the peculiarities of the language, due chiefly, in Bacon's opinion, to the barren controversies of Scholasticism Of all the idols it seemed to him that these were the most troublesome Errors arise herein owing to the loose and uncritical use of words. People are addicted to the use of words which are ambiguous and equivocal, and they make little effort to clarify or objectify their meanings It seems to be the case that if people talk long enough about anything, no matter what, they eventually believe they

know all about it. Disputes frequently arise about words rather than about the things meant by them It is necessary to get behind phraseology in order to clarify and systematize the thoughts or meanings for which words stand In themselves words are nothing, but, owing to their constant use, there is a tendency for them to become stereotyped and inflexible in meaning and hence in usefulness In this matter care and criticism must be exercised if truth is not to become entangled in a net of verbalisms

*d. The idols of the theatre* are false judgments induced by traditional theories, by false sciences, by sophistic teaching System makers have succeeded in ensnaring the minds of men and maintaining them in narrowly defined channels of thought. These prejudices arise owing to the presence of influential system makers who are "always more solicitous to provide an answer to the question and affirm something positive in words than about the inner truths of things" Such men have served to limit and discourage new theories which might make possible the advancement of civilization as a whole The most dangerous influence of traditional theories is the tendency for them to introduce abstract and final causes in the task of explanation and to supply fanciful and mystical solutions which are often based upon past opinion rather than upon a study of present conditions. Final causes lie in the opposite direction from the source of true understanding *How* events occur is significant, not *why* they happen Dogmas derived from final causes may well be confined to the sphere of theology which has its foundation upon faith and not upon reason

### 3 *The New Method*

To avoid errors of the past it is essential to approach the problem of knowledge from a strictly empirical angle Sound and certain knowledge must come from experience alone, for it is only from this source that truths are obtained which are capable of objective verification It must be recognized that all knowledge comes from and is directed toward nature. The mind in the beginning is wholly unfurnished so far as its content is concerned It is a blank tablet upon which knowledge is to be inscribed It is necessary to begin with particular events directly and carefully studied, in order to arrive eventually at a grasp of basic principles. If these are to be had, it is absolutely essential that all ideas without an *empirical* support be eliminated from the field of knowledge.

This strict empiricism must openly accept the dangers of sense perception and endeavor to overcome them by constant use of all manner of instruments of precision The senses are the sole means of knowing nature, but each must be checked against the others with the aid of objective standards Through their use our basic task becomes that of understanding nature, but in order to do this it is necessary first to obey her In obeying and carefully scrutinizing the process we discover events and find the essential relationships which bind them together We then find it possible to employ nature in the service of human welfare The old ways of thinking are insufficient to achieve this end and therefore a new method for acquiring knowledge must be evolved

All discovery is by induction Deductive, syllogistic reasoning is unable to find anything new or useful It merely repeats the old and points out whatever meanings or implications are contained within the premises The examination of particular instances makes possible the discovery of constant characteristics or essential "forms" We never are able to understand an object until we are in a position to point to its essential character Science, proceeding along the lines of a strictly empirical approach, is able to uncover the rather obscure processes of nature and the inherent relationships which make for a continuity of events The genetic processes of nature are brought about by means of minute variations which tend to elude even the most careful sense perception Investigation should proceed with the aid of instruments of precision and careful checks constantly applied to the results.

More specifically, in order to discover these "forms" contained within particulars, regular and definite steps should be followed. First it is to be decided just what particular events are to be investigated or what type of relationship is to be sought This serves to limit the field and direct the process of investigation Suppose that it is desirable to know the cause of so frequently an occurring phenomenon as sour milk. This is equivalent to the primary step in the process of discovery The second step is that of testing all available cases where the phenomenon of sour milk occurs, making careful records of the conditions attending its occurrence This, however, is insufficient to render adequate knowledge. It considers only the positive side of the situation The third step must be that of investigating all available cases where the phenomenon does not occur. It is necessary to note not only

the conditions present upon the occurrence of sour milk, but the conditions present when milk remains sweet The fourth manner of testing the phenomenon is to examine accompanying conditions when it occurs in varying degrees This process of study and tabulation being complete, it was Bacon's opinion that the results could be read off By checking over the data it should be possible to know the factors making for fresh milk, sour milk, or for all gradations of sour milk

Though Bacon was perfectly well aware that mere enumeration, as in the case of the second step of the process, is insufficient to give truth, he was nonetheless shortsighted in his belief that with the complete analysis it would be possible to know the answers merely from an examination of the data given He was unaware that it takes rather more than staring at data to elicit from them the necessary generalizations or hypotheses, and had he been more of a scientist himself and less the advocate of a new method he would have recognized this There is in his discussion of method no clue as to how accuracy is to be obtained or what instruments of precision are to be used in conducting the research Perhaps it is the greatest single discrepancy that Bacon makes no mention at all of mathematics in the procedure It was recognized even by some of his contemporaries that accuracy depends more or less completely upon the quantitative measurement of data It seems to be the characteristic of Bacon's work on the method of science that the more specific he should have become the more vague he really was It remained for successors to supply the necessary omissions that are obvious in his analysis

A merit that is often overlooked in the work of Bacon is that he urged the application of inductive scientific method to all fields of learning, including law, politics, and sociology This is the forerunner of a conviction which later became dominant, especially in France during the period of *enlightenment.* He is significant particularly for his frank avowal that the scientific enterprise is above all things designed to enable man to control nature and direct it toward satisfying his desires through making the world a better place in which to live.

## B THOMAS HOBBES

### 1. *Philosophical Status*

Thomas Hobbes lived as a contemporary of the famous French rationalist, Descartes He was less systematic and more uncritical

in his thinking than Descartes, though both possessed the common interest of offering a mathematical interpretation of nature Hobbes was born before Descartes and died after him, but there appears to have been little influence exerted by one upon the thinking of the other For at least two reasons it is best to study first the philosophy of Hobbes One of those reasons is that his work represents the next step in the development of scientific method following in the tradition of Bacon and more especially of Galileo This step consisted in applying mathematical analysis to *all* things, including the behavior of man himself This attempt to apply mathematics on the wholesale scale produced a decided and outspoken materialism reminiscent of the ancient thinker, Democritus In the second place, Hobbes is revealed as rather a naive reasoner when compared with his French contemporary With almost astonishing simplicity he accepted the principle that because mathematics works in the broad field of mechanics it ought, therefore, to work when applied to the activities of human beings Consequently he proceeded with an attempt to analyze all human activity and experience, however personal, as being internal motions induced by external motions Descartes was aware of problems and difficulties introduced by this hypothesis which were overlooked or unknown to Hobbes For this reason, from the standpoint of systematic philosophical developments, he was noticeably in advance of the Englishman

## 2 *Life and Works*

Hobbes was born at Malmesbury, England, shortly after reports had reached there telling about the approach of the great Spanish Armada in 1588 He tells us that his mother's terror at this impending disaster resulted in his premature birth To this he half facetiously attributed his rather timid nature, a characteristic in evidence in general social situations rather than in debates upon philosophical issues If he were a social lamb, he most certainly was, in demeanor at least, an intellectual lion An early developed precociousness enabled him to enter Oxford at fifteen Here he promptly became familiar and dissatisfied with the traditional Scholastic type of learning offered by the institution. He preferred, instead, accounts of travel, maps, history Upon leaving college he became the private tutor of William Cavendish, afterward Earl of Devonshire On several occasions with Cavendish, and later with the latter's son, Hobbes

visited the Continent, where he was afforded opportunity to study the classics. This both broadened his vision and increased the range of his field of learning On one of his trips to France he met Descartes and, shortly afterward, Galileo in Florence Of these two men only Galileo appears to have made any marked impression upon Hobbes. The net result of his Continental experiences was to produce a thinker who became openly sympathetic with the general revolt against Scholasticism

His philosophical treatises of most significance are four in number Concerning physical bodies he wrote *De Corpore*, as a science of nature In this he outlined mechanical and physical laws of motion and changes as he understood them Concerning man he wrote *De Homine*, as a science of special bodies, in this he outlined his theories regarding the physiological and psychological activities of human beings Concerning the state he wrote *De Cive*, as a science of human bodies in groups This is one of the earliest of modern period treatises on sociology and social psychology In it are outlined the conditions determining the mutual relationships of groups and associations of men His best single treatise is doubtless the *Leviathan*, in the front of which, in order to make it sell, he gave a summary of his views on physics and human nature It is known chiefly as the work in which Hobbes outlined his ethical and political theories

### 3 *Method and Materialism*

His initial claim was that it is essential to begin investigation with a study of the geometry of bodies per se From this, progress must be toward an understanding of mechanics, physics, physiology, psychology, and finally sociology He argued that, though each of these sciences is essential to the one following, nonetheless those which follow are not to be conceived as reducible to those prior to them At each new level new phenomena emerge to be studied and accounted for. Thus to each new level is given a specific and different subject matter For this reason a systematic interpretation of the world and man cannot be purely a deductive process since new presuppositions must be introduced from time to time in order to afford a satisfactory account. For example, mechanics must assume force, physics discovers in sense perception secondary qualities, the science of man, including sociology, presupposes a rather lengthy historical human experience None

of these can be obtained from the simple process of mathematical deduction based upon even the most universal of propositions. This is a clear repudiation of the fundamental thesis of a strict rationalism

With respect to the universe as a whole it was stated that all that exists is bodies, all that occurs is motion Otherwise stated, only bodies are, only motion happens If the inquiry were made as to the procedure by means of which Hobbes came to this conclusion, his only answer was No proof is available but these are bare facts seen by all who will think the matter through without prejudice or preconceived ideas To his way of thinking all reality is corporeal An incorporeal thing would be a chimera It is to this world of corporeality that science should, and as a matter of fact must, devote its attention Science is at home only in the world of finite things, particular entities alone can be the objects of its study Perhaps God originally created the stuff of reality but this and other religious problems belong to the realm of faith and cannot be a part of the subject matter of philosophy and science The universe as a whole cannot be known as regards either its origin or its destiny. That there is a universe beyond the scope of human knowledge is indicated, but as to its nature one must remain agnostic since it cannot be an object of knowledge Science is thoroughly nominalistic and proceeds to an arbitrary act of naming, defining, and classifying different bodies in terms of their motions Without such motions there can be no sensation, experience, knowledge, or science

Sensation consists of a set of motions in a given body induced by another set of motions in another body It is "nothing more than a motion among the particles of a sensing body" Consciousness results from a motion of certain parts of a sensing body that are located in the brain. The motion, not consciousness, is the real, consciousness is only the form under which we become aware of motion Thus all mental processes are appearances of motions or effects of them This *epiphenomenalism* is characteristic of Hobbes's psychology throughout For him the feeling of pleasure is the result of a motion in the heart, thought, of a motion in the head As these phenomena are but the result of motions, the question may arise as to what are the grounds upon which the distinction between pleasure and thought is to be made. The only ground is that of differences of motions. In perception we have an awareness

of motions within, and these different awarenesses are given the various names familiar to all as various colors, tastes, sounds, and such This solution is quite similar to that offered centuries before by the Greek atomists In a measure it deviates from Hobbes's original thesis that bodies and motion constitute all of reality, since conscious experiences are the products of motions and are not motions as such Since they cannot be bodies, their status is left very open Hobbes inclined to the practice of calling them *fantasies*, though it is clear that calling them by another name neither hangs them nor saves them

This analysis obviously accepts what is commonly called the subjectivity of sense perception and is thus in accord with contemporaries such as Galileo, Gassendi, and Descartes The external world is assumed to exist as real but as such apparently we cannot know it Our knowledge of things seems never to square up with that from which it is derived and toward which it is directed To repeat, outside there are bodies in motion but these motions do not get into our experience, inside there are states or motions which are produced by the motions without but which are not identical with them In all this it is motion of corporeal parts that is held to be genuine, the experiences arising from these motions are in themselves unreal or, as Hobbes calls them, fantasies Our world of experience is a world apart from that which we assume induces that experience and the clues we guide our lives by are the accidents of mechanical motion

Bodies in motion, which is the defined character of reality, are to be understood under the discipline of mathematical calculations The words we use as signs indicating varied experiences are the tools to be used What science does, then, is to consider the possible or discovered relationships among these symbols It cannot deal with abstract entities which have no existence The symbols of science stand for particular cases of varied motions of corporeal bodies in a world that contains nothing else than these Truth is a matter of agreement or disagreement among the ideas or symbols, the supposition of their correspondence to an objective reality being incapable of substantiation This agnostic attitude sounds the keynote of all major British thought that follows Science thus proceeds by tracing effects from causes, reducing the whole process to quantitative analysis and mathematical designation. Deduction is given far greater consideration and importance

than in the case of Bacon Mathematical deduction after the fashion of Euclid makes possible the systematization of knowledge and the practical demonstration of truth Mathematics must be made the foundation stone for accuracy and the means for organizing the data of experience.

### 4. *Politics, Ethics, Religion*

To explain the state and political society as it is found, Hobbes believed it is necessary first to understand the original nature of man. It is essential to go back to a time before all society to examine the conditions out of which society emerged In this original condition of man, he is discovered to be living in a state of war of each against every other Each is dominated by two basic impulses, desire and aversion These are so basic that all human conduct can be traced to them The force of all behavior thus lies in the original nature of man himself Since human beings are fundamentally alike, they are activated by the same basic dislikes and the same basic desires Among all there is competition for the same goods, which all alike wish to possess Unrestrained impulse governs action The egoistic impulses are limited only by the ability of each person separately and independently to satisfy them Any and all devices are legitimately employed to secure the desired ends Social virtues or altruistic impulses are unknown because they are unnatural and absent from the make-up of man Fear, hatred, cupidity, treachery, all the restless human passions are supreme No man is ever safe either with respect to his life or with respect to whatever goods he may happen to have in his possession His security and that of his property depend entirely upon his strength and ingenuity He must arm himself constantly against the aggressive impulses of his fellow creatures He is a savage different from the beasts of the earth in one respect only, his ability to speak Like them, he can but do that which his nature dictates The dominance of base and animal drives is complete He cannot will to do otherwise than constantly seek his own preservation through the exercise of all the power in his possession Man's nature completely determines his every act This means, simply, that his desires and aversions, prompted by his experience of pleasures and pains, determine the course of his action He acts in the direction of the strongest desire or aversion Deliberation is the process of alternating desire and aversion before one or the

other has become strong enough to overrule Man is the victim of his own nature and originally his life was "solitary, poor, nasty, brutish, and short"

The state of nature proves to be intolerable and self-defeating. In this condition nothing is secure and freedom leads only to bondage. An enlightened self-interest demands that individual freedom be restricted in order that everyone may be secure in the use and enjoyment of some of life's blessings rather than be insecure with respect to all of them With this realization it is recognized that a central authority is essential, a central authority to whom all must agree to pledge unqualified obedience. Each must renounce his right to do as he pleases and whatever rights by nature he may have must be given over completely that each may receive in return a guaranty of such goods as the ruling power judges advisable The result of this enlightened viewpoint is the formation of a contract among the people to give up their rights competely and subordinate themselves to a central authority.

This is an agreement confined entirely to the people themselves *To this contract the sovereign is not a party* It is not a mutual agreement between the people and ruler Thus the opposition between the governing power and the desires of the individual is complete The sovereign now has all the natural rights which prior to the contract the individual enjoyed. He has become the absolute ruling power and no recourse may be had to any authority above him Absolute obedience is to be expected and, if need be, enforced. To protest against the decrees of the monarch or to revolt against him is irrational upon the very grounds of the origin of the political power Without a government the people cannot exist and, having seen this, they have instituted upon their own initiative a society the organization of which is to be determined completely by the sovereign, to whom all powers have been delegated Thus the will of the sovereign is held to execute the will of the people For the individual to presume to overrule or disobey the orders of the sovereign is to revert to the disorderly and intolerable state of nature from which society has evolved as a necessary institution. Such conduct would ignore the original purpose of the contract which was the sole means of getting for each individual as much of the goods of the world as possible.

Since the king must decide all problems it is he who determines the entire moral code. *Morality so interpreted is an entirely arbitrary set of rules.* It is not a part of the original nature of man. Man is

basically a *psychological egoist* and originally knows no restrictions with reference to his conduct except such forces as may oppose the satisfaction of his basic desires and impulses Morality emerges with the organization of society when the sovereign enacts the rules and laws necessary to regulate it Unmoral man in the state of nature becomes a moral creature in society Right and wrong are determined according to prohibitions or permissions guaranteed or commanded by the sovereign In this activity the king can do no wrong, for what *is* wrong is by his own arbitrary dictates created In all of this the concept of natural law must not be overlooked. In the first place, it is fundamental to man that above all else he seek in all possible ways to preserve his person But it is likewise declared to be natural that, finding the state of nature intolerable, *each should sacrifice his innate rights in order to obtain a degree of* security It becomes a natural duty for each to lend his support to his voluntary act of surrendering his rights However, at this point it should be noted that not *all* rights are relinquished since, regardless of circumstances within a social order, it is never right to expect a man to give up his right to defend his person, to injure or kill himself, or to refrain from giving testimony against himself Nor shall it be wrong for him to refuse a command to kill another man It is a natural duty, once the contract is formed, to keep it. This duty is frequently not practiced, partly because men lose sight of it or fail to realize its significance in their lives Hence it is necessary that the sovereign provide sufficient force to execute his edicts Some men will need always to be guided through fear rather than by understanding of duty. The most fundamental of all natural moral principles emerges in the course of social development *Do not to others what one would not suffer from them.* It is necessary to sacrifice in order to gain, to be altruistic in order to satisfy a basic egoism, to be cooperative in the interests of individualism All the special virtues have herein their origin. For anyone at all to obtain lasting access to the goods and pleasures of life, virtues like fidelity, gratitude, complacence, self-control, justice, tolerance are indispensable The laws that give rise finally to society and morality are natural because they are grounded in reason. They are immutable, eternal, that is, and, it may be added, divine since God probably made them

Since man is essentially egoistic it is seen that in the matter of religious worship each will seek to assert his own beliefs and prejudices at the expense of those who are weaker than himself.

Religious controversy will naturally run rampant, provided that in this field, too, there is not the strong hand of a guiding sovereign to bring order. Therefore, in religion as well as in morality and politics, what will be worshiped and when will also be determined absolutely by the edicts of the king To avoid bickering and ill feeling within the state it is necessary to determine arbitrarily the nature of man's worship If one may dissent from the beliefs prescribed in this manner, he is to conform outwardly He may seek consolation in the realization that he is merely acting in accordance with the rules of the king and not according to the dictates of his own beliefs He may gain a crumb of compensation for the restrictions placed upon his individual desires with respect to religious worship by the thought that it is the king who is acting through him

The work of Bacon and Hobbes largely eliminated from the major traditions of modern European thought several assumptions and guiding principles dominant during the Renaissance. Teleology found no place in the critical analysis of Bacon, who declared it to be among the most dangerous of the idols of the tribe Nor was there place for it in the materialistic philosophy of Hobbes The false sciences of alchemy, astrology, the rule of spirits, uncaused phenomena, all are smoked out and revealed to be barren of sound results and the source of spurious claims and false ideas Heterogeneity is replaced by homogeneity The universe, instead of revealing distinct spheres of qualitative differences after the fashion of Neoplatonism, is seen rather to be everywhere the same, throughout determined by the same natural laws and capable of being systematized according to causal principles Bacon earned a lasting place for himself in modern philosophy by his keen analysis of the causes of human error and by his plea for objectivity through a strictly empirical approach to human problems Hobbes made his most significant contribution through his empirical approach to political philosophy With these men modern thought made a marked advance toward disentangling itself from medieval concepts, though it continued by no means completely free from the marks of Scholasticism.

## DISCUSSION TOPICS

1. On what grounds did Bacon argue in favor of a new technique for acquiring useful knowledge?

13 Distinguish and apply the following terms to the philosophy of Descartes (*a*) mechanism, (*b*) teleology, (*c*) rationalism, (*d*) empiricism, (*e*) logical, (*f*) innate ideas, (*g*) skepticism, (*h*) objectivity and subjectivity, (*i*) nominalism, (*j*) realism

## PARALLEL READINGS

DESCARTES, R *Discourse on Method* (complete)
FULLER, B A G *History of Philosophy*, Vol II, Chap II, Sec 7
HOFFDING, HAROLD *History of Modern Philosophy*, Vol I, Book III, Chap IV
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Sec 27
THILLY, FRANK *History of Philosophy*, Secs 45, 46,
WEBER, A., and PERRY, R. B *History of Philosophy*, Sec 53.

# Chapter XIV

# RATIONALISTIC APPROACH TO PHILOSOPHY

## BARUCH SPINOZA

### 1. *Character and General Viewpoint*

Spinoza was born of Jewish-Portugese parents in Amsterdam in the year 1632, to which city they had been attracted because of its opportunities for free worship during a time of widespread Jewish persecutions, especially in southern Europe Almost nothing is known of the period of Spinoza's youth, though it is apparent that he spent most of his life in the neighborhood of his native city and The Hague, where he died at the early age of forty-five, a victim of tuberculosis inherited from his mother He was educated in the traditional Jewish manner and became thoroughly acquainted with the Old Testament and the Talmud, the while living under the none too loving care of his older half sister In succeeding years, his genius having been partially recognized, he continued his studies, becoming adept with some ten languages including, besides Hebrew, Italian, French, English, Spanish, Portuguese, Dutch, and German At the age of eighteen he made the acquaintance of an influential Dutchman, Francis van den Ende. This man was a freethinker and, in name at least, a lawyer, doctor, diplomat, bookseller, and schoolmaster, who encouraged the young Spinoza's independence of thought This influence especially assisted in weakening Spinoza's faith in orthodox religion Through this influence he also became acquainted with the work of Copernicus, Kepler, Harvey, Huygens, Pascal, and Bruno and Descartes, the two philosophers who exerted the most profound influence upon his philosophical thinking.

By the time he was twenty he had come to disagree fundamentally with orthodox Jewish religion. In several respects he found it difficult to accept its teachings He denied that the Old Testament taught a doctrine of immortality; claimed that angels may

be merely phantoms or ideas conceived by the minds of men; suggested also that God might have a body Likewise, the fact that he was one of the first ever to question the authorship of the Pentateuch made him suspect in the eyes of not only Jews but of Protestants and Catholics as well. It was a highly sacrilegious thing to say, in the days of Spinoza, that the first five books of the Old Testament were not written entirely by Moses, particularly when the ground for this claim was that portions of the Bible were self-contradictory. After repeated attempts to obtain a reconsideration of these conclusions had failed, Spinoza was finally excommunicated from the Jewish synagogue at the age of twenty-four. Thereafter he obtained a slender living grinding lenses for optical instruments During this period he spent the bulk of his leisure time in philosophic study, and, as he grew older, he enlarged his acquaintance with men in scientific circles Upon the publication of his first philosophic effort, he was invited to occupy the chair of philosophy at Heidelberg This honor he refused on the ground that he could not simultaneously carry out the duties of this position and retain his independence of thought His chief work was published after his death and bears the title *Ethics*

The life of Spinoza as a whole is seen to have been markedly introverted as compared with contemporaries such as Descartes, Leibnitz, Hobbes, and Locke. He was misunderstood by most people for several decades after his death, and certainly he was badly misunderstood by most who lived during his time His restricted social relations were determined largely by his religious difficulties His books were proscribed, his life was endangered by the beliefs he held, he lived as an outcast among his own people His gloomy outlook upon the race of men is in large part the product of experiences such as these. He came finally to the basic conclusion that what most men strive for is neither possible of attainment nor worthy of the pursuit To him most men are spurred to activity by two sorts of craving: first, for pleasure; second, for honor and position. These ends are empty on occasion when they may be partially realized and lead men into activities that make of their lives a state of perpetual strife. Man should seek satisfaction in the more worthy and attainable values life has to offer It is better to seek satisfaction through safety in goods that are attainable than to seek the unattainable and fail That which all men in measure can achieve is knowledge, and in the obtaining of knowl-

edge man realizes his highest capacities and procures both control and understanding of life

## *Speculative Development*

Spinoza's thought received its first inspiration from problems of religion, its second from philosophy Very early he had become dissatisfied with the shortsighted and anthropomorphic attitude exhibited by the majority of mankind This attitude seemed to him particularly obvious within the province of religion. Religion appeared to encourage an attitude of expecting nature so to conduct itself that man will thereby benefit It fostered the notion that the whole of creation, and therefore nature, is ordered for the express purpose of benefiting human beings and aiding them in the achievement of their petty objectives This purposiveness Spinoza interpreted as originating in the minds of men, who read into nature whatever there is that could be construed teleologically He pointed out that as soon as men become cognizant of themselves as agents directing their energies toward the achievement of predetermined ends, they leap to the conclusion that any sequence or regularity in nature is indicative of purposes being realized there also Continued thinking along these lines leads to the conviction that the whole of nature is designed for the realization of ends, the latter having been provided by an omnipotent deity who planned it all Traditional belief in God has its origin in this condition of human thinking. There is nothing in nature that requires or supports such a religious conviction

Another misinterpretation of nature emerges as a consequence of the feeling of freedom experienced by man This belief, too, has been abundantly supported by religious doctrines It is always the case that in retrospect one believes that he could have chosen to act and could have acted otherwise than he did This feeling of freedom should be understood as originating from man's ignorance of the real causes of his acts. Each man is, in reality, in every act absolutely determined by prior events and is in no sense free to do otherwise than his essential nature dictates Even thinkers like Descartes who interpreted nature as a determined order of events went on to make an exception to this order in the case of man, declaring him able to exercise free choice even though all the rest of nature be completely determined To Spinoza this concession to man was both unwarranted and undesirable from the standpoint of understanding man as he truly is.

The second source of influence upon Spinoza's speculations came from the field of philosophy itself He had early made the acquaintance of Bruno and found in him a philosopher at heart much like himself Since his early formative years, Spinoza had retained a strong impression of an all-encompassing deity that somehow could not be thought of as existing separately from the universe God is bound up in the composition of all things This conviction found philosophic support in the pantheism of Bruno and served to add weight to Spinoza's conception of a God-universe.

From Descartes Spinoza inherited the problem of mind and matter, the general problem of substance, and the method of rationalism. Agreement between these thinkers is found concerning the basic character of method and criterion of truth, though there is absent in Spinoza's work the long process of tentative doubt which played so striking a part in the procedure of Descartes The object of speculation is to discover an axiom or set of axioms so self-evident, so indubitable, that upon them can be constructed a body of knowledge as certain as the axioms themselves The ideal is the discovery of an axiom so general and universal in nature that from it all truths may be inferred by a rigid process of deduction. The close-knit mathematical type of reasoning exemplified by geometry was taken as the ideal to be used in constructing a proper philosophical system For Spinoza it was not enough to accept the spirit of geometrical reasoning as an ideal The form as well must be employed Accordingly, the *Ethics* was organized as a typical textbook of Euclidian geometry It begins with definitions and axioms held to be self-evident and proceeds with proposition after proposition held to be demonstrated by the definitions and axioms or by preceding propositions so proved

Though it is clear that there is a basic understanding between Spinoza and Descartes with reference to the phases of general method, it is equally obvious that there are fundamental disagreements These may be briefly summarized under three points (*a*) the status of the deity, (*b*) free will, (*c*) the problem of substance

*a.* The theism of Descartes is opposed by pantheism God is denied as existing separately from the universe and standing to the universe as the creator of it For Spinoza, God is not prior to the universe, but simultaneous with it. God is the necessary cause of the universe, but not the temporal cause in the sense that first there is God and then the creation of which God is the cause. God and the universe are equally eternal, being both of them one

and the same thing. Neither can God be said to possess will or intelligence or any other attribute of excellence The universe is what it is, not because of any plan or design, but simply by reason of the fact that all things follow from the nature of God as the properties of a triangle necessarily follow from its essential nature. This is a planless universe, identical with a planless deity. All things are in God, and God is in all things.

*b.* It has been mentioned previously that Spinoza objected to the *free-will* interpretation proposed by Descartes It seemed to him a basic inconsistency to provide a special category for man amidst a nature completely mechanical in function This Cartesian error must be overcome by recognizing that man is as much a part of the whole of things as any other entity and is, consequently, subject to the same unalterable laws of nature Nothing escapes the mechanism of the universe Both mind and body states are subject to determination by the fixed laws of prior events or conditions The natures of men completely determine their every act and thought The concept of interaction between mind stuff and animal spirits is a thesis incapable of demonstration and, on the premises of Descartes, self-contradictory and miraculous Interactionism, upon which the theory of free will is inclined to depend, is theoretically unsound and incapable of offering any stable foundation for such a belief The fact that Descartes made the error of supposing an exception to his otherwise flat denial of interactionism, in this way becoming involved in perplexities that were too much for him, makes it necessary to reexamine his fundamental metaphysics

*c.* The third ground upon which Spinoza disagreed with Descartes concerned what seemed to be an obvious confusion in interpreting the problem of substance It appeared to him that there were three substances contained within the metaphysical system of the Frenchman, whereas logically there should have been but one The mind-body dualism, theoretically based upon the reality of these entities as substances, breaks down when they are compared with or referred to what is apparently a third and still more ultimate substance called God. If God is substance for Descartes, then mind and matter cannot be substances, since by his admission these latter are conceived to be dependent upon God as creator of them. They are, therefore, but derivations of substance, and there is only one ultimately real one, God. This

conclusion once reached by Spinoza seemed to supply the necessary order and correction demanded by the results of his predecessor. For Spinoza, all things in the universe make up a single all-inclusive whole. There is but one substance, God, intrinsic to the entire universe. The two relative substances, mind and matter, are declared to be two ways in which God manifests His nature. All things are at the same time both matter and mind. Panpsychism replaces the dualism of mind and matter. Psychophysical parallelism replaces interactionism.

### 3 *Metaphysical System*

From the start of his philosophizing, Spinoza was certain of his most fundamental axiom *God is*. The very definition that he gave of God involved the ontological argument. The evidence and certainty of God-substance was contained within the very concept itself and needed no further proof. It remained only for Spinoza to deduce the consequences or draw the inferences based upon this most fundamental and universal of truths, God is. The methodological procedure thus is deductive in nature, a matter of drawing the less universal conclusions from the more universal ones. It is a process of developing a system to follow from a minimum of original postulates. Particulars are to be subsumed under universals or inferred from these basic principles. Principles themselves are to be regarded as the elements of an all-inclusive system. This method sought the utmost in clearness and simplicity. All things are conceived to be derived from God as the necessary logical consequences of the essential character of God as reality. There is no temporal cause or order of things in the usual meaning of the term "cause." Things and ideas proceed from God in parallel relationship and in point-for-point correspondence. It must be remembered throughout that the term substance and God are, for Spinoza, but two names for the same thing. To say that all is God or that all is substance is to say exactly the same thing.

Spinoza analyzed the cosmos in terms of three categories. Everything is either substance, attribute, or mode, though ultimately attributes and modes alike must be referred to the one unchanging, eternal, and ever-present God-substance. His definition of substance is, "That which is in itself, and is conceived through itself; that of which a conception can be formed independently of any other conception." It follows, therefore, that

substance is self-caused or self-determined It is infinite, single, and absolutely undetermined by any other thing It is absolutely free in that its own nature determines the things or events which follow from it It is free in being completely self-determined Substance, as cause, cannot be separated from nature as effect These are simply two ways of perceiving the same thing God as active agent or the essence of all things is one way of conceiving him, and, so considered, is designated *natura naturans* God, as the sum total of all things, or as the way in which God is revealed as the universe, is *natura naturata*

Spinoza is more than careful to insist that the term "creation" has no place in his particular interpretation of the universe He believed substance to be the necessary ground for the occurrence of all phenomena He is also emphatic in denying that there should be attributed to God substance any qualities of worth or that God should be thought as possessing any anthropomorphic qualities—a value judgment, activated by subjective or shortsighted motives or understanding God is not a thinking, planning, designing being Perhaps the nearest approach to a brief and fairly faithful description of Spinoza's God is depersonalized nature operating by purely mechanical laws, which are as they happen to be because of the essential nature of substance itself. It is either this or a contentless abstraction about which little or nothing positive can be said

Spinoza means by *attribute*, "that which the intellect perceives as constituting the essence of substance" This statement has been subject to varied interpretations, but into such controversies it would not be profitable to go Most authorities agree that Spinoza intended to convey the thesis that the sum total of attributes constitutes the nature of reality His definition of substance led logically to the assertion that there is ample reason to interpret God as having an infinite number of these attributes However this may be, only two can become known to man These turn out to be the two alleged substances which gave rise to the famous dualism of Descartes, now reduced to their proper status. The two attributes conceived by the intellect as constituting the essence of substance are *extension* and *thought*. Each thing in nature is constituted of these two attributes That is, all things are both mental and physical throughout the entirety of nature. This is what is meant by the term "panpsychism." It is impossible to explain or

describe nature in terms of either one alone These are two ways of knowing or viewing the same identical thing. Neither thought nor extension is in any way influenced by the other, but since they are each but effects, as it were, of the same thing, they may so function as to cause it to seem as though one might determine the other By means of this interpretation, Spinoza was able to avoid the perplexing difficulties that were centralized in the Cartesian problem of mind and matter, and hence interactionism plays no part in his philosophy It is replaced by a theory of parallelism, or the notion that for every alteration of extension there is an independent, parallel alteration in thought

Possibly this analysis may be made a bit clearer by recourse to a somewhat crude analogy. Remembering that extension and thought are two aspects of the same thing—substance—let us represent substance by a sheet of crumpled paper Suppose, also, the paper is white on one side and black on the other. Looked at from one side alone or the other, the crumpled paper is a mass of creases, dents, bulges, all of them either black or white Let the white appearance of the sheet represent the attribute thought, the black, extension—two ways of viewing the one sheet of paper, or in the manner of Spinoza, two ways of perceiving the identical substance It is, furthermore, clear that for every convex portion of the paper there is on the reverse side a concave area For every peculiarity of shape that the paper exhibits when viewed from the black side, there is a corresponding and complementary alteration of the other No change can occur on one side without a change of the other The convexities and concavities occur in what may be called a parallel fashion To return to Spinoza's attributes, he says that for each mental state or mode of thought there is a corresponding physical state or mode of extension. Thus it may appear that mind and body interact, but as a matter of fact there is no such thing. The appearance of it is but an illusion. With this theory Spinoza believed it possible to escape the perplexing contradictions of the Cartesian dualism as dealt with either by Descartes or by the Occasionalists.

A *mode* is "the modification of substance or that which exists in and is conceived through something other than itself." This indicates that all those entities designated by the term "mode" can be understood only by referring them to a more ultimate reality, finally back to substance itself. They are modifications

of the God substance Of modes there are two sorts, finite and infinite. The finite modes of extension are the particular motions or movements and the particular intervals of rest that are exhibited by individual bodies that grow, decay, and cease to exist. Motion and rest, as such, are everlasting and eternal though particular manifestations of them have a temporary existence only.

The infinite modes of thought are intellect and will The finite modes of thought are simply particular intellects and wills exhibited by particular persons In the case of modes of thought, as in the instance of modes of extension, it is a case of transient existence of particular entities partaking of qualities themselves eternal and everlasting

To understand particular things, which are modes, Spinoza declared that it is necessary to understand the nature of substance. Substance, as before mentioned, is the necessary condition for the occurrence of all particular things However, this does not entirely clear up the situation, for Spinoza also states that from the nature of substance it is impossible to infer the coming-to-be of any particular object That is, no particular thing necessarily exists, its occurrence is contingent upon substance and in order to be understood it must be referred back to substance This impossibility of inferring from the ultimate reality the necessary existence of any individual entity led Hegel at a later time to remark that the God substance of Spinoza is the den to which all tracks lead and from which none return No matter how carefully the inferences may be drawn from the basic nature of substance, no single finite mode necessarily must come into being Spinoza's position can mean no more than this, that if a finite mode exists it can be understood only by referring it back to the infinite mode, the attribute, or what amounts to the same, the one immanent substance as the necessary condition of *all* modes.

*Natura naturata* is the realm of finite modes, the world we experience as changing, as infinitely varied, while simultaneously it is in essence always the same. *Natura naturans* is the realm of the permanent essence of all, the infinite modes, the attributes, substance itself This is Spinoza's answer to the problem of the *one* and the *many*, to the problem of Parmenides and Heraclitus, to the problem of how there can be permanence to reality and changeability with respect to its manifestations. It is, however, an answer that has lacked cogency for subsequent thought and

appeared to Leibnitz, Spinoza's immediate successor in the rationalistic school, a vulnerable part of the system of the Jew of Amsterdam.

### 4. *Theory of Knowledge*

The knower is constituted both of mind and of body. His essential nature is both thought and extension, this being simply two ways that the one reality presents itself in the case of the human being It has been remarked already that this situation obviates the necessity of further considering the problem of interaction between mind and body. This is so, quite obviously, since both thought and extension are attributes of a single substance For every mode of extension there is a mode of thought, and this parallel arrangement of thought and extension is basic to the whole theory of knowledge as offered by Spinoza. It presents, however, a rather serious problem of knowledge to which Spinoza gave a great deal of attention It is simply this. that if for every alteration of extension of body there is a parallel transformation in the modes of thought, it is not, on the surface, quite clear how there should be any possibility of error on the part of the mind. To the question of how error is possible in this rigid psychophysical parallelism, Spinoza's answer is the familiar one, that error is faulty understanding due to the insufficiency of perception as compared with reason.

Spinoza argued that it is possible to perceive or to understand nature in two different ways, and these two ways he designated, "perceiving under the form of time" and "perceiving under the form of eternity." Sense perception perceives God under the form of time and the object of this activity is the finite world of modes. Reason, on the other hand, conceives God under the form of eternity, that is, reason grasps the nature of reality unencumbered by the roundabout technique of "perceiving modes " Ideas derived from sense are not referred to reality but rather to a transient and obscurely understood manifestation of the real Error is due to "privation of knowledge," which in turn consists of "inadequate, fragmentary, or confused ideas." These sources of confusion or error are classified under two heads· (*a*) "Some particular thing represented to our intellect fragmentarily, confusedly, and without order to our senses." (*b*) From having heard certain words we remember things and form ideas about them, which ideas may be

wrong in that the thing remembered may or may not have any agreement with the actual entities of reality In these two ways the mind comes to possess what is called the "first" sort of knowledge. This "first" sort of knowledge is otherwise called inadequate knowledge and the pursuit of it is incapable of rendering a true understanding of nature or reality

To derive *truth* it is necessary to obtain either the "second" or the "third" type of knowledge These two types are what Spinoza called "adequate" knowledge and carry with them their own test of truth In Spinoza's words, "He who has a true idea simultaneously knows that he has a true idea and cannot doubt the truth of the thing perceived " This is simply another expression of the familiar rationalistic criterion of self-evidence. The first sort of adequate knowledge may, for convenience, be called *rational* knowledge and consists of all our clear and distinct ideas conceived by the reason as "notions common to all men" and "ideas of the properties of things " The second type of adequate knowledge is called *intuitive* and is conceived to be a still further step in the direction of truth By means of it the world is understood as a complete unity, one grounded in the single substance which is reality As Spinoza expresses it, "intuitive knowledge proceeds from an adequate idea of the absolute essence of certain attributes of God." The way of avoiding error is that of pursuing adequate knowledge and escaping the pitfalls of sense perception To perceive truly is to perceive things as they really are in themselves This means they are to be perceived independently of any external agencies which may from time to time influence our ideas or cause them to change or alter This is what is meant by perceiving things under the "form of eternity." The ideas of the mind in order to be true must be completely uninfluenced by anything outside the realm of reason itself To be true they must be regarded as completely self-contained Ideas may arise from the activity of the mind whenever several ideas hold together simultaneously and their various relationships become apparent Notions of inclusions, exclusions, lightness, constant connections, and the like emerge as self-evident truths

Error, as deficiency in knowledge, thus arises from sense perception or imagination which induces ideas of things and events as they affect us personally, instead of as they are parts or aspects of the whole of things Sense perception thus becomes the source

of confused ideas, ideas that arise in parallel fashion as modifications occur in the body. The realm of finite modes of extension is one that is linked together by rigid laws of influence One event determines in part, at least, the next one Among the bodies so influenced by other bodies are those possessed by human beings Since for every modification of the body there is a parallel modification in the states of mind, ideas may thus occur in the mind determined by the influence of modes of extension upon the body It is through the occurrence of modifications of the body that the mind becomes aware of bodies apparently existing externally to ours The human mind, knowing its ideas, truly knows the body and the changes going on there as influenced by other bodies The existence of these other bodies is self-evident to the mind, but with reference to their characteristics there can be only a confused understanding since they are known only in so far as they produce changes in the body.

The perception of an external object follows a sensation indicative of a state induced in our body and this is really the product of two forces, an external object on one hand, and the reaction of our sense organs on the other Perception, being the product of these two conditions, cannot be argued as a reliable source of knowledge It is clear at any rate that of the world of things the mind has knowledge only indirectly. This is a clear recognition of the subjectivity of sense perception and is Spinoza's final answer to the problem of the source of error.

If then, sense perception produces *inadequate* knowledge, how, specifically, may reason secure *adequate* knowledge? To answer this it is first necessary to note Spinoza's distinction between "action" and "passion" These are two ways of considering the function of mind (*a*) as it is determined or altered by circumstances external to it, and (*b*) as it functions independently, determined by no condition external to it It is the first of these ways that explains the presence of error or *inadequate* knowledge It is the *passive* aspect of mind The inference follows, therefore, that the second function of mind produces adequate knowledge and describes the reason as *active* or free in the sense of being entirely self-determined It is the case that mind is something more than an aggregation of finite modes of thought. Thought as such—intellect and will—is a part of God. It is one of the knowable attributes As such it is a part of reality and when acting this

genuine part it is able to know God, that is, the whole of things. Thus reason is able to see things as they truly are under the form of eternity. The basic difference between perception and reason appears to be this, that reason is able to form ideas about the whole of things, about things as they are in God, while perception is able to form ideas in only a limited way, about things as they affect us personally. Spinoza affirmed the possibility of escaping this subjectivity by seeing with the eye of the reason, beyond the immediacy of everyday experience, an eternal reality.

## 5 *The Way of Life*

Knowledge for Spinoza not merely is significant as a practical activity in the Baconian sense, but also is a means of achieving freedom from the demoralizing influence of the passions, a means of avoiding the despair that ensues when one's plans or ambitions are not realized. Lastly, it is an end in itself. In achieving it, man reaches the highest goal of his striving. Through it he obtains complaisance in a life that would otherwise be mean and disorderly.

To Spinoza the emotional life is one that is apt to produce undesirable consequences. It is not to be assumed that because of this conclusion he regarded *all* emotions as obstacles to the achievement of man's well-being. It is, rather, that the stronger ones, such as fear, anger, and hate, function harmfully and, therefore, must be discouraged. The Stoic element in Spinoza's thought is not thoroughgoing in the sense that the ideal of life should include the elimination of emotions. It is rather that the emotions should be *controlled* and indulged only in their proper perspective. Such an emotion as joy should even be cultivated under proper circumstances.

The analysis of the passions is connected with the theory of knowledge in this way, that the passions are a variety of inadequate knowledge, a group of confused ideas. They are effects produced in us by external agencies. We are caused, because of evaluations we place upon experiences, to love, hate, fear, pity, etc., whatever appears to relate in any way to our personal desires. This is due, basically, to man's ignorance of nature and his place therein. It follows that man is the slave of his passions proportionately as he lacks true insight. If this is the case, then the logical procedure is to obtain, in so far as he is able, the greatest possible quantity

of true or adequate knowledge Through knowledge alone does a man become free

To obtain this knowledge it is necessary to know the universe as it *is* and ourselves as a part of it In this way may a man obtain a true perspective of life and come to an understanding of the source of such disturbing passions as fear, hate, and pity In pursuit of this knowledge, it is necessary to understand that the fundamental drive behind life is the impulse to perpetuate or preserve the organism This urge of self-preservation, which impels men to act, may cause them to engage in pursuits that may be self-deceiving, providing an understanding such as the one mentioned is not achieved The basic desire for preservation supplies a criterion for judging actions and ideas as good or bad. All those devitalizing ideas and actions, those that work contrary to the impulse to preserve one's being, must be regarded as evil All other ideas or actions which are vitalizing in the sense of increasing the vigor of life and the general feeling of well-being are good The totality of emotions and passions is in this manner described as arising from the urge of self-preservation and may be criticized in terms of contributing or not contributing to such activity Joy attends all heightened activity, while sorrow accompanies the devitalized agencies Hate, love, fear, hope, jealousy, pity, and the like are directed toward those things judged to be the means or the obstacles, as the case may be, to the achievement of well-being

Freedom from the bondage of passions through acquiring adequate knowledge sounds the keynote of Spinoza's basic philosophy of life The freedom once achieved results in a calm that is unruffled by those passions that set men at work to acquire goods or a famous name, things which are actually unworthy of the effort and in the end are self-defeating. Such calm comes when nature is known for what it is and the real origin of the passions is understood In such cases the passions are seen to be the product of misunderstanding and are not an essential part of the nature of things. This misunderstanding comes about through the proclivity of human beings to judge nature personally, as being an arrangement of events somehow especially designed to be used for the satisfaction of human purposes True understanding abolishes this attitude and replaces it with the realization that nature is a neutral and impersonal structure of events That it

may be judged teleologically by man is all the more reason for extreme caution in directing life's activities This teleological interpretation, indeed, is the source of all hopes and aspirations, which hopes and aspirations, when unfulfilled, lead to disappointments, envy, and hate All this may be eliminated through a proper understanding of nature and a love of it for itself. This enables man to place himself in a position to enjoy the ultimate and most lasting goods and values life is able to offer.

It is necessary to be free from external influences We must overcome the discrepancy that is often so apparent between what we desire and what we can get, for this is the source of most unhappiness This, of course, does not imply that a man has freedom of choice It means only that a man becomes free when he acts according to the essential nature of man as a rational being, as a part of the whole of things Bondage results when one's behavior is directed or influenced by the shortsighted personal attitude or judgments men are prone to make with regard to themselves and the world This bondage is overcome and true freedom results when action takes place according to the universal laws of nature This, in turn, is possible only through the achievement of an adequate knowledge of that world It will then be possible to understand that we should be content with what can be obtained Some things, we shall see, are impossible to get, and once we have seen them to be so we shall no longer strive for them or be troubled by the disappointments which are entailed if we persist in pursuing them Our desires may be reduced, and they are ours in reality only so long as we insist upon believing that we can obtain things that we really do not want. There are no values in nature, for nature is simply just what it is If we pass judgment upon it, it is because we feel that certain parts of nature may be useful or harmful in the satisfaction of our biased and unreasoned wants These desires which so frequently cause us mental and physical unhappiness must be recognized as things caused by events acting upon us externally In this condition we are "passive" and are not acting according to our own essential nature We are subject to the demands of forces outside ourselves which are not understood This passive state may be overcome by virtue of the mind's ability to act solely in accordance with its essential nature This is the active state and by means of it reason achieves truth.

The ultimate aim in life emerges finally as a pursuit of knowledge, which culminates in a love of reality for itself For Spinoza, this is to say that the highest good is an intellectual love of God, *since to Spinoza God and the whole of things are one and the same* Such a statement may appear to be misleading in view of what has already been stated It must not be regarded as implying a view with any religious significance Spinoza's God has no personality He is not all-powerful or benevolent He is not an entity of whom favors may be asked God is simply the whole of nature The love of nature can only result in a disinterested feeling involving no passions It is not possible to hate God or to love him either, in the usual meaning of those terms Such a disinterested feeling arises from a realization that all things, as such, are simply what they are, and to apply the terms "good" or "bad" to them is a meaningless procedure

Once we realize reality is of this sort, things will be accepted for what they necessarily are This state can be more quickly reached through an understanding of the way in which nature operates, in other words, through an understanding of the laws and principles that govern events A basic idea of the value of things is to be found in the fact that it directs one toward the pursuit of the immutable or unchanging aspects of reality. The *values pursued are those values which are not the product of* temporary desire, but are eternal and everlasting If values are anything to be pursued at all, then it is reasonable that those values should be regarded as highest of all which are the most durable and lasting This final kind of knowledge, which concerns itself with God, is the sort called by Spinoza "intuition" It takes a step beyond the knowledge of the "second" kind and informs us of the unity, necessity, and perfection of all From this is derived the highest pleasure and the greatest assurance, for it is accompanied by the idea of God as cause God as the source of pleasure becomes the object of love, not as a being but as an eternal reality *Thus man achieves freedom through knowledge* of God and complacency through this intellectual love for reality

To summarize briefly, the chief good of man lies in an ability to increase his power to preserve himself This is derived through knowing activity, which ultimately pursues genuine truth by knowing God Bad or evil are all those obstacles, including human passions, which militate against achieving this self-preservation

Good applies to all those things which promote human well-being by means of their uplifting and vitalizing effects Virtuous action is reasoned action, which is made possible through obtaining an adequate knowledge of the one all-pervading God. Nor should it be thought that such achievement is beneficial only to a few. An entire society may benefit from the kind of truth Spinoza urges.

The social implications of his theory led to his explanation of the origin and purpose of society In the state of nature, each person seeks to preserve his being and each does all he can to advance his personal interests. The rule of nature is the rule of might Political order or society emerges from this state of affairs through the organization of a social contract designed to promote the welfare of the members By means of a social organization the inevitable conflicts of egoism are to be controlled This contract involves the restriction of natural rights and substitutes for them a new objective which may be called the common good From such a society emerges the various social virtues benevolence, justice, honesty, and friendliness. The purpose underlying the organization of society is traceable back to a realization that, in order to pursue one's egotistic interests rationally, it is necessary to take steps to regulate the process One realizes that, if it be rationally sound to promote his personal welfare, this right should be recognized as belonging to all and not solely to himself. Each begins to realize that the welfare of others is rather obviously bound up with his own and that for him to prosper others with whom he lives must also prosper. Therefore exhibitions of envy, hate, and fear should be discouraged, for they provoke misunderstandings and sap the vitality both of individuals and of society Social organization is maintained for the most part by fear of the aggressiveness of others, but this is an inferior bond of union that should be replaced as quickly as possible by a rational grasp of the necessary demands of common welfare The natural state of blind desire is the most unfree state A man becomes free and more powerful in associations with other men having common objectives. The more solidly united men become in the pursuit of common purposes the greater the possibility for peace, quiet, and rational living In addition to seeking the common welfare through the social contract, it was Spinoza's belief that all men, regardless of the size of the society, might be brought together in a common and mutual agreement through possession of genuine knowledge of God.

## DISCUSSION TOPICS

1 State specifically the philosophical relationship between Spinoza and Descartes

2 According to Spinoza, what is the solution of the Cartesian problem of substance?

3 Explain psychophysical parallelism How would it follow necessarily from Spinoza's metaphysics? What is panpsychism?

4 Discuss with reference to Spinoza's theory of knowledge the following three sorts of ideas (*a*) unclear or inadequate, (*b*) clear or distinct, (*c*) intuitive What is the source of each of these? What is Spinoza's explanation of error? What is the history of the latter idea?

5 What is the difference between freedom and determinism? What is Spinoza's accepted view? Explain how he arrived at his conclusions According to him, how may a man achieve freedom?

6 What is Spinoza's distinction between actions and passions? Of what significance is his analysis of passions? Explain the role of self-preservation in life Outline the way Spinoza described such passions as hate, pity, hope, fear, etc

7 What, specifically, was Spinoza's ethical ideal? How is this concerned with his theory of knowledge? Make clear how the ethical goal is to be reached

8 Discuss the agreements and disagreements between the political philosophy of Hobbes and Spinoza Give a critical estimate of the merits of the two views Which do you prefer?

9 In what respects is Spinoza a modern Stoic? On what ground is he in substantial agreement with Socrates?

10 According to Spinoza, what is the source of human misunderstandings and unhappiness? How is this bondage to be overcome? Do you think Spinoza's life exemplified his philosophy in this respect? Why?

11 Give a detailed description of Spinoza's God

## PARALLEL READINGS

DURANT, WILL *Story of Philosophy*, Chap IV
FULLER, B A G *History of Philosophy*, Vol II, Chap II, Sec 9
HOFFDING, HARALD *History of Modern Philosophy*, Vol I, Book III, Chap V
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Sec 28
THILLY, FRANK *History of Philosophy*, Sec 47
WEBER, A , AND R B PERRY *History of Philosophy*, Sec 55

# Chapter XV

# RATIONALISTIC APPROACH TO PHILOSOPHY

## GOTTFRIED WILHELM LEIBNITZ

### 1. *Place in Philosophy*

Leibnitz was a man both of the Renaissance and of the Enlightenment In so far as he was a metaphysician and a man interested in all the scientific learning of his age, he continued the general spirit and movement of the Renaissance His interest in man and his affairs and in the rational solution of natural and human problems marks him as a man of the Enlightenment, a movement which was basically a return to an anthropocentric starting point The Enlightenment ordinarily dates from the appearance, in 1690, of Locke's *Essay concerning the Human Understanding* Since Leibnitz lived some twenty-five years after the appearance of this document, his life overlaps the early years of this period in the history of human ideas

In Leibnitz all the conflicting interests and problems of his age find expression He was familiar with Greek, medieval, and contemporary thought in the fields of philosophy, religion, and science He was a man interested in many realms of learning and possessed of an intellect that enabled him to become master of them all Accompanying this interest and grasp of knowledge from diverse branches of learning was an intense desire to bring the loose ends of thought together in some form of universal harmony The idea of this harmony appears to have been derived from his understanding of mathematics, which, above all other things, is characterized by certainty and accuracy Nor was it in the interests of pure knowledge or theory alone that Leibnitz desired this harmony of all learning His constant contact with the world of affairs made him more than a mere theorist. Familiar with all theories, he wished, either through compromise or through the discovery of common foundations, to unify them all and organize them into some practical working philosophy of life Following

this fundamental bent of his thought, it became apparent to him that the opposed theories of teleology and mechanism and the disputes between religion and science were most in need of critical analysis and systematic synthesis He desired to recognize the mechanism of science and yet to make room for the concept of underlying purpose hidden beneath that mechanism. The product of these interests led to the emergence of his basic metaphysics with its concept of all-encompassing preestablished harmony, a universe interpreted in terms of the mechanical science of his day, yet a universe which, beneath its phenomenal appearance, reveals a fundamental religious teleology

The universality of his interests and the magnitude of his knowledge forced upon him a world view not always closely knit though it possessed remarkable breadth and insight His persistent efforts to reconcile incompatible hypotheses resulted more or less inevitably in the appearance of weaknesses that are the usual attendants of compromise. Perhaps the very abundance of his insight is the chief source of weakness to be found in the technical development of his thought.

In some respects the precocious Leibnitz was nearly as remarkable a man during his age as Aristotle was during his His early access to his father's extensive library enabled him to learn Latin by the age of eight, and he was familiar with the original Greek and Roman classics by the age of twelve. He entered the university of Leipzig at fifteen, wrote his dissertation and was granted his bachelor degree at seventeen. He was refused a doctorate degree at Leipzig because of his youth He thereupon went to Altdorf, where, at the age of twenty, he was given the degree At the same time he was offered a professorship at the university, which he declined.

Instead he entered the service of the Elector of Mainz, for whom he wrote propaganda intended to favor the political aspirations of the Elector. In the service of the Elector, near the end of his sixth year of employment, Leibnitz was sent as diplomat to the court of Louis XIV in France After a year in Paris, his services to the Elector ceased at the latter's death. He continued to reside in Paris, however, making the sciences his chief study. From Paris he went to London, thence to Hanover by way of Holland At The Hague he met Spinoza and there read the unpublished manuscript of the *Ethics*. In 1676 he became librarian for the House of Han-

over, continuing in this service most of the remaining forty years of his life

Here he had access to the library records and undertook to write a history of the House of Hanover, which, by the time of his death, had been traced from the eighth to the eleventh century Meanwhile, his interest in mathematics had increased At the age of thirty-eight he published his discovery of differential and integral calculus almost simultaneously with an exactly identical discovery in this field by Isaac Newton At the age of forty his philosophical career definitely began, the influences in this field being derived chiefly, it appears, from his vast knowledge of classical philosophy, his familiarity with contemporary science, and his understanding of contemporary philosophers, such as Hobbes, Descartes, Spinoza, and the Occasionalists

It is somewhat ironic that a man so active politically for most of his seventy years of life should die almost unnoticed, to be "buried more like a robber than what he really was, the ornament of his country " But such was the case His patrons had died or were removed during his old age and the man who, during his career, had carried on an active correspondence with more than a thousand people had but a single servant at his side when he died.

## *Metaphysics The Monodology*

Leibnitz's theory of reality developed out of a disagreement with ~~his predecessors and contemporaries, especially~~ Descartes, Spinoza, ~~and the Occasionalists~~, who to his mind had failed to offer an adequate explanation of the real with their various interpretations of the problem of substance He approved the general procedure of Descartes and Spinoza in seeking a body of self-evident truths as the foundation for a genuine science of reality. He maintained, however, that an interpretation of reality as a twofold substance, as in the case of Descartes, was inadequate in that the concept of extension left the world a passive, inert, and lifeless thing, whereas it is indicated that the very essence of all things is activity In the instance of Spinoza's interpretation of the one substance exhibiting itself as thought and extension, Leibnitz felt that he perceived a basic self-contradiction. The Occasionalists appeared to accept a reality too much dependent upon an imperfect God who constantly must be called upon to intervene in the processes of nature. In the place of these concepts

of substance Leibnitz substituted the notion of a reality essentially dynamic—a universe construed as a system of forces

He argued that extension is not the essence of bodies, but that they are, instead, composed of force-substance which is the very opposite of inert extension Resistance, which seems to be a basic characteristic of bodies, must be interpreted as the product of effort, of activity on the part of the object His predecessors, he believed, had mistaken phenomenal manifestations of force for the reality of things and must be corrected accordingly It is force that makes possible the observable effects, including all the so-called extended and material bodies Yet it is not a single universal force, but rather an infinitude of forces, each self-contained and independent of every other force Bodies are composed of these units or "atoms" of force Believing with some of the ancients that a nondivisible entity must have no extension, he argued that the unit of reality is immaterial but of the nature, in the aggregate, to produce objects exhibiting such characteristics as extension and inertia He agreed with Descartes that the universe is completely filled, but it is filled with these units of force, which he called *monads* taking the term, apparently, from Bruno The observable manifestations of these forces are to be interpreted, as Descartes had argued, mechanistically

All the motion possessed by the universe is derived from the energy exerted by the monads No external force plays a part in the organization and continuance of natural processes No monad is able to exert any influence upon the behavior of any other. Each is absolutely independent of the countless others, a distinct and separate unit of force playing its own private and dynamic part in the cosmic show Mechanical interaction of bodies finds no place here and thus the explanation of the movement of bodies by the billiard-ball physics of Descartes is repudiated Descartes had maintained that no motion is ever lost, Leibnitz asserts that no force is ever dissipated He thus substitutes conservation of force for the conservation of motion

Every monad is essentially like every other one, the difference being that of the degree of adequacy with which each represents the entire cosmos Each monad is conceived to reflect the whole universe from its particular station or point of view From creation it was predetermined that the monads should display a complete harmoniousness of function. The universe is conceived as composed

of an infinitude of monads, ranging from those that mirror the universe obscurely to those that mirror it with greater and greater clarity. Each monad may be held to be a point of perception, each differing from all others but at the same time forming a scale of perceptual clearness from the obscure to the vivid. Juxtaposed monads exhibit infinitesimal differences incapable of being discerned. Monads are alike in man, plants, animals, and so-called matter. All matter, all nature is animate, alive, conscious in varying degrees Bodies are composed of monads reflecting the entirety of the cosmos according to their various degrees In the so-called higher bodies, such as plants, animals, and men, one monad among all these that go to compose each separate body perceives the universe more clearly than the rest Such a monad is called the ruling monad, the *entelechy*, or *soul*, or *mind*

A question arises immediately as to how it happens that these monads so arrange themselves to form bodies The answer is that the formation of such organizations is prearranged, in terms of the nature of things, without a single monad being influenced in its behavior by any other Each apparently feels the impulse to associate itself with higher monads in the scale of perception Those monads with unclear perception give the appearance of being inert and lifeless, yet in reality they are not dead, but merely are farther down the scale with regard to the perfection of perception Man alone of all the bodies of nature possesses not only perception and memory but self-consciousness, or in Leibnitz's terminology, *apperception*. In animals there is no apperception, but there are perception, memory, and degrees of consciousness. Thus nature is composed of groupings of monads, each independent of every other and each perceiving the universe with different degrees of clearness The reason for all this intricate and substantially automatic arrangement of parts is the God who created the monads in the first place and provided for the harmony of the lower to the higher

### 3. *Theology: The Best of Possible Worlds*

Leibnitz was a devoutly religious man who saw no ground for differences between the findings of reason and religion If there are theological problems incomprehensible to the reason, it does not follow that they are against reason There are some truths which transcend reason or are above it These concern the nature

of the divine being and the final purpose of creation However, it is at the same time true that whatever is contrary to reason must likewise be contrary to religion. There is no real contradiction here and human reason can in measure at least achieve contact with divine reason. Because of the harmony existing between divine and human reason, we possess by our very natures faith in God and immortality There has been implanted in each of us eternal truths basic to Christianity. These may be uncovered either by the light of revelation or by the exercise of reason

The Leibnitzian philosophy of religion is outlined chiefly in the *Theodicy*, a treatise written chiefly against the theory of evil sponsored by Pierre Bayle Therein is contained, besides arguments peculiar to Leibnitz's own philosophy, the traditional proofs of God's existence, the teleological, the ontological, and the cosmological Of one thing he was very sure· that God exists as the sufficient cause of all things God stands to the universe as its absolute creator. Accepting most of the familiar Scholastic assumptions, and in true rationalistic fashion, Leibnitz drew whatever inferences seemed necessary or self-evident concerning the nature of God and the created world And herein the problem of substance takes on additional complications.

In all the universe of monads considered from the standpoint of ultimate reality there is one among them that stands to the others as an exception to the principle that no monad is able to influence another The rule of absolute autonomy is broken in the instance of the monad of monads, God, for this entity is the creator of all the others. Though protesting against anthropomorphism in religion, Leibnitz at the same time posits the thesis that God is omniscient, omnipotent, free, and independent of the universe. God is viewed as one capable of making a choice at the event of creation, a choice that resulted in the creation of the very best of possible worlds Among all the worlds that God could have created, His nature determined that He produce only the best.

There is herein, it would seem, a curious inconsistency. If God, as the monad of monads, is clearly regarded as the creator of all things, it is obvious that here in an exception to the rule that no monad can influence any other monad On this ground, the system of Leibnitz may be interpreted theistically However, if this is the case, the monadology seems to be in danger of being overthrown. If the monadology is retained as the theory of the

universe, then God is a monad actually and there would appear to be no room for the interpretation of the universe as created by a deity On this interpretation Leibnitz is in no position to argue for a theistic interpretation of the world and is faced with the necessity of accepting a position very near to pantheism It is clear that Leibnitz is not in sympathy with the pantheistic interpretation of the world, stoutly maintaining a theistic view. We may, therefore, leave it to speculation as to the manner of weaving together the elements of such a contradiction This situation may be taken as typical of the more serious weaknesses of attempted compromise in his philosophy.

If it be taken as true that our world is the best, it is necessary to answer the obvious objection that experience finds it not always easy to accept this conclusion The world we live in often appears to us far from good and perfect To answer this objection Leibnitz was forced to offer an explanation of the appearance of events or things ordinarily judged to be evil In a perfect world there should be no evil at all. Accordingly, we find offered a threefold classification of evils The first type may be called *metaphysical evil* This is conceived to include certain evils which God unconditionally willed should exist for the good of mankind, and, since these evils are designed for the welfare of man, they cannot really be called evil A second class may be labeled *physical evils* These include pain, pestilence, and disaster of various kinds, ordinarily traceable to the work of nature In general, these evils God provided by an act of will for human punishment or otherwise as means for man's attaining a higher stage of goodness Again it follows that it is only by the grace of a word that these conditions may be called evil. The third variety of evil may be called *moral* Leibnitz is somewhat evasive as to the origin and purpose of this class of evils. It appears that God permitted these but did not explicitly will them, and, so far as it seems apparent, the reason for their existence is that of all possible worlds even the best must somehow contain some evil It is also suggested in connection with this variety of evil that it is really relatively good for it serves to emphasize the character of the good through the operation of contrast effects In much the same way that dissonant notes in a musical composition add to the beauty of the whole, evil adds to our appreciation of the good Basically, this explanation of evil is not a new one, but follows the typical lines of apologists,

who, while believing in the intrinsic goodness of God's creation, yet have to find some way of accounting for evil Since to grant its reality would appear to contradict the goodness of God's nature, evil must be interpreted as a good in disguise

Personal immortality, which to Leibnitz was a fundamental principle of faith along with God's existence, proved in his discussion to be not less obscure than the nature and function of God. True to the spirit of Christianity, Leibnitz adhered to the belief that the soul of man cannot die with his body The soul is free in the same sense that God is free, free in the same way that Spinoza's God is free It is determined by no other agency than itself since no external force can, according to the theory of monads, act upon it. Being completely self-determined the soul is at the same time wholly free Every spirit is "a little divinity in its own department." That part of a being which is spirit or soul, and which is immortal, is difficult to distinguish from that which is not soul In fact no distinction is possible, despite Leibnitz's stout affirmation of the reality of immortality. Admittedly every soul has a body, in fact it is never without one. God alone is a bodiless monad Yet Leibnitz speaks of a state of being in which souls preexist in a bodiless state before they are incorporated in a body This obvious contradiction cannot be overcome by appealing to preestablished harmony, through which medium it is presumed souls and bodies become conjoined Never is there any genuine relationship between the two, for there can be no interaction Together, by a prearranged harmony, they develop whatever inherent potentialities are present—they mirror the world from a particular point along a finite range having infinite points of view. What is the ultimate goal of that process of unfoldment?

Leibnitz claimed it to be immortality for the soul Yet the concept can have little meaning. Future life, whatever that may mean, again must discover souls with bodies and metaphysically both are equally immortal The stick and the stone are as immortal, actually, as the highest apperceiving soul The principle of indestructibility of force, which is the essence of monads, prevails eternally. Death is a dissolution of a particular arrangement of monads At this event the monads can become but parts of other beings Though Leibnitz presumed them to advance "to a grander scene of action," that advance cannot, in terms of his metaphysics,

be construed to mean achievement of heaven, and personal immortality has no meaning whatever

### 4. *Epistemology. All Knowledge Is Innate*

Leibnitz's theory of knowledge presents an attempt to reconcile empiricism and rationalism. To begin with he was convinced of the possibility of deriving absolute truth He was also convinced that such truth could not be obtained from experience alone. If knowledge is to be of the sort that is lasting and incontrovertible, it must originate in the intellect alone and thus be a priori in nature. This is to say that truth is to be had independently of sensation, truths like those found in mathematics, for example However, these truths are not confined to this field alone, for they are also to be had in logic, theology, ethics, and law The task of philosophy, in part at least, is that of discovering such absolute truths.

It is, of course, necessary to accept the results of science, but underlying these discoveries of science is an order of knowledge more ultimate and deep rooted. Philosophy must discover this Beneath the mechanism and scientific measurements lies a teleological structure whose function is manifested in the phenomenal world of apparent corporeality. It is this phenomenal world that the laws of science describe As presented to the senses, events do not convey a guaranty that they must be such as they are That is, there is the possibility that they might have been otherwise. A mechanical interpretation of them could never clarify this phase of the problem. Only by recourse to a study of the underlying purpose can a *sufficient reason* for their particular concurrence be discovered. Empirical knowledge goes but part way along the course of explaining the world and must be corrected, or at least clarified and amplified, by the discovery of more basic principles that are unconditional, necessary, and self-sufficient. Upon these alone can absolute knowledge of the world be constructed. Both empiricism and rationalism have their places in the scheme of knowledge, but ultimately truth is rational in character. These are truths of such a nature that it is impossible for them to be otherwise. By the law of contradiction, they are such that their opposites cannot be thought.

Though Leibnitz seemed to recognize the reality of sensation, it is not the ordinary interpretation of sensation that is found

in a strictly empirical approach. It is not the case that an object in our world is in process of influencing a subject perceiver. The mind is not a blank tablet upon which impressions are made by motions or activities in the external world. His metaphysics does not permit him to recognize this usual meaning of sensation as adopted by empiricism He had already made the point that each monad is completely independent of every other, and it follows, therefore, that both sensation and reason arise as aspects of cognition Sensations arise within the windowless monads through self-stimulation. It is a process of gradual unfolding of that which was there from the beginning.

How, then, is it possible to distinguish between reason and sense perception? Both of them are subjective in the sense of being uninfluenced by things external to the conscious monad. The difference, apparently, is one of degree rather than of kind Sensation gives rise to ideas that are unclear and confused, while reason produces ideas that are distinct, clear, and orderly in character. Sensation is necessary to stimulate the reason, so that the latter may become aware of implicit truths all the while possessed by the intellect. This process, however, does not generate any new idea or concept, but rather aids in bringing inherent ideas to the focus of consciousness At all times the monad perceives, but not always are these percepts conscious ones. Monads unfold, as it were, through the stages of unconscious preception and conscious perception to self-consciousness or apperception. The materials involved in the process are never at any time or in any part of them derived from external sources All truths, all sensations, are innate Whatever comes to be recognized as absolute truth existed there in an unconscious condition from the beginning.

Ideas of the reason are those whose opposite is unthinkable. As stated, they do not depend upon experience, for they go far beyond it. This is true in spite of the fact that they were once unknown and were in time aroused by sensation and elevated by the reason to the status of absolute truths All ideas other than those whose opposite is unthinkable lie within the realm of sense perception. They cannot, as yet, be generalized or made to assume the form of abstract knowledge and, therefore, pertain only to the particular instances or events of experience They are what might be said to be particular descriptions rather than descriptions of universal events or processes

Learning is a process of making obscure ideas clear ones, it is a process of discovering among unclear ideas those that have universal application and carry with them the absolute necessity of their truth. Learning, again, is a process of transferring concepts from the realm of the empirical to that of the rational. Sensation gives an account of the universe mirrored by the monad in a distorted manner, rather than the sort of account that does justice to genuine reality. Reason can grasp truths about the universe which reveal it as a complicated arrangement of nonmaterial entities, orderly and properly planned as a universal harmony. Sensation views the world as dimensional, as consisting of bodies and space The reason discredits the concept of space as a category of reality and proclaims it to be a perceptual construct merely. It is an effect produced in the mind when superficial phenomenal manifestations of forces—the latter alone being real—are mistaken for genuine reality. This error of mistaking the phenomenal for the real is a characteristic weakness of the senses which reason must correct if truth is to be had

This is a clear-cut assertion for the complete innateness of knowledge, an extreme form of rationalistic epistemology. Descartes had argued that some truths only are innate Upon these few truths the body of knowledge is to be constructed by a process of deduction which arrives at clear and distinct truths, all of them dependent upon the original premises Leibnitz goes the whole way to assert that it is not a few truths merely that are a priori but in reality all of them are Thus, in order to give an account of empiricism and rationalism that would serve to reconcile them, he found it necessary to redefine the processes of perception. It is this view that is to be remembered as the complete opposite of the theory of knowledge presented by the British empirical school

### 5. *Leibnitzian Influence The Enlightenment and Romanticism*

From Leibnitz there developed the fundamental ground of eighteenth-century German Enlightenment. His influence was felt in the field of philosophy through his rationalism His genius as a mathematician exerted its sway in the physical sciences Finally, his concept of the individual unfolding his personality in a cosmic setting, the parts of which were divinely cemented together, found expression in German literature up to the period

of Goethe and Schiller Writings of Leibnitz in French and Latin were translated into the German for German consumption. This was done chiefly by Christian Wolff at Halle, and around Wolff developed the first modern school of philosophy in Germany It looked upon Leibnitz as its patron saint, though the Wolffian interpretation omitted much that was characteristic in this philosophy It cannot be said that a wholly faithful interpretation was rendered However, the movement which is known as the Leibnitz-Wolffian school had a tremendous effect upon the future thought of Germany. Wolff's textbooks and his pupils were to be found in all the universities of Germany It was into this tradition that Kant was introduced when he entered the University of Konigsberg in 1740 The movement was in the fullness of its power then and so remained until Kant's own influence overshadowed and supplanted it later in the century

Wolff made epistemology more central in his philosophy than metaphysics Leibnitz had constructed his theory of knowledge upon the foundation of his monad theory of reality, the latter having been of more significance than his theory of knowledge Wolff's epistemology distinguished rational and empirical truth, but no particular effort was made to reconcile or coordinate them, since his superficial analysis failed to create this problem for him. He was convinced of the reality of a priori rational truths and of a posteriori empirical truths An understanding of man and the cosmos may be undertaken from the standpoint of either and ultimately neither stands in contradiction to the other. Ultimate knowledge or absolute knowledge is of principles and is conceptual, while other knowledge is contingent, relative, and perceptual. This readiness to recognize an empirical element in knowledge permitted the influence of Locke to be introduced by the younger members of the school and aided in bringing to a focus the issue between rationalism and empiricism in the work of Hume and Kant Wolff's approach to metaphysics by way of logic and epistemology set a precedent for future thought that is seen all through the tradition of German Idealism.

For all the claims of Wolff to be offering a correct interpretation of Leibnitz, it is necessary to agree with Lessing that Leibnitz could have found a better interpreter In 1765 Leibnitz's *New Essays* were published and Lessing translated them The thought that struck him forcefully from his study of Leibnitz was that of

the struggle of the individual soul up from the dark depths of the unconscious to the clear light of the conscious From this time on interest among German men of letters centered upon the individual, his hopes, ideals, feeling, struggles, defeats, and victories. It became the vital force of the romantic movement It was Lessing chiefly, influenced somewhat by Leibnitz, who gave to romanticism its initial impetus and began the reaction against the intellectualism of the Enlightenment

By some Lessing is considered the greatest philosopher of the German Enlightenment Like Leibnitz he was not known as a philosopher chiefly but as a critic and a dramatist His philosophy he expressed in his literary works, and as the father of modern German literature his influence was profound It has often been said that no particular set of philosophical beliefs were supported by Lessing However this may be, it is clear that he was opposed to a strict rationalism and was very certain that human history can best be understood in terms of struggle Each era has its own objectives and consequences but each exemplifies the effort of individuals to realize their inherent capacities History is the drama of human striving, of the struggle of the microcosm within the macrocosm In this activity the individual is not an isolated bit of the whole of things. He is instead a vital and necessary part which grows and develops with nature History indicates that it is impossible to achieve the rationalistic ideal of absolute knowledge It is likewise true that the absolutely false cannot be determined Knowledge is relative to each historical epoch, to the various periods of human development Herein is to be found the basis for Lessing's break with the period immediately preceding with respect to the style and subject matter of his literary work The foregoing reveals an anti-intellectual temper that is a characteristic element of the romantic movement

Lessing was dominated by deep religious feeling His final views upon religion mark him in sympathy much more with Spinoza than with Leibnitz The notion that God is somehow everywhere present in nature was a fruitful lineament of romanticism Against the rational theism of Leibnitz, Lessing maintained that it is impossible to prove anything about the nature of God or the manner of the world's coming into being. All this may one day become known to man but it will be only after the lapse of a great period of time during which God will slowly reveal Himself through

nature and in human spiritual life. Theism does not offer the proper concept of God Feeling informs that God is unseparable from the universe All things are real only as part of the cosmic unity which is God. Religion must satisfy feeling rather than intellect and, because of this principle, there is no ground for interpretations that would place God outside the confines of the universe or would consider Him separate from it Such a view is lacking in emotional satisfaction It removes the warmth from religion and reduces it to a cold rational level. However, there is something good in all religions if they are considered from the standpoint of their period and consequences. They are stages in the history of religion which by slow steps will finally bring man to a grasp of true rational religion In the work of the Romanticists absolutism is replaced by the concept of development All things mature gradually according to principles of growth inherent in the nature of things Knowledge must proceed inductively rather than deductively. To learn of a thing entails a study of its history, its growth, its development.

From the time of Leibnitz to that of Kant two forces are seen to be at work in the intellectual life of Germany One of these is commonly called the Enlightenment, the other Romanticism. Neither ceased to be an influence with the development of Idealism, and there is an obvious romantic strain in Kant, Fichte, Schelling, and Schopenhauer Rationalism, introduced by Leibnitz and continued by Wolff, afforded the groundwork of the Enlightenment Lessing, influenced both by Leibnitz and Spinoza, popularized feeling in opposition to the intellect as being the best avenue of approach to the problems of existence and in this way was instrumental in bringing about a change in the literary tradition from the classical to the romantic.

## DISCUSSION TOPICS

1. Why may Leibnitz be called a philosophical mediator? To what extent do you feel that he was successful? State clearly your reasons

2. Discuss Leibnitz's relationship to his predecessors, Spinoza and Descartes What were his fundamental disagreements with them?

3 Describe the structure of reality according to Leibnitz

4 What is the doctrine of preestablished harmony? How is it related to (*a*) psychophysical parallelism, (*b*) Occasionalism? Why did Leibnitz introduce the concept into his system?

5 How did Leibnitz propose to reconcile teleology and mechanism? In this respect, how did he use the criterion of sufficient reason?

6 Discuss freedom and determinism in the philosophy of Leibnitz Compare this view with that of Spinoza

7. What is contained in, what is the argument for, and what conclusions are drawn from the notion of "the best of possible worlds"?

8 What are the origin and foundation of the ethics of Leibnitz? Criticize the view

9 Explain Leibnitz's theory of knowledge and criticize it from the standpoint of Locke's empiricism

10 Analyze Leibnitz's theology in terms of his metaphysical system

11 What do you understand to be the meaning of Romanticism?

12 Give an account of the chief philosophical development in Germany from the time of Leibnitz to that of Kant

13 What contributions were made by Lessing to the general movement of Romanticism?

14 Distinguish between the general meaning of Enlightenment and Romanticism Could you make out an argument that Romanticism was a reaction to the Enlightenment?

## PARALLEL READINGS

ALEXANDER, A B D *A Short History of Philosophy*, Chap I, Sec 3
FULLER, B A G *History of Philosophy*, Vol II, Chap II, Sec 10
HIBBEN, JOHN GRIER *Philosophy of the Enlightenment*, Chaps VII, VIII
HOFFDING, HARALD *History of Modern Philosophy*, Vol I, Book III, Chap. VI
WEBER, A, AND R. B PERRY *History of Philosophy*, Sec 56.

# Chapter XVI

# KNOWLEDGE AND REALITY: SYSTEMS OF EMPIRICISM

## JOHN LOCKE

### 1 *Life and Interests*

Locke was born in the seventh year of the reign of Charles I, and his life spanned the remaining years of one of the most turbulent centuries in English history During this period occurred the long drawn-out wars between the Stuarts and Parliament and between Cromwell and Parliament Finally out of the struggle the Parliamentary philosophy of government emerged, and Locke came to be, in his later years, the chief spokesman for it

His life, after the age of thirty-four, was intimately associated with the career of Ashley, later the Earl of Shaftesbury, who was probably the outstanding statesman during the reign of Charles II Shaftesbury's career in English politics reflected the unrest of the times. His sympathy for the Stuarts first showed itself during the career of Charles I. He was instrumental in assisting Cromwell to put down the second of the two severe wars of Charles I's reign and was rewarded by Cromwell for this assistance. Cromwell's relationship with Shaftesbury, during his eleven-year rule, became more and more strained and Shaftesbury opposed Cromwell So with the restoration of the Stuarts in the person of Charles II, Shaftesbury was in a favorable position to take a leading part in royal politics The quarrel between Parliament and the Stuarts resumed, and, as events transpired, Shaftesbury inclined more and more heavily in the direction of Parliament As a result, he fell from royal grace, was involved in plots, and was forced to escape to Amsterdam in 1682 There he died one year later. With him on this enforced visit to Amsterdam went Locke, fearing also to be involved in the plots of his patron. In Holland, at the age of fifty-four, Locke published his first articles He remained there

some six years, returning to England when William of Orange was asked to take the throne of England in 1688 After his return to England Locke's fame grew He was offered public office and published articles upon such topics of general interest as political theory, education, and religious tolerance

It was during Locke's residence at Exeter House, the home of Shaftesbury, that he became interested in an independent philosophical enterprise. Before this he had become acquainted with philosophy through reading Descartes, with whom he frequently found occasion to disagree. At Exeter House, on occasions, certain gatherings were held among friends interested in science and theology It was at this time that Locke became acquainted with the physician, Sydenham, and the chemist, Boyle He was interested in the success of empirical science as represented in these two men and in the general problems discussed These irregular meetings led to frequent and often endless discussions, which prompted Locke to wonder if it might not be the case that they were dealing with problems which might not be capable of being settled by the human mind. It was proposed that he bring to the next meeting a few notes regarding the nature of the human understanding This is the starting point of his philosophical career Twenty years after this, the result of his mediations was published in the famous *Essay Concerning Human Understanding*, the manuscript of which brought the magnificent sum of $150 upon publication

The *Essay* made him more famous than he expected, and from this point on Locke became one of the leading voices in philosophical theory in England. His interests are perhaps best illustrated by an examination of the titles of certain of his treatises written in England after the publication of the *Essay*. One of these is called *A Letter Concerning Toleration*, in which he argued for free religion in a free state and proposed that there be freedom for all varieties of religious belief, provided they did not conflict with the best interests of the public. He expressed his theories regarding popular sovereignty in his *Treatises on Government* The same liberalism and psychological insight are revealed in his *Thoughts on Education*, wherein is advocated a more thoughtful procedure in the training of youth. *The Reasonableness of Christianity* was a defense of the prevailing form of religion in England From a philosophical standpoint, however, the most significant of all his writings is the *Essay Concerning Human Understanding*. Its impor-

tance is revealed in the fact that the period of the English enlightenment is ordinarily dated from the publication of this document.

## 2. *Theory of Knowledge*

As before mentioned, the meeting of friends at Exeter House led to the launching of his philosophical career. He determined to discover three things, if possible, with reference to the human understanding. First, he wished to ascertain the origin of all our ideas, secondly, to show what is the certainty, the evidence, and the extent of human knowledge; finally, to compel philosophy to abandon those discussions and problems which surpassed the human comprehension by clearly marking and defining the limits of mental capacity. Taking these in order, it is possible to outline the development of the chief phases of his philosophy.

*a Origin of Our Ideas* In order to discover the source of our ideas, Locke felt called upon to criticize the prevalent theory that knowledge, in part at least, is inherent in the mind of man from the beginning Thus the familiar theory of innate ideas, held by Descartes, the British Neoplatonists, and Leibnitz, was called into critical review. His argument was directed, it appears, chiefly against his British contemporaries, the Neoplatonists, represented typically by Cudworth. It was the argument of these opponents of his that ideas may be present in the mind without the mind's being conscious of their presence. This appeared to Locke to be a contradiction. He believed that the term "unconscious idea" is self-contradictory and without meaning. To be in the understanding meant to him to be understood or to be perceived by the mind. Thus, an innate idea in a state of existence as an unknown idea prior to its coming to consciousness is a contradiction in meaning. It is certainly true that there are individuals who do not possess the innate principles or ideas, such as identity, being, substance, cause, etc, that human minds are alleged to have. That is, the newly born infant, the ignorant, idiots, savages, and the like, certainly do not have a knowledge of such principles. If they are said to have these ideas and yet not be aware of them, Locke answers that he cannot detect any meaning in the statement. Nor can it be asserted that universal consent is an adequate ground for belief in innate ideas. Apparently no one knows such truths until he learns them from another. Even if universality characterized the presence of one or more such ideas,

it would still not follow that they were innate, for, after all, such ideas as fire, sun, and water appear to be ideas held universally by men, and these are certainly derived from experience.

Ideas, it must be granted, occur by degrees, by a process of acquisition or education, which is the same as saying from experience. Neither can it be argued that there are innate moral principles such as those the Neoplatonists uphold. Even a casual study of moral principles as sponsored by different nations of people will reveal no marked similarity among the moral codes of the various groups of people. Christian and pagan alike disclaim innateness for their moral principles. In the case of the Christian code, the laws are given and God requires obedience and will punish those who fail to comply. The pagan argues that failure to obey the dictates of morality, for example, the keeping of contracts, would be to violate the excellence of man. Likewise, those who follow Hobbes assert that the great Leviathan demands obedience and will punish any transgression. In none of these cases is the sanction for moral conduct resident in absolute a priori principles, but instead it is reverence for a deity, respect for human personality, fear of punishment by the civil authority.

Those who argue innateness of moral principles very likely are being misled by the commands of conscience. Everywhere that man congregates a set of principles guiding conduct is in effect. As a result, the individuals of such a society grow to maturity with certain habits of thought and conduct developed in them from their youths, which habits reveal themselves in the familiar working of the conscience. The conscience is nothing more than our own opinion of ourselves and our activities and is a slave to accepted practices, which vary with different races or different classes of people. Frequently the dictates of conscience are determined by no more intelligent a source than ignorant and superstitious nurses or uninformed parents. Simply because certain principles seem to be a part of us and are in later life somewhat perplexing to account for is not sufficient ground for claiming them to be inborn rather than derived from experience. Even the idea of God is not original, though no less a thinker than Descartes believed the contrary. Atheists and whole nations of savages are found to have no such idea at all. Thus the argument of Cudworth, that God may be demonstrated by *consensus gentium*, must be rejected entirely.

Locke's conclusion from this negative aspect of his argument is that the mind, in the beginning, is completely blank and devoid of any content whatever It is a blank tablet upon which inscriptions may be made but upon which there is nothing to begin with. Experience is the source of all our ideas, the foundation, therefore, of all our knowledge All of it is acquired through the process of experience and there is nothing originally given, even by God.

Ideas accumulate in the mind from two sorts of experience. One of these, *sensation*, gives us our knowledge of events occurring in the world around us. The other, *reflection*, supplies us with ideas of the inner processes of the mind while it is functioning These are the twin sources of all our knowledge In the beginning the child has sensations which supply it with the content of its ideas. As he grows older, reflection arises when this content is arranged or manipulated in various ways Thought begins when sensation furnishes the raw material. During the process of accumulating the raw materials of knowledge, the understanding is purely passive It is a photographic plate being exposed through, or by means of, the various sense avenues The objects of sense force the mind to have impressions of them in the form of ideas and the mind cannot resist having them

*b Kinds of Ideas* Ideas as content of the understanding are of two sorts which may be designated *simple* and *complex* Simple ideas occur when the mind is passive, complex ones arise when it is active The mind receives the simple ideas and constructs the complex Once given, simple ideas may be interpreted, combined, or altered as to their original sequence, compared, and otherwise organized. This is what is meant by reflective processes. The mind has no power whatever to create simple ideas These may come to the mind through one of four avenues These are simple ideas given by means of a single sense (1) Examples of these ideas are colors, tastes, smells, sounds, and, in addition, the particularly frequently occurring idea of solidity, which is a production of the sense of touch. The second source of simple ideas is the operation of more than one sense (2) For example, sight and touch combined produce ideas such as space, extension, figure, rest, and motion. In the third place, simple ideas may arise from reflection (3) These ideas are thinking; imagining, willing awareness of the mind's functioning upon the content of sensation. Finally, simple ideas may be

derived from a combination of sensation and reflection. As examples of this type, pain, exhaustion, unity, and diversity are offered. Locke lists as the faculties of the understanding such activities as abstraction, comprehension, discernment, retention, perception. These processes, when active, variously produce a remarkably diversified body of complex ideas. The mind may put together simple ideas to make complex ones or make combinations of complex ideas, the latter having already been formed by a combination of simple ideas either of sensation and reflection or both. By combining two simple ideas into a unit, it is possible to obtain an idea which partakes of the characteristics implied by the contents of the two originally simple ideas. By comparing ideas without combining them, it is possible to exhibit certain relationships among ideas possessed by the mind. By separating some ideas or aspects of ideas from all others that may accompany them, it is possible to obtain abstract or general ideas.

*c. Classification of Complex Ideas.* All complex ideas fall into one or the other of three classes *modes*, *substances*, or *relations*. By mode is meant all complex ideas which, however compounded, contain not the supposition of independence but rather the notion of dependence upon some underlying support or substance. Examples of this variety of ideas are triangle, gratitude, murder, and the like. Of modes, it is possible to distinguish the *simple* and the *mixed* varieties. An idea included in the class of simple mode would be one concerned with the variations or combinations of the same simple idea, like that of number or units. Ideas such as dozen or score are the products of adding together units each the same. A mixed mode is an idea compounded of more than one simple idea, as for instance, beauty, which combines figure and color, or theft, "being the concealed change of the possession of anything, without the consent of the proprietor, (which may be seen to be) a combination of several ideas of several kinds."[1]

By ideas of substance, Locke means combinations of simple ideas taken to represent distinct particular things existing by themselves, accompanied by the notion of an underlying support of qualities.

Thus, if two substances be joined, the simple idea of a certain dull, whitish color with certain degrees of weight, hardness, ductility, and fusibility, we have

[1] *An Essay Concerning Human Understanding*, Book II, Chap. XII, Sec. 5. By permission of E. P. Dutton & Company, Inc., publishers.

the idea of lead, and the combination of the ideas of a certain sort of figure with the powers of motion, thought, and reason joined to substance make the ordinary idea of man Now of substances also there are two sorts of ideas, one of single substances, as they exist separately, as a man or a sheep, the other of several of those put together, as an army of men or flock of sheep, which collective ideas of several substances thus put together, are as much each of them one single idea as that of a man or a unit [1]

Thus groups of simple ideas, when constantly appearing together, produce in us the supposition that supporting them is a substratum which, though it remains unknown in essence, must be supposed to exist as the essential means for these qualities to appear together in the constant relationships in which they are revealed to us. Locke insists that though we can have no clear idea of substance, we cannot deny its existence. He goes on to say that in the deficiency of our understanding we are in substantially the position of the Indian, who, "saying that the world was supported by a great elephant, was asked what the elephant rested on, at which the answer was 'a great tortoise', but being again pressed to know what gave support to the broad-backed tortoise, replied—*something he knew not what.*" The same type of interpretation as this with reference to a material substratum as a support for sense qualities must also be accepted with reference to an attempt to understand the substance basic to mental processes. Spiritual substance, too, must be accepted as existing, as necessary, yet it is impossible to know what its true nature is Here we find in Locke's analysis the familiar Cartesian dualism of mind and matter in but slightly disguised form. He believed that we have ideas of three sorts of substances, mind, matter, and God, which latter is called pure spirit.

The process of comparing ideas diversely acquired or constructed by the mind produces ideas of relations Ideas may be related in a nearly limitless degree, but of all such ideas the most significant is of cause and effect, an idea derived from both sensation and reflection. We perceive that some of our ideas are generated or altered by other ideas, and thus the idea of one as cause of the other emerges. This idea and others of the same type, such as identity, diversity, space, time, extension, moral principles, since they occur to the mind during the comparing of ideas, have their origin in no innate or a priori source. All the ideas enumer-

[1] *Ibid.*, Book II, Chap. XII, Sec. 6

ated are derived from experience, no rationalistic origin for them can be substantiated All ideas whatever are produced from the two sorts of experience, sensation and reflection..

*d. Kinds of Knowledge and Organization.* The foregoing argument involves the implication that our knowledge can extend only so far as our ideas We can have knowledge to the extent only that it is possible to perceive the agreement or disagreement among our ideas. Locke proposed that the perception of such agreement or disagreement takes three forms First, *intuition*, which supplies us with self-evident truths immediately perceived, second, *reason* or *demonstration*, by means of which we obtain ideas through intermediaries or ideas which assist us in passing from one truth to another truth. Ideas so procured could not be had merely by observing relationships immediately apparent The third form taken is *sensation*, by means of which ideas are referred to objects believed to exist separately and independently of us. This type of knowledge may be designated sensitive or problematic

The intuitive variety of knowledge is the most certain of all our knowledge, but it does not pertain to all our ideas. It offers us no information with respect to the details of relatedness among ideas not immediately evident. Demonstrative knowledge extends the intuitive type by the introduction of intermediate steps or ideas which enable us to pass from simple notions or simplified understanding to a knowledge of more complex relations among ideas Thus it is possible immediately to perceive that there are two triangles, but it is impossible for us immediately to know that the triangles are equal We can, however, know this by a process that is familiarly illustrated in geometrical reasoning Demonstrative knowledge, however, does not exhaust our ideas, for we have that type which we refer to objects that exist in nature Sensation furnishes us with ideas that cause us to refer them outward to the external world We assume a connection in the form of more or less faithful likeness between the idea and the stimulus giving rise to it This variety of sensitive knowledge is yet narrower in the sense of certainty than the other two. The three, intuition, demonstration, and sensation, furnish us with all the knowledge we have

Knowledge of the sort to be called genuine not only is limited to the extent of our ideas, but is narrower even than the ideas

themselves. Our ideas are apparently short of the totality of reality. When we examine them often, it is impossible to have any notion of that which we commonly suppose to give rise to them. Of the substance of reality we know nothing for we are confined entirely to the sphere of mind content. It depends somewhat upon the ingenuity of the individual thinker to determine how great the extent of his knowledge will be The extent will depend upon the perceived agreement and disagreement of ideas, these being systematized under four categories of ideas, identity and difference, coexistence, relation, and real existence

*Identity* and *difference* among ideas are evident through the process of intuition, which is confined to ideas as such and makes no reference to any possible relationship between ideas and things and no use of intermediaries *Coexistence* pertains to the agreement and disagreement of ideas chiefly with reference to knowledge of substances such as chairs, trees, rocks, squirrels, etc. Simple ideas are presented to us in certain arrangements or combinations, which situation induces the mind to arrive at ideas of substances Qualities thus associated are regarded as coexisting They come to the mind in constant relationships, and we are led to assume that a real object exists which possesses the combination of qualities so experienced Knowledge of *relations* covers the largest field of our ideas, and it is difficult to indicate its exact limitations. This knowledge is confined to ideas as such and makes no claim that they should correspond to anything outside the field of ideas. Mathematics is an example of a system of ideas of this sort Included in the category of *real existence* is, first, an intuitive knowledge of the self, or our personal existence, second, a demonstrative knowledge of God, and, third, sensitive knowledge of "some few other things" These "things," held really to exist, belong to the world as it presents itself to the senses The mind is able to perceive agreement and disagreement among ideas when such ideas are directed toward the external world and affirmations or negations are made regarding the conformation of ideas with things.

It will be apparent that mere agreement and disagreement among ideas, as a criterion of knowledge, are not entirely self-sufficient. It would permit agreement and disagreement among ideas derived from dreams, imagination, illusions, hallucinations, and all manner of fictions This is not the sort of content genuine

knowledge traditionally is held to possess. Locke is willing to admit the point "If it be true that all knowledge lies only in the perception of the agreement or disagreement of our own ideas, the visions of an enthusiast and the reasonings of a sober man will be equally certain "[1] He proceeds to define genuine knowledge as the agreement of ideas with real things The question arises immediately as to how it is possible to know about such agreements or disagreements if we can know things only through the medium of ideas, which we suppose the things cause us to have. It seemed plausible to Locke to argue that two sorts of ideas agree with reality First, all simple ideas These, as he had demonstrated, are not constructed by the mind but are present to the mind, owing to the fact that the mind, in its passive condition, is forced to receive whatever impressions or simple ideas it does obtain Such simple ideas

> carry with them all the conformative changes intended or which our state requires Thus the idea of whiteness, or bitterness, as it is in the mind, exactly answering that power which is in any body to produce it there, has all the real conformity it can or ought to have with things without us And this conformity between our simple ideas, and the existence of things is sufficient for real knowledge [2]

His argument is simply this, that since the mind can create no simple ideas of any kind, ideas cannot be fictitious, but on the contrary must be faithful to the source which caused them to be given to the minds of men This is exactly the assumption questioned by those who recognize the activity of mind in any and all formulation of ideas

In the second place, all complex ideas make up genuine knowledge except ideas of substances. The conformity here is somewhat different from the usual understanding, for it refers to the conformity of one idea with another idea, not with a thing thought to exist independently of any ideas The mind, in constructing complex ideas, does not assume that such ideas have any reality over and above that to which they must conform. They have validity if the process of their derivation has been accurate, but they do not have truth in the sense that truth depends upon conformation of ideas to external objects. This goes a long way to explain the reality and validity of mathematics, for this discipline makes no

[1] *Ibid.*, Book IV, Chap IV, Sec 1
[2] *Ibid.*, Book IV, Chap IV, Sec 4

claim other than to an inner coherence among the conclusions drawn from the original definitions or axioms which the mind itself makes. Furthermore, in Locke's opinion, moral knowledge possesses the same certainty and reliability that mathematics has since it, too, is based upon definitions and axioms constructed by the mind. The truth of moral principles pertains merely to the agreement or disagreement among ideas concerning conduct when these are related to moral laws

When ideas are referred to entities outside of us, to objects, the truth and certainty of knowledge decrease and become more probable in nature. Since ideas of sensation refer to objects separate from us, they may conform only partly or not at all. That is, a certain collection of our simple ideas which have come to be united in a single complex idea of a physical object may find united within it parts which are not faithful representations of the object as it really is. In so far as there is agreement between ideas and things, we have knowledge of the physical world Knowledge here must be made up of simple ideas as elements which have been "discovered to coexist in nature" Thus, our ideas, "though not perhaps very exact copies," are to be regarded as real knowledge of things. Though such knowledge does not reach very far, as far as it goes it is our knowledge We are helped but little, however, if we inquire further as to the manner of being certain of such agreement.

The senses are forced to produce ideas in the mind rather arbitrarily: people with defective sense organs do not have ideas others derive from such organs, the senses severally bear out the testimony of others; the mind cannot by remembering a sensation reproduce it in anything like its original intensity By these signs we come by the assurance that other things exist besides ourselves. It is likewise obvious that our assumed knowledge of these other things is of utmost practical importance in the ordinary course of experience. Yet such knowledge is limited to the data our senses supply us at the present moment only. The continued existence of all things not immediately perceived and the application of principles derived from events that are past alike are matters of probability only. If our memories are sound, we can have sound knowledge of past existences as well as present existences, but the future, yet unrevealed to the senses, remains under a cloud; expectations are mere hopes, predictions, probably happenings.

This is our least certain type of knowledge and at the same time the kind most used

In this realm of knowledge probabilities range from the impossible to the all but indubitable In all situations demanding action we attempt to guide ourselves by real knowledge, but, being usually unequipped with it, we fall back upon guiding principles which appear most probably true in the light of experience Inducements to adopt one or another procedure in such situations are derived from two sources. We feel confident to act if the situation or event squares with our own experience, observations, or knowledge If we lack this, we act upon the testimony of others we believe to possess the requisite experience In this we are guided by such factors as the number testifying, their truthfulness, their skill as witnesses, their purpose in offering guidance, the internal consistency of the testimony, and such evidence to the contrary, if any, as is available Yet, in spite of the huge bulk of probable knowledge, Locke retained the conviction that there is also real knowledge of at least "some few other things" that belong to the world at large

### 3 *Metaphysics*

Having come at last to the assertion that of the real world we can have knowledge, Locke attempted to become a bit more definite in specifying what the nature of that world is. This metaphysical development reveals him accepting the common-sense metaphysics that had been systematized by Descartes He did not see many of the issues that Descartes saw clearly and passed easily over the subtleties of problems indigenous to the dualism of mind and matter He asserted that two substances are real, matter and spirit. He believed that material objects are characterized by those primary qualities before mentioned· solidity, size, figure, motion or rest, and number These qualities genuinely belong to the objects, though what is the nature of the more deeply lying support of such qualities—substance proper—we cannot know, though we are led to believe that it exists. Locke meant that we may have knowledge of substances, meaning particular objects with size, figure, number, and the like, but cannot have any knowledge of substance as such, a something that apparently lies deeper in the nature of things than even the primary qualities The term quality refers to characters thought to be possessed by

objects. When these qualities act upon a sense organ, the resulting products are ideas.

Some qualities of bodies are inseparable from them regardless of their time, place, or condition. These persist throughout the duration of particular existence, for if there were no solidity, extension, figure, motion or rest, and number would be nothing at all, and an organism such as man, supposing he existed, could have no sensations whatever He would come to possess no ideas; his mind would remain so long as he lived a completely blank tablet without markings of any kind. What are frequently mistaken for real aspects of things, sense qualities like sights, sounds, or tastes, do not even resemble the objects but are the subjective effects produced by powers possessed by objects to act upon us through their primary qualities The ideas we have of primary qualities of bodies are genuine resemblances of the patterns of primary qualities really existing in bodies. This is what Locke means when he claims that we have sensitive knowledge of "some few other things" In addition to the possession of qualities, whether they are perceived or not, and the power to act through such qualities upon our sense organs, bodies have still another power which affects us indirectly Some bodies by virtue of particular arrangements of their primary qualities are able to induce alterations in the pattern of primary qualities of other bodies which may thus affect us differently than they did before. The sun thus is able to cause alterations in the figure and extension of a block of ice so that our experience of it is changed.

Locke has much the same type of analysis to offer of substance of minds. Whereas the basic nature of material substance is passivity, the essential nature of spiritual substance is activity. Spirit, as a substance, must exist in order to make possible such actions as perception, will, and imagination. True spirit is identified with God, and man's soul is defined as partly active, partly passive, the details being rather vague and the final conclusion indefinite. As both active and passive, the human spirit can act as an intermediary between mental processes and physical events. In this way Locke accepted the basic principles of interactionism without apparently perceiving its more intricate complications. His judgment is that such interactionism actually takes place, but why or how it does we cannot know Thus both the spiritual and the material substances must be believed to exist, but the

true nature of either it is impossible to ascertain. We find the same point expressed with reference to the nature of God, in whose existence Locke believed yet whose complete nature it is impossible to know. By an argument almost identical with that of Descartes, Locke defended belief in the real existence of the self. The very activity of doubting proves that the doubter is something that actually exists If one's skepticism goes so far as to doubt his own existence it is well, argued Locke, to allow him to go his way until hunger, thirst, or pain convinces him of his existence. "As for our own existence, we perceive it so plainly and so certainly that it neither needs nor is capable of any proof." In this way the experience of each of us is able to convince us of the intuitive certainty of our own existence

There are certain skeptical elements to be found in Locke's analysis, especially with reference to knowledge of the world believed to exist independently of sensation, but at the same time there is the ardent enthusiasm of the believer in things which remain yet but unclearly visioned He is too much the common-sense philosopher to develop the element of skepticism contained within his system It was left to Berkeley and finally to Hume to draw the conclusions that Locke either did not see and thus could not draw, or, seeing, did not draw because of the strength of his common-sense realism

## 4 *Political Philosophy*

Earlier in this account Locke was mentioned as the spokesman for liberal Parliamentarian rule, following the accession to the throne of William and Mary. Principles of his political philosophy came to be actualized, in part at least, in the government of England and still more in the United States, some hundred years after Locke had laid down the fundamental principles of his political philosophy.

He agreed with Hobbes that originally man exists in a state of nature and not until later does government arise out of a contract The state of nature, according to Locke, is undesirable chiefly because private property is insecure. Basic human nature is not savage (Hobbes) to the extent that fellow feeling is absent. It is a fact, however, that even though rights of life, liberty, and property belong to original man, their enjoyment is hampered by

others. To obtain the goods of life necessitates restricting natural rights according to mutual agreement among free men. The state of nature lacks the necessary regulatory principles that make possible the universal enjoyment of rights. Lacking also are impartial judges to settle disputes and a source of power capable of executing the regulatory principles. These agencies are supplied by the society that is organized for the purpose of promoting human welfare. By a free act devices are created and men chosen to represent the will of the people as specified in their agreement. These men contract to fulfill the articles of government. According to the principles of this contractual arrangement, both parties have to conform to certain rules. The contract is broken whenever either party violates the principles upon which they have agreed. The government is to preserve the safety and welfare of the people and, in the last analysis, is responsible to the people for any misconduct to that enterprise. Furthermore, if the government fails to maintain the security of the people, it is right and just that the people set up a different form of government, or another variety of the old, which it is foreseen will effect the necessary adjustments. On the other hand the agencies of government set up by the people must conform to the basic principles incorporated in the original contract. A part of the function of government must be to see that acts of the people do not violate such agreements. Ultimately, however, the people, using instruments provided for the purpose, have the right to alter even the most fundamental articles of the original contract. Sovereignty rests upon the citizens, not upon the organization adopted for their benefit and comfort. In this respect, the basic theory of Locke's governmental contract is the exact contrary of the theory of Hobbes.

In a government that is controlled by the people and is designed for their mutual protection, it is necessary that the powers of government be divided. This is partly to prevent the possible concentration of power in the hands of one or a few who, by virtue of their vested power, may more easily seize the reins of government and manipulate it to suit their selfish ends. Thus the laws of the land must be made by a separate legislative group whose business it is to make laws. Another division of government must enforce them. This, the executive division, has no right to make laws but has sole power of enforcing them. A third division is necessary in order that judgment may be passed upon laws as to

their agreement or disagreement to the basic principles of the government they are supposed to guide and direct Thus the judicial branch of the government has the sole power of judging the constitutionality and legality of any legislative measure. This is the division of powers familiar enough to any student of American history

To preserve the welfare of the people, Locke argues, is a natural duty of government. By nature man is endowed with certain natural rights that no conventional organization can rightfully take away These natural rights it is the duty of government to protect and guarantee In accepting the doctrine of the rights of man, Locke continues the very long tradition of thinkers who, beginning with the Sophists, make a distinction between natural law and man-made law and maintain the priority of the former over the latter. Acceptance of the reality of natural rights simultaneously determines the basic character of duties

By the time of Locke, modern thought upon the problem of rights had arrived at some fairly well-developed tendencies. A specific thesis becoming more clearly outlined contended that each man has separately a basic nature independently of any and all forms of social organization He has, by nature, rights that no institution has the authority to take away or subvert. The privilege *to pursue one's interests unhampered so long as the interests of* others are not jeopardized, the right to live securely and without fear of losing one's life unjustly, the liberty to move about in the pursuance of one's occupation, the privilege of being secure in the possession of well-earned goods that contribute to the happiness of existence—these are the rights every man has by virtue of being a man Society is comprised of human atoms each with intrinsic rights such as these, and its purpose is to guarantee them Social organization emerges as the result of a contract among individuals

The social contract theory found, through this reasoning, a clear and definite statement. Its popularity continued through the influence of Hobbes, Spinoza, Locke, Rousseau, Kant, and others. To numerous, more recent, thinkers the fundamental concept of the contract theory is faulty. Nor is it particularly obvious that the notion of rights, as prerogatives possessed by man independently of any social organization, has any particular meaning.

## 5. *Ethics, Religion, Education*

*a Ethics.* Locke's adherence to the theory that man has by nature certain given rights supplies the ultimate foundation for his beliefs about morality. The fundamental rights of life, liberty, and property prescribe the basic natural duties of each to further and protect life, provide for freedom of activity, and guarantee the security and enjoyment of property The protection of such rights becomes the chief business of the civil government and laws should be formulated with this objective in mind The influence of society upon the members of it develops a strong public opinion that is exerted whenever tendencies contrary to basic laws show themselves. There is thus a threefold sanction for morality in the case of God, the state, and public opinion, all three of them affirming the reality and correctness of a single order of moral laws that has been supplied by the creator.

This does not mean that moral ideas have been imprinted upon the mind nor even that man has been supplied with a moral sense. The rights and duties man must recognize have to be discovered through experience and organized by rational activity This fact accounts for the diversity of moral laws and the variety of accepted behavior habits discovered among different races at any given time, though all the while but one set of true guiding moral principles exists In the instance of some men the law of God is best known through divine revelation, while for others intelligent analysis of experience is the best approach The latter is the sounder method since by means of it the divine law is discovered to be rational as well as divine For the intelligent man experience in this way develops an understanding of the necessity, correctness, and value of morality that is not possible if moral principles are accepted upon the strength of Biblical revelation alone. In fact, whenever the latter seems out of accord with experience, it should give way though there is in reality no conflict since the law of reason and that of God are identical

The nature of moral judgment implies agreement or disagreement of conduct with rules that govern it. The actuality of rules or laws presupposes a lawmaker or a lawgiver able to reward or punish This is done by the civil government, public opinion, or by God. A knowledge of moral principles is derived from experience It begins when each of us is very young and continues until

we die. The weight of these principles operates as conscience or forces of habit that impel us to act one way or another when presented with a moral situation The inertia of conscience is so marked and the origin of its elements so obscure that the uncritical may assume a superexperiential origin for it There is no doubt that much of the authoritative drive possessed by morality can be attributed to the function of conscience, but that its origin is supernatural is a thesis not substantiated by the facts of experience

It seems clear, however, that Locke leans definitely toward an intuitive foundation for morality in the last analysis It is evident as well that he was intrigued by the thought that morality has authority independent of civil government—that it existed as a law of God before any and all society. In all events he affirmed the possibility of demonstrating the rules of correct action from intuitive self-evident propositions by a process as sound as mathematical deduction. Though this development within the ethical theorizing of Locke must be noted, it is at the same time true that his interest in the empirical explanation of morality is greater Locke's views from the position of strict empiricism are frequently out of sorts with those of his ideas which were prompted by his fundamental theological beliefs. It would appear that he tries to be consistently an empiricist while at the same time retaining convictions derived from antiempirical sources

One of his obvious efforts to be faithful to the empirical ideal is exemplified in his analysis of pleasure and pain as determiners of conduct In this he is basically in accord with Hobbes when he declares that good is pleasure and bad is pain All things contributing to the occurrence of either are judged desirable or undesirable according as they result in one or the other People feel the pull of desire in the presence of things that can bring them happiness while aversion is displayed whenever an event or thing is perceived capable of producing pain Total freedom from pain would be the necessary condition for complete happiness And all that we desire is only to be happy. This desire for happiness and aversion to pain are fundamental aspects of human nature. It is the strongest desire or aversion that determines the will, that finally decides the course action will follow Experience informs us about situations and circumstances that will or will not be likely to contribute to our happiness, and natural desire for the maximum of pleasure

and a minimum of pain will determine our behavior In the pursuit of pleasure it is found that the welfare of each individual depends upon the stability enjoyed by society The moral life is not a solitary one nor is the happiness of one achieved without the aid of others Public and private good are inseparable. The rules of conduct emerge along with the realization of this truth. Men come to accept them as criteria by which to judge their conduct The virtuous man is he who comprehends such rules, finds them commendable, and governs his conduct according to them.

*b Religion* Locke was both a firm believer in the basic principles of Christianity and an ardent advocate of religious tolerance Atheism was anathema but rigidity of dogmatic belief was likewise disparaged. Religious interpretations vary among groups, each of which firmly adheres to belief in God's existence and divine revelation, and for this reason no single church should try or be permitted to try to inflict its particular dogmas upon others Nor should the state lend its support and protection to a particular religious organization The provinces of church and state must remain distinct, neither presuming to legislate for the other. In all matters of religious opinion human reason should be called in to criticize and evaluate Nothing should be believed upon faith which is contrary to truths established by the reason However, so long as no belief based upon faith is not contradicted by reason and is helpful to the individual it may well be accepted even though it is seen to go beyond the limits of experience. It is not justifiable for the holder of such beliefs to impose them upon others who do not find them congenial Reason is adequate to establish all the beliefs that are necessary for human success either in this life or in another

The evidence offered to support belief in God belongs as an integral part to the larger philosophical issues discussed by Locke His general acceptance of the Cartesian dualism impregnated his system with two realities, mind and matter, plus the pure spiritual substance called God alike by Locke and by Descartes There is, likewise, obvious similarity between the ways these men sought to prove God's existence The demonstrated existence of God takes its departure from the reality of finite selfhood Finite entities, such as persons meet, have their cause in that which is greater than themselves It is furthermore certain that something cannot be generated from nothing It follows, therefore,

that *some thing* has existed eternally This eternal something is the source and cause of all the particular historical finite entities that come to be and cease to be in the course of time Since the products of the eternal cause contain less than their source, the magnification unlimitedly of human power, happiness, and knowledge gives a reasonable picture of the nature of God. The presence of mind and intelligence implies an intelligent source At the same time it is evident that the cause is essentially active and nonmaterial since matter is purely passive and incapable of producing motion or consciousness By amplifying our ideas of power, happiness, duration, and knowledge, the reason composes the idea of God as pure activity, pure spirit, intelligence, power, goodness

> Our reason leads us to the knowledge of this certain and evident truth, that there is an eternal, most powerful, and knowing Being, which whether anyone will please to call "God," it matters not The thing is evident, [1]

Though by this manner of reasoning Locke reveals himself as a believer in the existence of God, and in other ways as adhering to the acceptance of Jesus as the Messiah and the Biblical definition of moral principles, there is contained among his thoughts upon religion the germ of future controversy Among the chief of these is his willingness to permit reason to be the judge of faith. It is simple to advance from the argument that man's natural or God-given reason should keep faith straight, to the stand that faith itself is unnecessary for religion and that the only revelation that is significant is confined to the realm of nature wherein God reveals himself in natural processes This is the trend taken by a movement known as Deism Locke was not its originator but its basic thought is unconsciously contained in his articles on religious tolerance.

*c. Education.* Locke's philosophy of education was immediately inspired by the request of a friend for advice in the matter of educating his sons The observations made upon the problem were determined by Locke's practical nature and his disapproval of the methods he encountered while he himself was a student His basic thesis was that the subjects taught were, many of them, impractical and useless, while the technique of teaching was unpsychological What a child is taught must first of all apply to the expected conditions of his life and be presented in a manner

[1] *Ibid.*, Book IV, Chap X, Sec 6.

that will encourage the desire to learn. The latter is to be accomplished by positive rather than negative teaching Learning through fear of chastisement tends to create an aversion in the child toward those things it would be well for him to know. Positive teaching will capitalize upon the natural reactions of children to social approval or disapproval Make useful things satisfying to the child, and they will be learned, make them tasks to learn and but small results will accrue Nor should the general significance of education be lightly considered since the behavior of the adult reflects the character and content of his mind, the training of which began when he was a child

> The little, or almost insensible impressions on our tender fancies, have very important and lasting consequences . . And I think I may say, that, of all the men we meet with, nine parts of ten are what they are, good or evil, useful or not, by their education [1]

Education should be distinguished from learning in that the former properly should aim at practical results The training of a prince, a nobleman, a gentleman's son, and a tradesman should differ according to the sort of life each may be expected to lead For a scholar, a prince, or a gentleman, learning rather than merely education should be sought For such Latin is a prerequisite, while for one planning to enter a trade this study would be wasteful both of money and of time Rhetoric and logic, likewise, are of little advantage to the average student while they should be part of the scholar's regular training. Some types of study should be discouraged, and any natural bent a child displays toward them should be the cause of concern on the part of parents No father should desire his son to be a poet The poet and the sportsman alike are wastrels and belong in the same category

"A sound mind in a sound body is a short but full description of a happy state in this world "[2] A healthy body is more times than not the sign of a healthy mind. The child's training, therefore, must consider the development of his body as well as his mind. In short Locke urged that educators must avoid pedantic and narrow teaching and substitute for it training that is broad, practical, and in keeping with living conditions to which the child as a future adult must effect his adjustment.

[1] *Some Thoughts Concerning Education*, p 1 By permission of the Cambridge University Press, London

[2] *Ibid*, p 1

## DISCUSSION TOPICS

1 Do you perceive any possible relationship between Locke's political theory and the circumstances attending his experiences as secretary to Shaftesbury?

2 What is the position defended against the theories of Descartes and the Cambridge Platonists with reference to the concept of innate ideas and *moral sense?*

3 Outline Locke's empirical analysis of the origin and kinds of ideas Distinguish between *idea* and *quality*

4 Define and illustrate (*a*) intuitive, (*b*) demonstrative, and (*c*) sensitive knowledge What part does each play in the achievement of *knowledge of real existence?*

5 What are Locke's conclusions about ideas of substance?

6 Of what significance is *problematic knowledge?* What criteria does he suggest for estimating probability?

7 Compare and contrast the political philosophy of Locke and Hobbes

8 Of what significance is the concept of *natural right* for Locke's (*a*) politics, (*b*) ethics?

9 Distinguish *primary* and *secondary* qualities Compare Locke's treatment of them with Descartes discussion of perception How would you evaluate the two views?

10 State in some detail the relationship of Locke's ideas to those of (*a*) Leibnitz, (*b*) Hobbes, (*c*) Descartes, (*d*) Grotius, (*e*) Sydenham, (*f*) Cudworth

## PARALLEL READINGS

DRESSER, H W *A History of Modern Philosophy*, Part I, Sec 8.
LAMPRECHT, S P *Locke Selections*
MAHONEY, M J *History of Modern Thought*, Chaps I–V.
MORRIS, C R *Locke, Berkeley and Hume*
ROGERS, A K *A Student's History of Philosophy*, 3d ed, Sec 30
SORLEY, W R *A History of English Philosophy*, Chap VI
THILLY, FRANK *A History of Philosophy*, Sec 48

# Chapter XVII

# KNOWLEDGE AND REALITY
# SYSTEMS OF EMPIRICISM

## GEORGE BERKELEY

### 1 *His Era and His Life*

George Berkeley belonged to that part of eighteenth-century England which saw within the literary tradition such men as Steele, Addison, Swift, and Pope, all of them his friends Politically it was the era of Prime Minister Walpole and the South Sea Island Bubble England was rife with social agitation and political strife and brought forth from the pen of the Irishman, Berkeley, an *Essay Towards Preventing the Ruin of Great Britain.* In it he comments "Other nations have been wicked but we are the first who have been wicked upon principle" He perceived in England moral decadence, political corruption, social injustice, and, worst of all, religion ridiculed from the high places and "free thought" entering the precincts of the holy It was more than Berkeley could bear and it was largely the cause of his turning away from England toward savage America, where he felt there were more fertile fields to cultivate among the American Indians He was at this time about forty years of age

Long before, he had graduated from Kilkenny School and at fifteen had enrolled at Trinity College, Dublin There he took his bachelor's degree at nineteen and his master's at twenty-two and immediately was made a Fellow of the College By this time he had developed a deep religious feeling, an enthusiasm for learning, and an ambition to make a name for himself in the intellectual life of his day. He had mastered Locke and Descartes and from them, and later from Malebranche, he began the serious construction of his own philosophy He had begun shaping it during his student days at Trinity College, jotting down ideas in a notebook known since as the *Commonplace Book.* It early became evident that his

religious interest would remain a dominant strain in his thinking; and the worst enemy of religion he soon decided was materialism in any and all of its forms His strongest energies were expended in an effort to refute it and some of his greatest contributions to the history of thought grew out of the arguments he advanced against it

In 1709 he published his *Essay Toward a New Theory of Vision*, a document remarkable for its clear and acute analysis of the phenomena of visual perception. The same year he was ordained deacon in the chapel of Trinity College The next year appeared his *Treatise on the Principles of Human Knowledge* It fell practically stillborn from the press and was ridiculed rather than read by the learned of England Three years later he published his dialogues between *Hylas and Philonous*, still among the best of their kind in the field of English letters At this time Berkeley was twenty-seven and in the same year he came to London for the first time His period of obscurity ended abruptly, for immediately he became the toast of London He made friends among the intellectual great and after a brief stay departed for the Continent, where he visited France, Italy, and Sicily and met Malebranche Failing, because of the devious ways of politics, to secure an ecclesiastical appointment upon returning to London, he revisited the Continent, remaining there until 1720.

The next few years found Berkeley growing ever more disgusted with conditions in England Even an appointment to the influential and lucrative (£5,500) office of Dean of Derry in Ireland in 1724 failed to dampen his enthusiasm for his proposed college in Bermuda designed for the enlightenment of American aborigines For the next four years he feverishly sought to collect funds and converts for his new venture Private subscription and £20,000 from the public treasury promised by Walpole were enough to send Berkeley west to Rhode Island, there to await, with true philosophic optimism, the charter and promised grant. With him went his bride of but a few months with his wedding present to her—a spinning wheel—twenty thousand books, and three of the eighteen original volunteers for the project. During the three years of waiting at Rhode Island, he met Dr Johnson and converted him to the Berkeley view and thus introduced a strain of philosophy into America There he wrote the seven dialogues: *Alciphron, or the Minute Philosopher*. The dialogues are an attack

upon the little philosophers of free thought As the months slipped quietly through the grounds of Whitehall, his Rhode Island home, it became increasingly apparent that the long-awaited grant was not to arrive at all The final answer came to him by way of the Bishop of London, who had received from Walpole a curious reply to the inquiries about the status of the grant·

> If you put the question to me as a Minister, I must and can assure you that the money shall most undoubtedly be *paid, as soon as suits with public convenience,* but if you ask me as a friend, whether Dean Berkeley should continue in America expecting the payment of £20,000, I'd advise him by all means to return home to Europe and to give up his present expectation [1]

Three years after returning to England Berkeley was appointed, in 1734, Bishop of Cloyne in southern Ireland He continued there until he went to Oxford in 1752, one year before his death Two additional publications belong to the period of his return from America. One, *A Theory of Vision*, further expressed his views upon the subject of space perception, while the other, *Siris*, proved to be a curious combination of acute philosophical observations and a testimonial for the medicinal properties of tar water, apparently the only contribution made by America to the growth of Berkeley's ideas. At least two visible results of George Berkeley's sojourn in America are Yale's Berkeley School of Divinity and the name given the city of Berkeley in California Of him Pope once wrote·

> Even in a bishop I can spy desert,
> Secker is decent, Rundle has a heart
> Manners with candour are to Benson given,
> To Berkeley—every virtue under heaven [2]

## 2 *Arguments against Materialism*

It is in materialism that Berkeley believed he found the chief source of support for atheism, skepticism, and free thought It was, therefore, his chief objective to attack and destroy it in the interest of God and religion. A universe that is fundamentally composed of unconscious, inert, and base matter has nothing to offer in support of a deeply rooted religious attitude. Berkeley had dis-

[1] Mahoney, M J , *History of Modern Thought*, p 105. By permission of Fordham University Press, publishers.

[2] Morris, C R , *Locke, Berkeley and Hume*, p 65 By permission of the Clarendon Press, London.

covered this during his student days at Trinity, when he organized a club for the purpose of studying the philosophy of Locke He very clearly saw many of the weak points in Locke's arguments and set about refuting them upon the grounds of their own assumptions This task was seriously undertaken in *The Principles* and involved criticisms of the origin of knowledge, the concept of substance, and the nature of abstract ideas

Throughout his argument he accepted the fundamental theses of empiricism that all knowledge comes from experience; that reason is not more ultimate than perception, that there are no innate ideas or principles He believed, however, that a thorough analysis of the content of knowledge so derived can reveal the fallacious character of materialism Belief in the reality of matter originates, he contended, from a confusion of thought resting upon the acceptance of the reality of abstract ideas To him it appeared that the whole concept of a material support of qualities, underlying the sensible manifestations of nature, depends upon the existence of abstract ideas If this is true, then proof that abstract ideas do not exist will with a single stroke destroy materialism and with it atheism and skepticism, the enemies of religion

The use of abstract ideas in common language has led to the very erroneous notion that there are real entities which correspond to them. The truth of the matter is rather that all abstract ideas are particular in nature and function as names or signs which may stand for a number of separate, particular ideas It is its use that defines whether or not a particular idea is particular as such or is a particular idea functioning as general or abstract An abstract idea may be composed of several particular ideas, but it must be remembered that it is only a name, a sign, indicating a group of particulars There is no entity to which the general idea corresponds after the manner of saying that the idea "pencil" stands for or corresponds to the "real" pencil existing independently of the idea of it We are often the dupes of confused usage of words and assume that, because we frequently use them, there are real entities which correspond to them. Upon a careful examination it is found that no idea at all can be formed of that which ordinarily is designated by the name of abstract ideas

If it is believed that abstract ideas actually exist, Berkeley requests that an example be given in order that an examination of

it may follow. The usual illustrations of such ideas are those like man, triangle, color, equality, or justice. Upon examination of the meaning of the term *triangle*, for example, one may search in vain for an entity which may be called triangle but which is neither scalene, isosceles, nor equilateral. If I think triangle, I can have no other idea than that of some particular triangle; a triangle of a particular shape, a particular size, and either scalene, isosceles, or equilateral There is no such thing actually as *triangularity* divorced from particular triangles, and the word stands for nothing other than qualities of particular triangles. The same analysis holds for any of the other alleged abstract ideas. Since all ideas are derived from sensation and can be shown to be nothing else than particular in character, it follows that general ideas cannot be said to exist If we have no idea of an entity, there certainly is no reason for believing in its existence There is nothing in experience that can be used to justify any such belief. By this appeal to a rigid nominalistic theory, Berkeley believed he had succeeded in destroying the grounds for belief in abstract entities and was now prepared to begin his argument against that particular abstract idea which he conceived to be most troublesome and the greatest support for materialism—the idea of a material substratum in which sense qualities inhere

It was Berkeley's belief that he could show that substance or matter is an abstract idea. To understand his procedure one may be reminded of two basic concepts that had been supported by his predecessor, Locke The first of these affirmed the thesis that all we can know is ideas, all of them being derived from experience The second maintained that some of the ideas so derived are wholly subjective, their nature being due to the peculiarities of human cognition, while others of them were believed to reveal the actual nature of an external and independently existing world of bodies. This is a distinction between primary and secondary qualities, the primary qualities are those which give a true picture of the nature of external reality, whereas the secondary qualities are effects wholly within the human perceivers This is a distinction supported immediately before the time of Locke by Descartes and involves the theory of subjectivity of sense qualities All characteristics of objects usually believed by common sense actually to belong to them, such as colors, odors, tastes, sounds, and the like, are declared to be subjective. or, otherwise stated, they are *in* the subject alone and not

in the object Primary qualities, on the other hand, supposedly belong to objects, any removal of them automatically meaning the destruction of the objects

This position appeared to be very much in need of clarification and correction Accordingly, Berkeley argued that all ideas are dependent upon the perceiver who has them, and the primary qualities are no exception to this rule As a matter of fact, it is impossible ever to obtain ideas of primary qualities A primary quality, such as figure or size, can never be obtained without some color attending it. There can be no such thing as a dimension without qualities other than mere dimension If it is true, therefore, that primary qualities cannot be known except through the medium of the secondary, there is absolutely no ground for affirming a sharp division of them It can, furthermore, be shown that all primary qualities are really sense qualities The chief reason for Berkeley's writing *A New Theory of Vision* was to show that such ideas as perception of depth, distance, solidity, and magnitude are due to the activity of visual perception All the primary qualities may be explained in terms of the operation of one or more of the several senses It is, therefore, impossible to affirm the existence of such qualities separate from the perception of them All ideas, therefore, depend upon sensation, and there is no ground for affirming the greater reality of one than the other Certainly there is no ground for assuming that the primary qualities give us a genuine picture of a separately existing world of bodies

Locke had seen the difficulty of this position when he admitted the impossibility of knowing the material substratum in which he believed the primary qualities to inhere He described it no more precisely than affirming it to be an *unknown somewhat*, the existence of which seemed necessary in order to explain where such qualities were, it being assumed that qualities must be qualities *of* something. This belief Berkeley clearly shows was founded upon a very old idea traceable at least as far back as Aristotle; an idea which had all along played a central role in Scholastic philosophy However, if it is maintained that knowledge is confined to the sum of our ideas and that the source of them all is sensation, then we cannot rightly argue for the existence of anything of which we have no idea and, therefore, cannot know. We must draw the only conclusion possible, Berkeley argued that we have no knowledge of a mysterious matter, an inert support of qualities. It is

merely an abstract thought and, therefore, can have no claim upon the allegiance of right thinking

It is clear from the foregoing discussion that Berkeley was in agreement with the first of the two concepts mentioned, that is, that all our ideas are derived from experience and that all knowledge is confined to them His quarrel was with the second of them only. We can find no evidence to support the belief that some of our ideas reveal to us external material bodies by a process of idea corresponding to a thing We can only compare ideas with ideas and never with things that are not ideas. Therefore, the claim that ideas correspond to material things is an absurd hypothesis. It is absurd for one reason because of the impossibility of such an entity as an idea being able to correspond to another completely dissimilar entity such as a material body. This difficulty cannot be avoided by any theory that would affirm the reality of this dualism of body and mind. In the second place, the whole theory is absurd when one comes to examine closely what it means for an idea to represent or correspond to another thing, especially a material object. Such a claim would necessitate the ability of the perceiver to see simultaneously and in their separate categories the *idea* which represents and the *thing* which is represented If such comparison could be made, then it could be ascertained if and to what degree a correspondence exists. Since this is an impossibility, Berkeley believed that he had shown the fundamental fallacy of representative perception. By discrediting the validity of representative perception, Berkeley succeeded in destroying the claim for a valid distinction between primary and secondary qualities If this distinction cannot be substantiated, then nothing other than sense data can be said to exist and these can make no claim to represent any extraexperiential material substance Materialism with its dependents, atheism and skepticism, has been discredited.

The foregoing argument may be regarded as a summary statement of the negative phase of Berkeley's philosophy He felt that it was necessary first to destroy the enemies of his cherished views before proceeding positively to supply the correct solutions of problems of metaphysics and epistemology If the world is not material at heart and it is not, therefore, necessary to accept any one of the horrible alternatives of atheism, skepticism, or irreligion, then it becomes the duty of one thinking otherwise to attempt an interpretation of the world which will permit belief in and pursuit

of the reverse of such alternatives This positive task Berkeley undertook in the spirit of a genuine crusader who believed that God must necessarily support the right.

### 3. *The Real as Spirit and Idea*

It has already been stated that the fundamental principle of the philosophy of both Locke and Berkeley is that the total content of mind is ideas Berkeley distinguishes three sorts of these. First, there are ideas which are derived through activation of the senses—ideas that are the imprints of sense perception Second, there are ideas which are derived from the operations of the mind during the time of its functioning—ideas derived from the senses excite the mind to joy or anger, or fear or love, concerning which ideas are formed Third, there is a group of ideas formed by the help of the memory chiefly through the activity of the imagination Though it would appear impossible to go farther than this while adhering strictly to the fundamental thesis that the mind knows only ideas, Berkeley nonetheless maintained that there is in addition a something that knows and wills a flow of ideas This entity he called the soul, mind, self, or spirit, the locus of ideas Since ideas can exist nowhere except in a mind, and we have ideas, it proves the existence of a mind. Of this we can have intuitive certainty This concept may be seen to be no different in principle from the concept of a material substratum or support of physical qualities against which Berkeley launched his vigorous attack There is no claim made that we can have an idea of this active thinking locus of ideas. The statement is made that we can have a *notion* of it, but it seems to be nowhere quite clear what fundamental distinction can be made between an idea and a notion Though we can have no idea of mind, we can have a notion of it as an active, nonmaterial substance which is spirit We can be sure that we are active agents. It is another and more difficult problem that confronts us, however, when the question arises as to the existence of other spirits Though it be granted that we have a notion of our personal spirit, it is more difficult to prove the existence of other spirits Of these we could only have either an idea or a notion. Since we cannot have ideas of active agencies, it follows that our knowledge of other spirits must take the form of notions of them These cannot have the same intuitive certainty as that which attends the notion of our own. They must be known

indirectly by their effects This is Berkeley's conclusion. Having knowledge of our own spirit as actively producing effects, we infer that other spirits exist when we become aware of similar effects which we know were not produced by us. We have, then, ideas of things and notions of spirits. What, now, may be said of the status of "things"?

That neither our thoughts, nor passions, nor ideas formed by the imagination exist without the mind, is what everybody will allow And it seems no less evident that the various sensations or ideas imprinted on the sense, however blended or combined together (that is, whatever objects they compose), cannot exist otherwise than in a mind perceiving them I think an intuitive knowledge may be obtained of this by anyone that shall attend to what is meant by the term "exist" when applied to sensible things The table I write on I say exists—that is, I see and feel it, and if I were out of my study I should say it existed—meaning thereby that if I was in my study I might perceive it, or that some other spirit actually does perceive it There was an odor, that is, it was smelt, there was a sound, that is, it was heard, a color or figure, and it was perceived by sight or touch This is all that I can understand by these and like expressions For as to what is said of the absolute existence of unthinking things without any relation to their being perceived, that seems perfectly unintelligible Their *esse* is *percipi*, nor is it possible they should have any existence out of the minds or thinking things which perceive them [1]

Thus Berkeley pronounced his most fundamental principle *esse est percipi*, to be is to be perceived All existence depends upon its being known or perceived There would be no colors, tastes, sounds qualities of any kind dependent upon the senses, were the senses not part of the human organism. If all perceivers were abolished from the world, there would be no world at all, for all that we know of the world is dependent upon our experience of it We cannot affirm the existence of things independently of their being perceived Most certainly we cannot affirm the existence of things in the usual meaning applied, that is, things as being composed of a material substance or matter. If there are things in the world at all, they cannot be extramental objects, for, by the very nature of things, unless they were mental in nature they could not become a part of a world of ideas such as that derived from ordinary sense experience If it is argued that material things do actually exist but that we have only ideas of them, Berkeley asks, significantly, what such a statement could possibly mean It would

[1] Berkeley, George *Principles of Human Knowledge*, Part I, Sec. 3 By permission of J. B Lippincott Company, publishers

involve, he argued, maintaining that colors are like things that are not colors and sounds like things that are not sounds. Actually an idea can only represent an idea and can never stand for or be like that which is not an idea. The corporeal is completely ruled out. The entire content of my mind is dependent upon my capacity to have ideas. Unless I were a perceiver, there would be no world so far as I am concerned. This is a position which is incapable of being refuted, and the argument holds for each person separately. So far as he is concerned as an individual, the world is entirely dependent upon his acts of perception.

This situation gives rise to certain questions. Do objects in actuality depend upon me as an individual perceiver? Do things actually perish when I cease perceiving them? Is it true that I create and destroy the world in each act of perception? Experience would indicate that the proper answer to all of these questions is a negative one. It has already been pointed out that Berkeley shows that one large group of ideas is present in the mind which are not due to the mind's own activity—those presented arbitrarily to the senses. They are not entities that are created by my mental acts. They are, in other words, obtained when I, as a perceiver, am passive in the situation. This group of ideas, which is forced upon me, changes without my desire and often against my wishes. For this reason, an external cause is indicated, and the world cannot possibly be the sum of my thoughts, but rather an inevitable and orderly series of idea experiences induced by an external cause. The source of these experiences cannot be an idea of my construction or any other person's construction, for by the very nature of idea, it is a passive entity and can do nothing. Ideas are things had by an active spiritual agency. Neither can the world be simply a sum of qualities existing by themselves, for, following Aristotle of long ago, it cannot be the case that qualities exist anywhere except in a substance. Since the concept of a material substance as the support of qualities has already been dispensed with, and since, if there were such substance, at all events it would be a passive entity, the only conclusion that can be drawn is that our ideas are induced by the activity of an actually existing substance in essence active. It must be a substance essentially similar to that which we commonly refer to as our own minds, which are the locus of our own personal ideas. And since it cannot be argued that other spirits similar to ours could be the cause of the world

any more than I am, it must be inferred that there is some one all-perceiving spirit substance who has the ideas which make up what we commonly refer to as the entire world of nature. This all-encompassing spiritual order is what Berkeley calls the ideas of God. As the all-perceiving substance, it is God who forces, by His acts of will, His ideas upon us. The natural world is a world of God's ideas, and the order, regularity, and symmetry of nature are in reality merely the order, regularity, and symmetry of God's thinking.

Clearly such an interpretation is not vulnerable to the claim that there is no world independent of individual perceivers, as it is sometimes urged against Berkeley. The world of nature is exactly the world as we experience it. It is independent of me and of any other individual person We need only think of it in terms of being the sum total of sense qualities inhering in a nonmaterial substance, instead of thinking of it in terms familiar to materialism as a combination of events or qualities inhering in unthinking inactive matter. Science is not ruled out, for quite obviously its business can be and is just the same on this interpretation as on that of materialism, and, according to Berkeley, this view affords a much more sensible, much more understandable interpretation of nature Science still must seek laws which ultimately must be interpreted as the orderly manner in which God thinks The permanence of bodies may be affirmed as the permanence of the ways of God's thoughts A knowledge of the orderly succession of ideas or sensations as revealed by science supplies us with the necessary information with respect to what we shall or should expect in the future In fact, this whole analysis involves no other alteration of one's ordinary common-sense point of view except that, instead of things being regarded as bodies after the views of Hobbes and Descartes, they should be regarded as essentially nonmaterial or spiritual. Otherwise science goes on as it has always done. The traditional scientific concept of cause, however, should be altered. The only cause is God and events happen through the absolute will of God. Event *B* is not caused by event *A*. We can only say that experience shows that when *A* appears we can expect *B* to succeed it. We have a succession of ideas which we are able to study and thus obtain a grasp of the orderly process by which some follow and some precede We cannot advance farther to say that event *A* necessarily determines that event *B* will follow

it, for the only cause is God and nothing has to be except as willed by God

God, according to Berkeley, must not be interpreted in any pantheistic sense He remains the absolute creator of the universe and should be thought of in the traditional theistic sense as infinitely wise, perfect, good, and just. He is the eternal mind and the absolute cause of all things The entire world was willed by God for the well-being of man and is arranged, therefore, in a fashion capable of being grasped by human perception. And how do we know all this? It is, according to Berkeley, more self-evident that God exists and that the world is his Handiwork than it is evident that we have perceptual experiences We are all about surrounded by evidence of God's existence, and we can be more certain of it than of the existence of other spirits

It is evident that God is known as certainly and immediately as any other kind of spirit whatsoever distinct from ourselves We may even assert that the existence of God is far more evidently perceived than the existence of men *because the effects of nature are infinitely more numerous and considerable than those ascribed to human agents* [1]

It should be noted that there is no argument here for direct perception of God. He is known indirectly as we are affected by His activity

It seems to be a general pretense of the unthinking herd that they cannot *see* God Could we but see Him, say they, as we see a man, we should believe that He is, and believing obey His commands But alas, we need only open our eyes to see the Sovereign Lord of all things, with a more full and clear view than we do any one of our fellow creatures Not that I imagine we see God (as some will have it) by a direct and immediate view, or see corporeal things, not by themselves, but by seeing that which represents them in the essence of God, which doctrine is, I must confess, to me incomprehensible But I shall explain my meaning A human spirit or person is not perceived by sense, as not being an idea, when therefore we see the color, size, figure, and motions of a man, we perceive only certain sensations or ideas excited in our own minds, and these, being exhibited to our view in sundry distinct collections, serve to mark out unto us the existence of finite and created spirits like ourselves Hence it is plain we do not see a man—if by *man* is meant that which lives, moves, perceives, and thinks as we do—but only such a certain collection of ideas as directs us to think there is a distinct principle of thought and motion, like to ourselves, accompanying and represented by it And after the same manner we see God, all the difference is that, whereas some one finite and narrow assemblage of ideas denotes a particular human mind, whithersoever we direct our view, we do at all times and in all places perceive

[1] *Ibid*, Sec. 147 (italics mine)

manifest tokens of the Divinity everything we see, hear, feel, or anywise perceive by sense being a sign or effect of the power of God, as is our perception of those very motions which are produced by men [1]

The cosmos is fundamentally a pluralism of finite and infinite spirits That there are finite spirits is indicated by self-consciousness of activity and by awareness of other activities about us not produced by ourselves Proof of infinite spirit is found in the symmetry, order, and purposiveness of nature. The universe is completely teleological Though nature may be described in terms of the regular sequence of experience without assuming divine purposiveness, it lacks the significance it is seen to have when it is understood that divine activity underlies the entire order of nature A final estimate of the cosmos must depend upon the fact that God is the one and final cause of all that is As the handiwork of God, nature assumes a significance and meaning revealed to no other type of interpretation. In this world man has an important place as the chief of God's creations, for in truth all things appear to be designed for human welfare By learning about the ways of God, man comes by his knowledge of right conduct. Rules of morality are inherent in the divine order of things Each man should seek his personal welfare through helping every other man achieve a proper understanding of God's will Happiness is the *summum bonum* and it is derived from an adequate knowledge of God as the infinite, perfect, omniscient, and final cause of the universe.

## CONTEMPORARY DEVELOPMENT: DEISM

Theology in England during the first half of the eighteenth century was perplexed by a controversy between traditional revealed religion and a viewpoint known as natural religion or Deism The latter was a product of the Enlightenment in England, a period generally dated with the eighteenth century As an approach to religious problems, it advanced the claim of reason against faith. During the early development of Deism, at least, the guiding thought was that nothing valuable in religions would be found contrary to reason Later on, when this condition became less apparent, the "freethinkers" demanded that faith and dogma give place to reason since they were superfluous in a system of natural religion Berkeley's philosophy was not uninfluenced by the Deistic controversies While he retained convictions as to

[1] *Ibid*, Sec. 148

the adequacy of revealed religion, he likewise believed that God could be found in nature as well He did not go with the Deists when they proclaimed against faith in favor of reason The established form of religion was held to be satisfactory, and he opposed with all his eloquence any interpretation that might destroy its vitality That many abuses masqueraded under the cloak of religion Berkeley knew full well, but he did not believe the Deists offered an acceptable correction for them It has been shown how his own solution of the religious problem was worked out upon an empirical foundation

Deism accepted the belief that man's intellectual powers are sufficient to inform him of the true nature of religion through a study of nature and human life which are ultimate products of divine creation. This type of religion, based as it was upon human reason, held that revealed religion of the traditional variety is not necessary as a support for genuine religion It is possible without religious authority to construct an adequate type of religion that will find in nature the highest religious values It will thus be a natural religion, and whatever element of faith may be incorporated will always be subject to the dictates of reason. This view, likewise, asserted that this is the earliest religious attitude Hume as a critic of Deism was inclined to discredit completely the assertion that man's intellectual power is a sufficient guide in the determination of an adequate religion At the same time, however, he was in accord with the Deists in refusing to accept divine authority as its support He was most vigorous in his refusal to accept the Deistic opinion that this type of natural religion is the earliest form It will be noted in the discussion of Hume that it was his belief that the earliest form of religion was not based upon reason, but rather upon feeling, and assumed, in the first instance, some form of idolatry

Deism is somewhat of a middle ground between two religious philosophies, theism and pantheism It accepts the thesis that originally God was responsible for the creation of the world, for its symmetry, its regularity, and its order. However, once the creation was complete the processes of nature continue without further intervention on the part of the deity Thus the Deists felt that science should have a free hand in the study of nature and were very much disinclined to recognize any of the traditional arguments for religion which would employ the concept of divine

intervention in natural processes Theism, on the one hand, accepts the position that God is responsible for the creation and is separate or transcendent with respect to it, yet is inclined to assert that things and men are controlled by God's intervention in the process of nature. Pantheism, on the other hand, stresses not the creative activity of God but rather the immanence of God and thus identifies nature with the deity Spinoza has already been discussed as one who advanced this thesis Deism, as the middle-ground view, accepts God as the originator of things and denies either His immanence or His power to set aside natural law.

The earliest English Deist of significance was Herbert of Cherbury, who was chiefly influential in the early part of the seventeenth century. He believed that man had been given a special ability somewhat akin to instinct or, as he referred to it, a "natural light," by means of which self-evident truths could be discovered during a study of nature. These truths are suitable as the foundation for moral and religious philosophy He believed that the "natural light" supplied man with such self-evident truths as that God exists, that by virtue of God's divine being man owes a duty to Him in the form of worship, that rewards or punishments await man in another life, dependent upon his conduct in this one, and that the type of view we have mentioned as Deism was the earliest form of religion The chief Deist in England at a later time was John Toland, who lived between 1670 and 1721 His most influential work bore the title *Christianity Not Mysterious*. In this work he was chiefly concerned to establish the priority of reason over faith and maintained that there is nothing in the gospels that may be construed either as against or as above reason In the last analysis reason must be the final court of appeal in matters of doubt or perplexity Whatever mystery there is in Christianity as commonly practiced, and to his mind there was an abundance, has been due to the influence of priests and philosophers who have employed Christianity in a narrow or unreasoning fashion.

Toland was very seriously opposed by the upholders of traditional Christianity in England. In fact, so much was he the subject of attack that there was some complaint that more was heard in the way of remarks about the evilness of Toland than there were things said about the goodness of Jesus Christ. During most of the time that such controversy existed, the followers of religious

orthodoxy had the better of the Deists The Deists were answered by some of the ablest minds of the period and intellectually they were unable to cope with them Deism had its period of ascendency and decline, although its influence by no means ceased entirely nor were its results forgotten Later Deists turned their attention to an explanation of miracles and prophecies with the hope of showing that there were natural explanations for them. If such natural causes were not easily discovered, a denial was made of the significance of either prophecy or miracle Other men included among the Deists were Blount, Collins, Tindal, Woolaston, Morgan, Chubb, Bolingbroke, and the third Earl of Shaftesbury The latter two, however, were less concerned with theological problems and Shaftesbury is far more significant as a moralist than as a deist.

The chief opposition to Deism did not come from religious thinkers, strictly speaking, but from those belonging to the tradition of British empiricism inherited from Bacon and Hobbes Reason, which played so central a part in deism, was denied by the members of this tradition as capable of establishing a ground for religion They were inclined to hold that religious truths are based on revelation and faith and that it is unlikely that faith and reason ever can be reconciled By denying to reason religious authority and by asserting that the basis of religion is faith, their tendency was to set religion aside in a separate category and adopt toward it an agnostic attitude. With the exception of Berkeley, they were mostly interested in the study of nature from what might be called a more purely scientific standpoint and believed religion was not subject to this variety of approach For this reason they were disinclined to be positively concerned with it.

An early critic of Deism, was the Frenchman Pierre Bayle, who saw in religion and philosophy an inevitable contradiction Though Bayle does not belong to the English tradition, he nonetheless speaks its language It was his opinion that faith is unreasonable, the evidence for this being chiefly the fact of contradictions among dogmatic beliefs In so far as this point is concerned Bayle really was lending support to Deism, but when he further denied that reason is able to establish God's existence or that God can serve as a guaranty for a natural religion, he is seen to be absolutely opposed to the general religious position Religion must be left entirely upon a basis of revealed truths, which revealed truths are contrary to philosophical reason It is necessary to

recognize the existence of two spheres, the religious and the philosophical or scientific. The content of the former must be accepted upon the basis of authority if it is accepted at all, while the other must depend entirely upon the rational approach. A single criterion cannot be employed in the support of both. Reason is the most reliable guide and toward religion an agnostic attitude is the sanest and most practical approach.

In France Deism enjoyed considerable popularity. However, it fell under the disapproving eye of Voltaire, who could not accept so optimistic a view of nature It appeared to him that there are far too many things in nature that show evidence of being opposed to divine benevolence to lend credence to a rational religious optimism Earthquakes, floods, famines, and the like would have no logical place in a scheme of the universe that originated as the creation of God This is all made quite clear by Voltaire in such works as *Candide* and the *System of Nature*

Though Deism failed to survive the storm of attacks upon it, its influence was not unfelt Perhaps the most significant single contribution made by that general movement was that it encouraged the adoption of a critical attitude with respect to religious authority It assisted in making for a more reasonable form of Christianity through its forcing the apostles of the creeds to be more self-critical with respect to the doctrines they so heartily endorsed

## DISCUSSION TOPICS

1 Explain the reason for classifying Berkeley as a nominalist

2 Give the argument against abstract ideas Of what importance was this part of Berkeley's philosophy?

3 Upon what points were there agreement and disagreement with Locke?

4 Explain fully the argument by which Berkeley arrived at his fundamental principle, *esse est percipi*

5 What is the status of *bodies* according to this view? Upon whom do they depend?

6 Does Berkeley's philosophy have any serious consequences for the scientific enterprise?

7 Give Berkeley's arguments in support of the existence of a world of spirits What do you gather is the meaning of the term *spirit*?

8 Why is Berkeley classified as an empiricist?

9 Distinguish between *idea* and *notion* Of what significance was this distinction? Criticize it

10 What is Berkeley's interpretation of cause?

11 What are Berkeley's conclusions with respect to the following (*a*) primary and secondary qualities, (*b*) materialism, (*c*) teleology, (*d*) spiritual substance, (*e*) dualism, (*f*) atheism?

12 What is the meaning and objective of Deism?

13 Why is it said that Deism is an aspect of the period of British enlightenment?

## PARALLEL READINGS

FULLER, B A G *History of Philosophy*, Vol II, Chap III, Part 2
HOFFDING, HARALD *A History of Modern Philosophy*, Vol I, Book IV, Chap IV
ROGERS, A K *A Student's History of Philosophy*, 3d ed, Sec 31
SORLEY, W R *A History of English Philosophy*, Chap VII, Parts 1, 2
THILLY, FRANK *A History of Philosophy*, Sec 50

# Chapter XVIII

# KNOWLEDGE AND REALITY: SYSTEMS OF EMPIRICISM

## DAVID HUME

### 1 *The Man*

The third of the trio of eighteenth-century British empiricists, David Hume, was born of middle-class parents in Edinburgh, Scotland, in the year 1711. Very early in his life he developed a passion for literature, and it remained throughout his life the chief source of his enjoyment. At first he intended to study law, but he was led to abandon this for what he called "poetry and the polite authors," and "books of reasoning and philosophy." Because of his interest in these pursuits, his mother is reported to have commented on the situation thus "Our Davie is a fine good-natured crater, but uncommon wake-minded"

Most of the fundamental principles of his philosophy were stated in his first work, *A Treatise of Human Nature*, which appeared in 1739. The book failed to make any stir, and in the words of Hume, "it fell deadborn from the press, without reaching such a distinction as even to excite a murmur among zealots" The sad fate of this first philosophical effort caused him to turn away from that field toward historical and political problems During this time his interest in philosophy did not die and became, in later years, his central interest His first recognized writing concerned political issues and appeared under the title, *Political Discourse*. He also wrote during this period a *History of England* in six volumes. So discouraged was he over the failure of his *Treatise* to arouse interest that for a time he denied having written it.

His work in the field of history earned for him the position of Keeper of the Advocate's Library in Edinburgh, where he had additional opportunity for the continuance of his research. The

*History* gained Hume considerable popularity for it was one of the first accounts ever to have been written on the subject which was more than a mere chronicle of wars He attempted to show the influence of morals, religion, economics, and politics upon the processes of social change. Meanwhile his interest in philosophy was much alive More than ten years before the *History* there appeared the first of three volumes of *Essays Moral and Political* The last of the three was published in 1748 In 1751 three important works were completed a second edition of *A Treatise of Human Nature*, *Philosophical Essays*, later to be called *An Enquiry Concerning Human Understanding*, and *An Enquiry Concerning the Principles of Morals* After publication of the *History* the next year, 1752, Hume had ready by 1755 his *Four Dissertations*, which included the *Natural History of Religion* These essays appeared officially in 1757 and his active literary career ended approximately at this time. *My Own Life*, Hume's autobiography, is the only other important writing done during the remaining years of his life and was published posthumously along with various other odds and ends, including the excellently done *Dialogues Concerning Natural Religion*, the writing of which dated back at least twenty years

From 1763 to 1765 Hume acted as secretary to the British Embassy at Paris By this time he was well known and well received in academic circles Here he met and became a friend of Rousseau When Hume returned to England in 1766 he brought Rousseau with him In a few months, however, Rousseau's delusions of persecution led to a break between them, and Rousseau returned to France After about three more years as Undersecretary of State at London, Hume retired from public life and settled once more in Edinburgh, where he continued to reside until his death in 1776 In his autobiography these lines appear

> I am, or rather was (for that is the style I must now use in speaking of myself, which emboldens me the more to speak my sentiments) I was, I say, a man of mild disposition, of command of temper, of an open, social, and cheerful humor, capable of attachment, but little susceptible of enmity, and of great moderation in all my passions Even my love of literary fame, my ruling passion, never soured my humor, notwithstanding my frequent disappointments My company was not unacceptable to the young and careless, as well as to the studious and literary, and as I took a particular pleasure in the company of modest women, I had no reason to be displeased with the reception I met from them In a word, though most men any wise eminent have found reason to complain of calumny, I was

never touched, or even attacked by her baleful tooth, and though I wantonly exposed myself to the rage of both civil and religious factions, they seemed to be disarmed in my behalf of their wonted fury my friends never had occasion to vindicate any one circumstance of my character and conduct—not but that the zealots, we may well suppose, would have been glad to invent and propagate any story to my disadvantage, but they could never find any which, they thought, would wear the face of probability I cannot say there is no vanity in making this funeral oration of myself, but I hope it is not a misplaced one, and this is a matter of fact which is easily cleared and ascertained [1]

## Adam Smith reported this conversation with Hume

I told him that though I was sensible how very much he was weakened, and that appearances were in many respects very bad, yet his cheerfulness was still so great, the spirit of life seemed still to be so very strong in him, that I could not help entertaining some faint hopes He answered, "Your hopes are groundless An habitual diarrhoea of more than a year's standing would be a very bad disease at any age, at my age it is a mortal one When I lie down in the evening I feel myself weaker than when I rose in the morning, and when I rise in the morning, weaker than when I lay down in the evening I am sensible, besides, that some of my vital parts are affected, so that I must soon die" "Well," said I, "if it must be so, you have at least the satisfaction of leaving all your friends, your brother's family in particular, in great prosperity" He said he felt that satisfaction so sensibly, that when he was reading, a few days before, Lucian's *Dialogues of the Dead,* among all the excuses which are alleged to Charon for not entering readily into his boat, he could not find one that fitted him, he had no house to finish, he had no daughter to provide for, he had no enemies upon whom he wished to revenge himself "I could not well imagine," said he, "what excuse I could make to Charon, in order to obtain a little delay I have done everything of consequence which I ever meant to do, and I could at no time expect to leave my relations and friends in a better situation than that in which I am now likely to leave them, I therefore have all reason to die contented" He then diverted with inventing several jocular excuses, which he supposed he might make to Charon, and with imagining the very surly answers which it might suit the character of Charon to return to them "Upon further consideration," said he, "I thought I might say to him, 'Good Charon, I have been correcting my works for a new edition Allow me a little time that I may see how the public receives the alterations' But Charon would answer, 'When you have seen the effect of these, you will be for making other alterations There will be no end of such excuses, so, honest friend, please step into the boat' But I might still urge, 'Have a little patience, good Charon, I have been endeavoring to open the eyes of the public If I live a few years longer, I may have the satisfaction of seeing the downfall of some of the prevailing systems of superstition' But Charon would then lose all temper and decency 'You loitering rogue, that will not happen these many hundred years Do you fancy I will grant you a lease for so long a term? Get into the boat this instant, you lazy loitering rogue'"[2]

[1] Hume, D, *My Own Life.* By permission of Harper & Brothers, publishers
[2] *Ibid.*

## 2. *Theory of Knowledge*

Hume was a thorough sensationalist He argued, along with his two predecessors, that the content of mind is wholly the product of experience. It comes ready furnished with no a priori principles and, whatever its ultimate furnishing, the original elements are all of them obtained through sensation. To indicate the content of mind, Hume employed the general term, "perceptions," and distinguished two kinds, *impressions* and *ideas*. These do not stand at par with each other as concerns ultimate priority. Analysis indicates that impressions, at least some kinds of them, are prior to the ideas and of the sort to be designated either complex or simple. This same distinction he likewise applied to ideas. The distinguishing characteristic between simple and complex impressions and ideas is that of their constitution. Simple impressions and ideas have no parts and hence are indivisible and not subject to analytical treatment. Complex "preceptions" consist of a number of simple, irreducible, basic elements. Clearest of all illustrations of complex types are the ideas built up by the imagination Such ideas as mermaid, unicorn, golden mountain, lemonade springs, and rock-candy mountains are clearly not derived from single impressions, but instead are obtained by combining several simple ideas or impressions into unusual or unorthodox patterns. Though the illustrations just used most easily clarify the principle that complex ideas are divisible into component parts, the principle at the same time applies to all complex ideas and impressions whether these are derived from the imagination or from any other mental process.

Close correspondence would seem to exist between impressions and ideas which for the most part are derived from them. All such derived ideas are faint resemblances of impressions, whether simple or complex. There is not, however, a one-to-one correspondence between these entities, and some complex impressions appear not to have ideas resembling them, while some complex ideas do not have corresponding complex impressions. As just illustrated, the latter are the product of that type of mental activity called imagination. Though this general statement is true with regard to the relationship of complex impressions and ideas, the obvious vagueness associated therewith does not apply to simple impressions and simple ideas, for it is claimed that for

every simple impression there is a simple idea, and for every simple idea, a simple impression.

> I perceive . . . that though there is in general a great resemblance betwixt our *complex* impressions and ideas, yet the rule is not universally true, that they are exact copies of each other We may next consider how the case stands with our *simple* perceptions After the most accurate examination of which I am capable, I venture to affirm that the rule here holds without any exception, and that every simple idea has a simple impression, which resembles it, and every simple impression a correspondent idea [1]

The question of what is the order of their appearance in the mind was answered by the conclusion that in experience ideas are always the effects of impressions in so far as the impressions are simple ones The chief difference between the two is the "force and liveliness" of the impressions as compared with the ideas derived from them Their constant conjunction proves a causal relationship | This conclusion is universally true, except in a few isolated instances which Hume himself held "scarce worth our observing" The conclusion is supported by two arguments. One calls upon the critic to state whether or not, as a matter of fact, it is ever the case that there are ideas in the mind not having been preceded by earlier impressions. Hume believed that no such instances could be discovered His second argument called attention to the improbability of an individual's being in possession of ideas if he had been born without the use of his senses. A person born blind does not have ideas of color and one born deaf does not have ideas of sounds. Remove the possibility of sensation and the whole body of "perceptions" is likewise removed If the possibility of having sensation has never been enjoyed by a person, there is no reason for expecting that his mind should contain "perceptions" of any kind. Original sense impressions are the prerequisites for any and all knowledge.

A seeming exception to this rule would appear when Hume goes on to say that impressions may be formed from ideas. However, it transpires that all that is meant here is that an idea which follows upon some sense impression may itself give rise to other impressions, which impressions in their turn may give rise to further ideas in sequence, which process may continue in rather a complicated fashion. Ultimately all impressions derived from ideas

[1] Hume, D., *A Treatise of Human Nature*, Book I, Part I, Sec. I. By permission of Longmans, Green & Company, publishers.

are seen to trace back to certain basic impressions which have no other things preceding them in experience At this point in order to clarify the issue, a further distinction is made between impressions of sensation and of reflection

The experiences we commonly call feelings, emotions, desires, and aversions are examples of impressions derived from reflection Experiences such as sounds, tastes, odors, colors, and the like are examples of impressions from the outer world excited by sensation All ideas are derived from impressions as fainter and less lively images of these Ideas make up the material for reflection and reason

> An impression first strikes upon the senses, and makes us perceive heat or cold, thirst or hunger, pleasure or pain of some kind or other Of this impression there is a copy taken by the mind, which remains after the impression ceases, and this we call an idea This idea of pleasure or pain, when it returns upon the soul, produces the new impressions of desire and aversion, hope and fear, which may properly be called impressions of reflection, because derived from it These again are copied by the memory and imagination, and become ideas, which perhaps in their turn give rise to other impressions and ideas So that the impressions of reflection are only antecedent to their correspondent ideas, but posterior to those of sensation, and derived from them [1]

If one would learn the distinction between true and false ideas, he must trace them or their parts back to the original impressions of sensation which gave rise to them To ask if an idea is true is to ask from what impression or impressions it is derived In the event of finding it, or them, the correspondence may be inspected and the question answered Should no origin of this sort be discovered then the source of the idea must be sought among the activities of the mind itself during its reception of the raw materials of sensation

Though Hume speaks at length about the activity of mind in forming new combinations of simple perceptions, it is not entirely clear what his conclusions were concerning the status or nature of mind However, experience informs us of mental activities when we become aware that simple ideas have been rearranged and reorganized in spatial and temporal contexts other than those attending their original reception The imagination is capable of separating all simple ideas and uniting them again in whatever form it pleases within certain limitations. Between impressions

[1] *Ibid.*, Book I, Part I Sec 2

and ideas there exists a compulsion of a sort that determines the ideas to be united in certain regular ways with the impressions. Nor is it the case that impressions of sense are given capriciously or devoid of order, sequence, or regularity, which fact is doubtless the more plausible explanation of the relatedness of ideas. Experience reveals that certain ideas follow regularly upon complex ones, and this phenomenon would be unlikely were ideas entirely loose and disconnected This regularity among ideas is to be explained only upon the assumption of the existence of more or less universal principles of relationship among ideas. On occasion it is apparent that the imagination can ignore such principles, but for the most part they function as "a gentle force, which commonly prevails" These principles produce an association among ideas, so that the appearance of one idea automatically introduces another related to the first by its similarity, by its proximity in space and time, or by virtue of being its product Three universal *principles of association* of ideas emerge to explain the operation of mind (1) *resemblance*, (2) *contiguity*, (3) *cause and effect*.

Hume believed it to be of little importance to show at any great length the operation of such a principle of association as resemblance It seemed clear that in the course of our thinking ideas tend to be directed or prompted by the recognition of any likeness that may exist between them If one idea resembles another, the two, because of this, are apt to be linked together in our thinking, even though one or the other may at a given time appear alone The principle of contiguity may be described with similar brevity Whenever ideas repeatedly appear together in the course of our experience, regardless of the absence of resemblance we are led to expect one on the appearance of the other An idea which follows another in a regular temporal sequence leads us to expect this sequence whenever one which has commonly preceded the other puts in its appearance. On the other hand, events appearing near together in space compel our thinking to move smoothly from the idea of one to that of the other upon the occasion of the real appearance of either The third of the three relations, causation, is the most significant and the one upon which Hume exerted most of his energy in order to clarify its origin and function. It is a firmer, more reliable link binding ideas together than either of the other two For centuries it has been a mark of definite knowledge to be able to assert that one thing is the cause or the effect

of another thing There is no relation among ideas that produces a stronger bond of connection nor so definitely determines the recall of one idea by another What is the cause of this and the other two associative principles cannot be known, though Hume suggests in the *Treatise* that they may be "original" qualities of human nature, which he did not pretend to be able to understand

'Tis plain that in the course of our thinking and in the constant revolution of our ideas our imagination runs easily from one idea to any other that *resembles* it, and that this quality alone is to the fancy a sufficient bond and association 'Tis likewise evident that as the senses, in changing their objects, are necessitated to change them regularly and take them as they lie *contiguous* to each other, the imagination must by long custom acquire the same method of thinking and run along the parts of space and time in conceiving its objects As to the connection that is made by the relation of *cause and effect*, we shall have occasion afterwards to examine it to the bottom and therefore shall not at present insist upon it 'Tis sufficient to observe that there is no relation which produces a stronger connection in the fancy and makes one idea more readily recall another than the relation of cause and effect betwixt their objects [1]

His interest in the problem of the association of ideas is explained by Hume's conviction that all reason consists in nothing else but a comparison of ideas and that knowledge must depend on the degree of certainty discoverable by and through the association process Since of all the possible connections of ideas it is causation alone that produces a connection among ideas which gives sound assurance that from the existence of one object we can infer that it has been preceded by, or that it will be followed by, some other specific object or action, it is imperative that thorough analysis of it be undertaken. To discover the essence of this significant relationship, Hume investigated objects commonly accepted as causes or effects to ascertain whether or not certain of their qualities give a direct sense impression of cause. He was forced to reject this hypothesis, since the most exhaustive examination failed to indicate qualities of any objects that remain sufficiently constant or are universally characteristic of objects in a manner to warrant their acceptance as significant factors. Stated otherwise, his rejection was defended on the ground that, regardless of what quality he undertook to examine, it was found to be absent in at least some of these relationships commonly designated as cause and effect. He next proposed to examine an alternative hypothesis, that causation must be derived from some *relation*

[1] *Ibid.*, Book I, Part I, Sec 4.

among objects rather than from any quality constituting them. Among relationships one appeared to be of particular significance. This relationship, spatial and temporal contiguity, is ever present as a characteristic of situations recognized as causes or effects. The least that can be expected of a causal situation is that the effect and the cause should appear near together in space. A second characteristic of such situations is that always the cause precedes the effect in time. Arguments which insist upon the possibility that a cause and its effect could appear simultaneously or that an effect could appear without its cause or prior to it must be rejected as contrary to experience.

A difficulty presents itself at this stage, in view of the fact that many events occur which are spatially contiguous and temporally successive in their appearance, yet quite obviously are not connected in any causal way. There must be a *necessary connection* between the two, which factor is of much greater importance than either of the two just mentioned. This difficulty stated otherwise is the problem of ascertaining "why we conclude that such particular causes must necessarily have such particular effects and why we form an inference from one to another." It must be established why it is that particular effects must necessarily have particular causes. We must discover the basis for our universal recognition of genuine causality by finding the true nature of the connection between cause and effect.

Once again it must be inquired what the impression is that gives rise to the idea of necessary connection or a "power" possessed by one object to effect the occurrence of another. Already it has been argued that no sense impression of cause derived from the qualities of objects is adequate. To employ Hume's example, though we agree that when a moving billiard ball strikes a second ball, it causes the latter to move, we never are able to discover by the most careful analysis any quality of the first ball that could be identified as the cause of motion in the second. From an object's first appearance we never can conjecture what effect will result from it. Unusual events leave even the most perspicacious of men at a loss to account for their causes, though experience of familiar causes leads even the most occasional thinker to expect almost habitually the familiar event that has in the past followed it. We only learn by experience the frequent *conjunction* of objects, without being ever able to comprehend anything like *connection* between them.

Nor do the ideas formed from sense impressions given in this experience ever originate impressions of power through reflection There is nothing in any particular instance of cause and effect that can suggest the idea of power or necessary connection Similarly it cannot be substantiated that the idea of power is derived from reflection upon the operation of our minds during reflection Though we feel that our bodies may be moved or directed at will, that we have power to act or not as we desire, the fact remains that the energy which performs such acts remains always a mystery to us It is another example of one sort of experience, this time what we call mental, being followed by another sort of experience we call physical or bodily But nothing in the first as such could ever inform us as to the necessary appearance of the second

In the final solution of this problem Hume calls to our attention the fact that whenever there have been frequent instances of the occurrence of objects followed invariably by other objects constant without exception, we come to form a habit of expecting one when the other has put in an appearance As a result, we have become accustomed to say that the one which immediately follows is the effect of the one invariably preceding it This repeated constant conjunction of two events in our past experience results in a strong feeling that a necessary connection exists between the two and accounts for the origin of the concept of causality In Hume's words, "after a frequent repetition I find that upon the appearance of one of the objects the mind is determined by custom to consider its usual attendant and to consider it in a stronger light upon account of its relation to the first object"[1] It is this feeling of compulsion to infer from one that the other will follow which explains the idea of necessary connection which is the basic ingredient of causality. "The necessary connection depends on the inference instead of the inference's depending on the necessary connection"[2] We do not infer that *B* will follow *A* because a necessary connection has been discovered to exist, but rather we come by the notion of the necessary connection because the mind has formed through repeated experiences the habit of *expecting B* after *A* and without hesitation infers that *B* will happen since *A* has already occurred.

[1] *Ibid*, Book I, Part III, Sec 14.
[2] *Ibid*, Book I, Part III, Sec 6

Causality reduces to a belief which Hume defines as "an idea related to or associated with a present impression" The basic difference between a belief and a simple fiction is that the belief is superior to the fiction in force and vivacity, in steadiness and simpleness. All beliefs are of this sort, merely habits induced by experience. So far as ideas go, it is impossible to anticipate future ones from those present. We are forced to confine knowledge to present impressions and ideas derived from them If we infer that future events will transpire, we do so without real assurance of their occurrence. Common experience indicates that we constantly make such predictions, and the exigencies of practical action demand that we do Still, it must be clear that in so doing we are going beyond the legitimate bounds of experience and our predictions become merely probable There is absolutely nothing in an event called a cause that absolutely determines the necessary future event called its effect. Repeated experiences produce beliefs in a sequence of events which at best are no more than habits in operation We cannot possibly understand why anything *must* happen We know only that in the past there have been frequent conjunctions of events, and habit impels us to expect the future to repeat them We may approach to an understanding of our beliefs psychologically, but, when we signify whether or not there are any *real* events or objects independent of our psychological processes, we are at a loss to supply any answer That we have ideas and impressions which follow the general laws of association for the most part is something scarcely possible to deny But as to what is the cause of these experiences we are very much in the dark.

How far the influence of Hume has gone is indicated by the following quotation taken from an article published in 1932. It states that

> in the best current tradition of science causality implies no force. What does it do then? Indeed, it does nothing Similarly, any other law of nature. The law of gravitation does not cause a sparrow's fall. Natural laws are merely descriptive They are as inert as a mathematical formula The law of causality expresses the fact of customary sequence among events. *B* follows *A*. That is causality Why *B* instead of *C* or *D*? Why anything at all after *A*? There is no answer in the principle of causality.[1]

[1] Breed, Fredrick S., "What Consolation in the New Physics?" *Scientific Monthly*, October. 1932 By permission of The Science Press

### 3 *Substance and the External World*

Hume agreed with Berkeley's analysis of substance in so far as the latter's arguments led him to the rejection of a material substratum as the support of qualities. However, it has been noted already that Berkeley continued to accept belief in the reality of a spiritual substance even though he admitted there is no idea of it available It is this particular part of the philosophy of Berkeley that Hume made the object of his attack He showed that the only "given" for experience is sensations which come to the perceiver in groups or configurations. We have a feeling following these experiences that the arrangements of impressions must continue in that relationship. We are prone to conclude that, if they are to continue together, there must be something which holds them together. By this means we come by the notion of a material substratum or a support of perceptual qualities. This entity which supposedly holds qualities together at no time gets into experience as sensation Since sensation is the source of all knowledge, there is no evidence that there is any necessity for the impressions to continue as they have been given in the past on the ground that they are held together by an underlying substance There is no guaranty, as it were, from experience that things must continue to be as they have been found to be in the past He accepted Berkeley's conclusion that no idea may be had of substance as something separate from the qualities perceived He accepted the distinction made by Descartes, Locke, and Berkeley between primary and secondary qualities. His interpretation of these qualities is identical with that of Berkeley in that he declared primary qualities to be no different in origin and significance from secondary qualities Both of them belong within the same category and are determined by and dependent upon sensation

Hume's criticism of the concept of self or ego followed the same line of attack as that pursued in destroying the argument for material substance Here it was that Berkeley failed to carry out his argument consistently and logically. Ideas were still held by him to exist in a spiritual substance, and it is to the problem of the reality of this spiritual substance that Hume applied his critical analysis He could discover no evidence for a mind substance, on the ground that no impression of it is available either

through sensation or reflection For this reason mind cannot be made an object of knowledge and nothing can be affirmed of it, for the simple reason that we have no experience of it If mind were an object of experience, it would be either a kind of sensation, a color, a taste, a sound, an odor, or it would be an impression from reflection such as emotion, pain, pleasure, passion, or something of the sort Clearly mind is not anything like these experiences, even supposing it to exist. There is, therefore, no idea of mind distinct from the impressions and ideas which experience possesses The effort to ascertain the nature of mind by analysis always results in hitting upon some particular perception which obviously is not mind When we glance into the content of mind, there is invariably found some certain experience, a perception of a thing, or an inner state, but never something that is not a percept The mind always escapes that analysis In Hume's familiar lines

> 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 And were all my perceptions removed by death, and could I neither think nor feel nor see nor love nor hate after the dissolution of my body, I should be entirely annihilated, nor do I conceive what is farther requisite to make me a perfect nonentity [1]

The term *self* can have no meaning at all other than "a bundle or collection of different perceptions which succeed each other with an inconceivable rapidity and are in a perpetual flux and movement." The question, however, persists as to why it is we are led to suppose that we possess an uninterrupted existence. Why do we happen to have this persistent belief in a self? His answer to this is that the memory brings back to us past successions of experience which we compare with the ones we are having at the moment, and as a result we form the conviction that there must be a something which carries us over from past to present, something that persists through time which has the present series of impressions and which had in the past a similar series which we remember. It is the memory which gives to us the notion of personal identity or the continuity of the self through

[1] *Treatise*, Book I, Part IV, Sec 6.

time Were there no memory, there would be no concept of self. If we were confined always to the experience of the moment, and no trace of those experiences remained as they passed, we would not be anything at all. There would be no ground upon which to conclude that we are beings with a continued existence.

If there is no evidence capable of establishing the existence of either a material or a spiritual substance, how is it to be explained that we have so strong a belief in an external world of bodies existing wholly independently of the perceiver? Both our thinking and our acting presuppose such a world What evidence is there that an external world exists? Berkeley had accepted it as a reality on the ground that it is the order of God's perceiving Hume, however, had destroyed and rejected the premises of this argument as well as those of any other which would conclude with the assertion that an external world exists The consequences of his position Hume was ready to accept and in substance it is the skeptical thesis that while we may *believe* in the existence of an independent external world we can never *know* that it exists.

He observed that it is the common practice of men to assume that at least some of our experiences impel us to accept the existence of objects external to us as a demonstrated fact Some perceptions of sensation are experienced repeatedly. When these arrangements of impressions thus repeat themselves over and over, we come to recognize them as objects. Since we do not have the feeling of having created them ourselves, we assume that the objects exist in an external world. Upon careful analysis what we call an object is no more than "a bundle of qualities given through sensation." These, in so far as we have any evidence, exist nowhere but in the perceiver All the qualities which we affirm to be those of bodies or objects are clearly subjective data for all that can be proved to the contrary.

We live within the world of our own ideas and can never escape from it. Yet we constantly refer many of our experiences outward and speak of an objective world of things and events. At the same time some of the experiences or impressions we have are presumed not to belong in the world outside at all but instead in us. An emotion we regard as somehow in us, whereas the hardness of an object we believe to be in the object. Whether we project these experiences outward or not, in neither case can we control

the recurrence of them. We do not project some and not others on the basis of the force and liveliness of some of them as compared with others. We may say that the heat is in the stove and the pain that results from touching it is in us, and surely, in this instance, the pain that is in us is as forceful and as lively as our notion of the heat presumed to be in the stove which we believe lies external to us.

The explanation of our belief in an external world, Hume argued, involves two questions: (1) Why do we believe in the continued existence of objects, and why do we believe in their existence separate from the perceiver? In answering these, attention is called to the fact that it has already been shown adequately enough that belief in the existence of something distinct from perceptual qualities is without foundation. There can be no appeal, therefore, to an external substance. Belief in the continued existence of objects is derived ultimately from the imagination. Objects are characterized by "a peculiar constancy which distinguishes them from the impressions whose existence depends upon our perception." Impressions that are caused by the activity of our mind, for example, a Medusa or a dragon, do not have the constancy or the persistence possessed by the experiences which we believe to be produced in us by the external world. That is, a so-called external object has a constancy that is lacking in the impressions that are due to our personal activities. When, in other instances, objects change, these alterations occur in a coherent manner. There is an order of change which becomes familiar to the perceiver in the course of his experience.

> When I return to my chamber after an hour's absence, I find not my fire in the same situation, in which I left it; but then I am accustomed in other instances to see a like alteration produced in a like time, whether I am present or absent, near or remote. This coherence, therefore, in their changes is one of the characteristics of external objects, as well as their constancy.[1]

Two characteristics of impressions, hence, are of central importance in explaining the origin of our idea of the continued existence of external objects: their constancy and their coherence. The constancy and coherence of certain impressions explain why we infer the continued existence of objects which are believed to constitute a world of real and durable things.

[1] *Ibid.*, Book I, Part IV, Sec. 2.

When we have been accustomed to observe a constancy in certain impressions and have found, that the perception of the sun or ocean, for instance, returns upon us after an absence or annihilation with like parts and in a like order, as at its first appearance, we are not apt to regard these interrupted perceptions as different, (which they really are) but on the contrary consider them as individually the same, upon account of their resemblance But as this interruption of their existence is contrary to their perfect identity, and makes us regard the first impression as annihilated, and the second as newly created, we find ourselves somewhat at a loss, and are involved in a kind of contradiction In order to free ourselves from this difficulty, we disguise, as much as possible, the interruption, or rather remove it entirely, by supposing that these interrupted perceptions are connected by a real existence, of which we are insensible This supposition, or idea of continued existence, acquires a force and vivacity from the memory of these broken impressions, and from that propensity, which they give us, to suppose them the same, and according to the precedent reasoning, the very essence of belief consists in the force and vivacity of the conception [1]

It is impossible to know that objects exist independently of the perceiver since it is not possible to escape the limits of impressions and ideas It would be necessary to have presented to the senses, simultaneously, a percept of an object and the object separate from it This is manifestly impossible. Yet the notion that there is an external world existing independently of perception is one of the most persistent of our beliefs. In practice we are forced to assume it though no proof of it is available Belief in the continued existence of objects carries along with it belief in their independent existence. We perceive what we call a tree on a certain day and after a lapse of a week, upon returning to the region once again, perceive the tree again Its qualities appear to have remained constant. The similarity of our two experiences, one present to the memory as idea, the other a present impression of the senses, produces a conviction that it is the same identical tree today and last week Furthermore, although our percepts depend upon our senses, we have a strong conviction that what is given in our experience possesses an arbitrariness not to be overcome by personal desires or will The apparent fact that impressions are forced upon us lends strength to our belief that their source possesses an independence of our perceiving activity.

This psychological explanation of our belief in an external world in terms of the coherence and constancy of certain of our

[1] *Ibid*, Book I, Part IV, Sec 2

impressions is not to be confused with arguments that seek to *prove* such existence, however. The upshot of the matter is that some of the circumstances of experience are of the nature to impel us to make inferences from it which postulate a world of independent objects The intent of Hume was not at any time to destroy arguments for *believing* in an external world His purpose rather was to destroy arguments purporting to *prove* its existence His problem, therefore, was twofold first, to show that the arguments for an objective world are unfounded, and, second, to give an explanation of the origin of the belief in the external world His analysis of the association of ideas and of causality supplied him with the necessary tools for a final psychological solution of this problem.

Hume's position at the close of his discussion of knowledge of an external world is that of skepticism He was unable to find, in spite of all the arguments that had been advanced, any that could stand before his criticism He was not, however, one to say that because there is no proof of an objective order we should adopt the behavior of a complete skeptic. The position of a complete skeptic is purely a theoretical one Upon this point Hume remarked that after he had enjoyed himself with friends, partaking of meals, engaging in conversation, playing a game of backgammon, upon his return to his studies he found them cold, unimportant, and divorced from reality. Yet, upon pursuing them further in search of an adequate ground for beliefs, it was only to find the theoretical paradoxes persisting However it may be that we can adopt a theoretical skepticism, it is a fact that in practice that skepticism must give place to action that has no other support than habit and belief

In Hume the work of Locke and Berkeley found its completion, for he doggedly followed the logic of empiricism He argued that there is no knowledge of the self or body and no guaranty of an independently existing world of bodies, that knowledge is limited to perception, the cause of which remains a mystery. The cause of the regularity of perceptions and their interrelatedness cannot be discovered All things beyond immediate experience must be accepted on the basis of belief and habit He recognized, however, that the position of absolute skepticism is a nonentity No one is ever completely a skeptic, for the very fact that he has to act He has to believe in order to live.

### 4. *Social Philosophy Ethics and Politics*

*a Ethics.* Among the most significant judgments formulated and employed as guiding principles for conduct within a society are those which concern the good and bad, the right and wrong So universally are moral judgments made in social life that any analysis of society which lays claim to completeness must endeavor to understand their origin and function Any such study would do well to adhere strictly to an empirical or scientific approach. This demands that an examination be made of numerous particular acts upon which moral judgments are passed By this inductive procedure there may be revealed to the investigator characteristics that are common to types of acts called moral, and a clearer understanding of the nature of virtues and vices be the product The general maxims or principles of a practical ethics must be derived from a comparison of many individual instances if they are to present any convincing claim to human loyalty. It would, therefore, be a mistake to proceed to the building of an ethics by first accepting as self-evident one or more principles from which inferences are then drawn by the rules of a stereotyped system of deduction There have been many philosophers, especially among the rationalists and intuitionists, who have conceived that such principles do actually exist in the human mind, conscience, or moral sense of some kind, that receives its content from extra-experiential sources To Hume this approach seemed wholly in error

True to the British tradition, Hume believed it capable of demonstration that no such principles of this order exist anywhere, either in the domain of morality or in the larger sphere of general knowledge. Instead, experience indicates that favorable sentiment toward acts of benevolence, justice, temperance, and many others is prompted by the valuable effects following upon the practice of such virtues, and is not the product of any absolute or intrinsic property inhering in the acts per se. No social virtue was ever estimated in actual practice apart from its benefit to society as a whole or to individual members of it Friendship is cultivated for the joy it lends to human life, while temperance or moderation is praised for the tranquillity and happiness that follow upon it We must conclude that the ultimate ends of human conduct can never be accounted for by reason alone Such ends

grow from the insistent demands of the organism; from the craving for pleasurable existence with as little of pain as possible Since pleasant feeling constitutes the happiness we crave and pain the misery we abhor, these feelings deserve to be recognized as the primary sources of all our desires and aversions As such they are the basic determiners of what acts we shall approve or disapprove.

It is found that practices which are useful are regarded with approval since they satisfy human wants and thus promote agreeableness of feeling The will is determined not by the dictates of our reason but by the experience of pleasure and pain and the consequent desire and aversion attending them Our feelings or passions make reason subservient to them, and the intellect functions as a means to the realization of pleasure on the one hand and the avoidance of pain on the other Moral sentiments are entirely without any compulsion unless they are based upon the expectation of pleasure or the avoidance of pain. The pleasure concerned is always either of the sort that goes with utility or, that which is the immediately satisfying feeling which supervenes in other instances where utility is absent Two criteria of morality clearly emerge (1) *utility* for society or the individual, and (2) *immediate agreeableness*, which arises frequently when no utility attends acts done or contemplated In both cases the ultimate objective is pleasure

The problem of whose pleasure is the chief determining influence when conduct is evaluated is naturally of marked significance There is an apparent degree of uncertainty about Hume's final conclusions in this matter Although he openly repudiates the egocentric theory of Hobbes on the ground that man possesses altruistic sentiments as well as egoistic ones, he never quite escapes the logic of his psychology, which brings the final sanction of morality back to pleasure and pain as motive forces The earlier *Treatise* openly accepts a broad egoistic foundation for morals, and though the *Enquiry Concerning the Principles of Morals* moves toward greater social emphasis, portions of it still retain the egoist accent His final interest indicates that the paramount significance of morality is the good of the group, though it is granted that some human activities are of greater importance for the individual than for the group. Nothing is ever recommended as a virtue or moral excellence except as it is useful or agreeable to the individual himself or to others. So far as concerns the utility of conduct,

emphasis is clearly placed upon its value to society On the other hand, the tendency for conduct to be approved because of its ability to produce agreeable feelings of pleasure seems to be based upon egoism

It was Hume's hope to explain away the egoistic aspect of morality by declaring that each man feels within himself the moral standard Through common experience men come by universal habits or sentiments which permit the growth of social or altruistic principles and remove moral judgment from the category of personal preference or individual taste

The moral "taste" common to mankind takes morality out of the status of personal preference and affords it a common social foundation This is not held by Hume to imply that all groups of people necessarily follow a single code of conduct Unless group experiences are similar, moral principles will vary though each group seeks a happy state and follows prescriptions dictated by utility and agreeable feeling The operation of *sympathy* makes man an altruist in spite of his basic egoism, a seeker after social welfare at the same time that he pursues his personal well-being Experience shows that we approve conduct beneficial to others as well as that beneficial to ourselves In addition we approve acts of others that not only are of no use but are actually detrimental to our personal interests When we compete with other individuals we often praise their veracity, justice, bravery, prudence, or sobriety, the while these virtues may end in our own undoing We give expression to disinterested approval when others display good sense, caution, presence of mind, facility of expression, independence, and perseverence These traits please us not because we will gain from others who possess them, but rather for the reason that we recognize their value for anyone who may have them If experience did not prove their utility, there would be absolutely no reason for approving them We derive pleasure from observing their exercise by others because we are able to recognize the feelings or emotions of another and, sympathizing with him, partake at the same time of his pleasure or misery. This natural sympathy brings us common feeling with others so that we share with them in some degree the good or ill fortune that befalls them Our approval or disapproval cannot be reduced completely to the pleasure *in* us indirectly generated by the conduct of others, as an egoist would argue We are able to give sanction or not by

virtue of our sympathetic feeling, but our personal experience is no more than a secondary motive for our judgment More significantly still, our behavior implies the existence of a natural disposition to approve, desire, and seek the happiness of other people

Our human nature is such that experience generates functioning habits of mind which show themselves as predispositions to act according to certain principles, frequently in a fashion that shows no evidence of an effort to estimate specific benefits for self or society This quality explains why some theorists in ethics have been led to support the claim that moral principles exist a priori As a matter of fact, we cannot affirm anything beyond the fact that we find moral principles as a part of human experience and that their explanation can most adequately be defended upon the a posteriori ground of a consistent empiricism A kind of moral sense, a posterior in origin, emerges as a part of human nature. It is a body of operating moral habits that have been found efficacious to man during his efforts to satisfy his natural urge to seek a life of pleasant activity

Hume placed much emphasis upon the uniformity of human nature and endeavored to show its basic significance both for epistemology and for ethics He claimed that the actions of men in all ages and among all nations have been quite similar and that history bears this out So similar are the minds of men in operation that feelings or experiences had by one person find a measure of sympathetic reflection in the behavior of others In spite of this uniformity, it is unnecessary to expect that all men in the same circumstances should act in the same way Differences superimposed upon common human nature develop out of varied customs, training, and education, making for diversity of character, belief, and opinion among men This variety of life and action so familiar to experience seemed to Hume not to obscure the fact that beneath all the change there is a common ground revealed in the process of knowing, communicating, and living in a society Its most significant manifestation in the sphere of morals is the phenomenon of *sympathy* It is the principle the operation of which defeats both egoism and individualism as explanations of moral behavior

*b Political Theory* Society is the product of human nature and is an artificial means for satisfying basic human needs Contrary to Aristotle, man is not a political animal, but insistent

demands of his nature lead him to become socially minded. He does not possess a social "instinct" that impels him to form a society But there are many motives, desires, and aversions stimulating behavior, and the satisfaction of them results in efforts that tend toward group action Alone, man has scant opportunity to satisfy the cravings of his nature, in a society the chances of his developing a complete life are enhanced The desire to control and regulate passions or desires felt in common by many men is the basic object of any social agency The sex impulse, for example, gives rise to various devices in the form of laws or conventions that serve to regulate its operation for the happiness and well-being of all As a part of common human nature, along with other natural impulses, it finds its most adequate expression when given direction by certain nonnatural regulatory principles Social institutions are the sum total of such rationally devised principles, and men living in society come to recognize the utility of obligations thus placed upon them and have an interest in maintaining and conforming to the rules. There is a certain natural limit to the goods which will satisfy universal human desires and inevitably there will be confusion and competition which must be controlled, in measure at least, if happiness is to result upon any large scale

Government, as the institutionalized form of a society, should have as its objective the happiness of citizens who live within the scope of its jurisdiction It is based upon fidelity and allegiance, and, since the sole sanction for these is the social utility of their function, it follows that the fundamental basis for government must be its utility The state is a large-scale means for satisfying the interests and necessities of human society Without it no social happiness could materialize, since one of the chief requisites of a peaceful and happy existence is that security shall be guaranteed and justice be done within the group Hume was disinclined to regard the familiar contract theory of government as having validity It is only in a restricted sense that government involves the concept of a contract It is, of course, implied that any government which sets itself up to guarantee the welfare of its citizens must hold to certain basic agreements, any deviation from them constituting a breach of faith Likewise the citizen is expected to abide by the laws of the land and any disobedience on his part is regarded as a crime Other than this no contract exists in any such formal sense as that supported by men like Hobbes and Locke

History indicates that "the state of nature" finds man not as an isolated unit but already at least in a family society As for men's natural rights, there appear to be none. The concept of an original contract designed to protect such rights is superfluous to a sound political theory and, in addition, there seems to be no historical evidence that any contract was ever formed, even granting that such a notion lay within the grasp of primitive comprehension Governments have arisen through usurpation of power or conquest and people have obeyed through fear, but there is no evidence that political societies sprang originally from a contract formed by the future members of the society or that obedience follows from a conscious appreciation of the security of natural rights guaranteed thereby. Whatever contract or article of consent finally comes to crystallization does so only after long passage of time At first a society must have been held together by forces more or less unrecognized by the members of primitive societies Perhaps it is accounted for by the semiblind operation of common elements of human nature drawing people together for mutual aid Much later, when reflection focused upon political organization, it was seen that definite advantages accrued to the individual who permitted himself to be guided or controlled by others who were more skilled or more experienced than he Exigencies inevitably arose in the lives of primitive peoples and upon such occasion some person or group emerged to assume leadership, through demonstrated ability, family seniority, reputation, or any number of other reasons. The custom grew of submitting to leadership, not merely in times of stress but likewise in periods of calm Once the habit was fixed, governmental rule became a basic social phenomenon The next developments lay in the direction of strengthening and solidifying the official agencies of control This done, there is little to prevent government from becoming an agency for coercion upon occasion as well as a device for properly promoting the welfare of its members. Under these circumstances it may no longer be an institution based upon any kind of consent

In measure it may be admitted that government is based upon the consent of the governed during a period long after the "state of nature" but before the modern era. However, the contract theory offered to Hume no adequate or historically correct explanation of eighteenth century political institutions Obedience in some instances is commanded by fear and necessity rather than

by a genuine feeling of moral obligation. In other cases, governments long established, regardless of what were the circumstances of their origin, have engendered the habit of allegiance and men no longer think to question the right of the government to exercise authority over them Habit and custom after a hundred years or so establish fidelity and allegiance as the keystones of the political arch Human rights wait upon the organization of government and are not, as Hobbes or Locke argued, the objects that government is to protect and for the preservation of which the government was originally created Apart from society there are no rights and hence no duties The value of political organization lies in the stability and security it creates, in the midst of which the individual seeks to satisfy his fundamental desires for pleasure for himself and for others

### 5 *Philosophy of Religion*

It was Hume's opinion that religion develops from the elements of human nature rather than out of an intricate process of reasoning on the part of man The proof of this seemed to him evident from an examination of the history of religion Religious ideas are found to be practically universal among men, though this is no proof that religious feeling is absolutely universal or that there is any very obvious agreement among different groups of people with respect to their basic beliefs Certainly there is little ground for the claim that religion springs from an original instinct and that because of its operation religious feeling appears in the experience of all men An early expression of religion as developed by people who lived two thousand or more years ago will be seen to take the form of belief in many deities This polytheism, according to Hume, is characteristic of all primitive forms of religion, and he is perfectly willing to identify it with idolatry The farther back we delve into antiquity, the truer it is that we find man "plunged into polytheism"

The origin for this type of religion is to be found in man's effort to deal with a world that is complex and by no means understood by him To primitive man nature was an unpredictable sequence of phenomena An event that served the purpose and welfare of one individual might well defeat the aims of another There was constant combat of forces in nature working in contrariety one to another Behind natural processes are unseen powers

which ultimately came to be interpreted by the ancient as the will of deities who control nature. In the case of these various deities regulating nature, it is not true that even the same one is self-consistent in his regulation of events within his control. One day he may protect and the next abandon the individual. Human prayer and sacrifice may be ill or well performed, but in so far as the results may be estimated the whole of man's dealing with nature is subject to caprice and uncertainty It is because of man's hope and fear with respect to the events of his life in an uncertain natural environment that he has been led to the formulation of religious beliefs Natural events were to him a mystery and their explanation took the form of supernaturalism.

The first impressions made by nature upon the thinking of mankind were those traceable to unusual rather than to regular occurrences The ordinary man did not point to the regularities of nature then any more than today as his first argument for the existence of supernatural powers regulating events The more regular and uniform nature appears to be, the more familiar does man become with it, the more he takes it for granted, and, therefore, the less is he puzzled and mystified by it The commonplace does not excite awe and reverence, whereas the unusual, the monstrous, or the sudden aspects of events, such as earthquakes, accidental death, various "providential" occurrences, are the things which attract attention Inability to explain them in terms of his own personal experience led man in the beginning to assume a cause for them somewhat analagous to powers he felt in a limited way within himself The apparent cross-purposes of nature more or less naturally prompted him to assume a multiplicity of causes far superior to himself though in many respects like him It is not until much later that he came by the notion that all things are controlled by a single supreme deity, and it was not until much later still that the notion evolved of all things being originally created *ex nihilo* by that deity

In the beginning deities find no better description than that they are intelligent, voluntary agents psychologically similar to ourselves but differing from mortals chiefly because of their superior power and wisdom Along with power and wisdom they exhibit characteristic human weaknesses like irresponsibility and amenability to bribery and flattery This anthropomorphism associated with all ancient forms of religion engenders the

growth of mythological traditions or stories of the origin and history of each of the deities. With time the unseen forces of nature assumed more the prosaic human form and character Eventually, largely because of this, primitive man outgrew these notions. When anthropomorphism became too sharply drawn, there developed a tendency to attribute the events of nature to the operation of abstract force operating through a single deity. By a process of abstracting from the imperfect the idea of the perfect developed, and all those human characteristics which man was believed to possess in moderation were thought to characterize the supreme deity in all their perfection One among the several gods came to be regarded as more powerful than the others and religious rites were directed toward the gaining of his favor Ultimately this deity assumed the form of the traditional theistic god All this is clearly the result of a long period of history In the beginning religion is not the product of rational effort on the part of man, but is the natural outgrowth of shortcomings or at least peculiarities of human nature Religion has thus a natural history and an adequate understanding of it may best be derived through a historical approach

Hume's final opinions upon the subject of religion led him to the conclusion that the only adequate foundation for religion is awareness on the part of man of regularities and uniformities in nature This awareness leads to the notion that such uniformities and regularities could not have been produced except through the instigation of some all-powerful creator who created according to plan or design

> Whoever learns by argument, the existence of invisible intelligent power, must reason from the admirable contrivance of natural objects, and must suppose the world to be the workmanship of that divine being, the original cause of all things

In another place, in Section IV, he comments.

> The only point of theology, in which we shall find a consent of mankind almost universal, is that there is invisible, intelligent power in the world But whether this power be supreme or subordinate, whether confined to one being, or distributed among several, what attributes, qualities, connexions, or principles of action ought to be ascribed to those beings, concerning all these points, there is the widest difference in the popular systems of theology [1]

[1] Hume, David, *The Natural History of Religion* By permission of the Clarendon Press, London

Furthermore, there is in addition to such considerations the factor of human experiences akin to fear and apprehension that lie in the very heart of religion, for he says, "If we examine our own hearts, or observe what passes around us, we shall find that men are much oftener thrown on their knees by the melancholy than by the agreeable passions." Every disastrous act alarms us Each convulsion of nature, its disorders, prodigies, or miracles, encourages in man the religious experience

However, in contrariety to deism, Hume believed no study of nature could prove the dogmas of religion Neither revelation nor reason is equal to the task of proof He thus accepted agnosticism the while granting that religion based not upon superstition contributes its own values in the experience of men

> *A little philosophy,* says Lord Bacon, *makes men atheists A great deal reconciles them to religion* For men, being taught, by superstitious prejudices, to lay the stress on a wrong place, when that fails them, and they discover, by a little reflection, that the course of nature is regular and uniform, their whole faith totters, and falls to ruin But being taught, by more reflection, that this very regularity and uniformity is the strongest proof of design and of a supreme intelligence, they return to that belief, which they had deserted, and they are now able to establish it on a firmer and more durable foundation [1]

Having stated what he believed to be the only reasonable foundation for religious experience, that of belief in unseen, intelligent power through a rational consideration of the processes of nature, Hume continued to a consideration of the grounds for religious belief such as those just enumerated He recognized them as reasons for the support of religious belief, but at the same time insisted that they are reasons no intelligent and straight-thinking individual would offer as the justification for such beliefs. As he says

> We may conclude, therefore, upon the whole, that, since the vulgar, in nations, which have embraced the doctrine of theism, still build it upon irrational and superstitious principles, they are never led into that opinion by any process of argument, but by a certain train of thinking, more suitable to their genius and capacity.[2]

By that he means they are prompted to form their beliefs by or through experiences of the unusual or extraordinary order before mentioned

[1] *Ibid*, Sec 6
[2] *Ibid*., Sec 6

Throughout his life Hume remained consistently skeptical of all traditional forms of religion, though it would appear that he personally endorsed a basic religious viewpoint That is to say, he made a distinction which since has become popular, between the religious experience and religions as such He had nothing kind to say about the religions of mankind, though at all times he seems favorably inclined toward a religious experience in the broader meaning of the term He included in the *Treatise* an essay on miracles which served to place him in the forefront of the religious critics of his time In considering the evidence for belief in miracles, which according to his analysis was one of the first grounds offered by the superstitious for belief in a supreme God, he endeavored to show that belief in such occurrences implied the very opposite situation in nature which could justifiably be offered as an argument for theism If any adequate argument is to be presented for theism, it must be based upon the absoluteness of law in nature, in other words, upon the uniformity of nature Therefore, any miraculous occurrence would represent a breach in the fundamental laws of nature, which laws may be interpreted from a religious standpoint as the regulating principles conceived by the deity at the time of creation Hence, far from being an argument for religion, belief in miracles is an argument that leads in a very opposite direction The only adequate test for a miracle, according to Hume, is an empirical one, which in effect states that no miracle should be accepted unless it would be still more miraculous to reject the evidence offered to support it In this connection one must take into consideration many factors, including the purpose or design of those who advance this miracle or that, the underlying assumptions that are made by such people, the skill and open-mindedness of the observer, and, in general, the reliability of testimony Then if it would be more incredible to reject such testimony than to accept its evidence, the proposals should be accepted Hume himself was inclined to believe that no such evidence could be established and that miracles do not exist Along with this he was likewise inclined to see in unusual occurrences, catastrophies of nature, and the like, natural events which have natural causes and, therefore, are not disruptions of regular laws of nature. For this reason he believed that the soundness of the argument from design remains unchanged if this method of approach be employed

Toward the end of his discussions in the *Natural History of Religion*, Hume pointed out rather scathingly that traditional religions have been scarcely of the nature to command the respect of an intelligent being He says,

> Examine the religious principles, which have, in fact, prevailed in the world You will scarcely be persuaded that they are any thing but sick men's dreams or perhaps will regard them more as the playsome whimsies of monkeys in human shape, than the serious, positive, dogmatical asseverations of a being, who dignifies himself with the name of rational [1]

There is no sharp agreement between the variable protestations of men and the examples of their lives Hypocrisy is obvious in the field of religion There are "no theological absurdities so glaring that they have not, sometimes, been embraced by men of the greatest and most cultivated understanding" Furthermore, there have been no religious precepts so rigorous that the most abandoned of men have not one time or another adopted them The general experience of mankind with his religious ideas seems to be guided by the maxim "Ignorance is the mother of devotion" Even the most accurate scrutiny cannot with complete assurance state the truth about the religious implications of experience. Human reason is perhaps incapable of delving into the intricacies of these ultimate problems "The whole is a riddle, an enigma, an inexplicable mystery" So far as Hume was concerned, he preferred to remain aloof from controversy and "escape in calm, though obscure regions of philosophy"

## DISCUSSION TOPICS

1 With respect to Hume's theory of knowledge distinguish (*a*) impressions and ideas, (*b*) simple and complex ideas, (*c*) ideas of memory and imagination, (*d*) impressions derived from sensation and reflection

2 How did Hume purpose to test the truth of an idea?

3 What is meant by *principles of association*? From whence do they come according to Hume? Define those suggested by him

4 Explain Hume's analysis of causation Of what significance is it with respect to the traditional concept of causality as employed by science?

5 With respect to the analysis of cause explain the following quotation "Perhaps in the end it will appear that the *necessary connection* depends on the inference instead of the inference's depending on the necessary connection"

6 Explain Hume's interpretation of *belief* What is the difference between a belief and a fancy?

[1] *Ibid*, Sec 11

7. Discuss Hume's arguments against the existence of material and spiritual substances

8 How does he account for our belief in the existence of an external world?

9 Explain in what sense Hume is a skeptic Compare his skepticism with that of (*a*) Descartes, (*b*) Pyrrho

10 Describe Hume's analysis of the operation of *sympathy* Of what importance are *pleasure*, *pain*, and *utility* in his ethical theory?

11 What were Hume's objections to the *contract theory* of government?

12 Why did Hume's philosophy of religion mark a distinct step forward in the clarification of religious issues?

13 What were his views upon the origin of religions?

14 What was his own position with regard to the validity of religious beliefs?

## PARALLEL READINGS

CUSHMAN, H E *A Beginner's History of Philosophy*, Vol II, Chap VIII, pp 192–210

FULLER, B A G *History of Philosophy*, Vol II, Chap III, Part 3

HIBBEN, JOHN GRIER *Philosophy of the Enlightenment*, Chap IV

HOFFDING, HARALD *A History of Modern Philosophy*, Vol. I, Book IV, Chap V

MORRIS, C R *Locke, Berkeley and Hume*

ROGERS, A K *A Student's History of Philosophy*, 3d ed , Part III, Sec 32

SORLEY, W R *A History of English Philosophy*, Chap VIII

THILLY, FRANK *A History of Philosophy*, Sec 51

# Chapter XIX

# BRITISH MORAL THEORY

## 1. *The Cambridge Platonists*

All significant moral theorists in England during the period following Hobbes took their departure from the egocentric position of that early English materialist Hobbes's theory claimed that pleasure and pain are the fundamental sources of motivation and that these are reducible to simple motions of material parts within the organism which help or hinder its vital actions. The human being does nothing except that which he believes will be of benefit either to preserve his life or to promote a more intense and vital type of living Approval of benevolent or social virtues is given only when these have a pleasurable effect upon the individual. The statement of Hobbes's fundamental principle of seeking peace and following it finds its ground upon the thesis that this is an indispensable condition for the achievement of one's self-interest Self-benefit completely commands behavior Rules for the realization of self-benefits are all of them determined by the arbitrary dictates of the Leviathan and are given in the form of laws and institutions

This ethical position sponsored two fundamental principles, both of them exciting immediate reaction from contemporary moral theorists One of these principles is what is commonly called psychological hedonism, or the theory that man's fundamental nature is such that his whole activity is controlled and determined by seeking pleasure and avoiding pain. The second principle is that morality is entirely arbitrary in nature, being the product of the will of the monarch.

Among those first to question both of these theses was a group of men at Cambridge University led by Ralph Cudworth and Henry More. They were particularly concerned with the second of the principles mentioned· that morality is a system

of arbitrary rules These Cambridge Platonists argued that it is not the will of the sovereign nor even the will of God that is responsible for the presence of moral rules, they are present in society because they are intrinsic to the order of reality, that is, they are a part of reality. Through reason man may come to an understanding of right and wrong, these being defined in terms of moral principles which originated, it is likely, from the divine reason of God These principles are universal and changeless in character, similar in this respect to mathematical truths They are of the nature of innate principles though the reason is required in order to know them Cudworth is responsible for drawing a list of twenty-three principles, which he claimed to be self-evidently true. "The superior good is always to be preferred and the lesser evil," is an example of one of these The others were of the same order, it being the claim of the Platonists that they were intrinsic parts of the rational order of existence

Upon the issue of the origin of tendencies toward benevolence or the nonegoistic activities of man, the Cambridge Platonists were not entirely clear They are, however, quite vigorous in their rejection of Hobbes's point of view Neither Cudworth nor More offers any very specific reply, though the general position was that reason, by its ability to recognize the intrinsic goodness of the principles of benevolence, determines the will to act according to it Both egoistic and benevolent impulses are a part of the rational order

Another development in British moral theory occurring contemporarily with the work of the Platonists was the theory of Henry Cumberland Cumberland's issue with Hobbes was chiefly on the problem of egoism He maintained that the end of knowledge is the good of all He did not choose to make an appeal to innate ideas, as did the Platonists, in order to establish the truth of this thesis, but rather his appeal was made to general tendencies displayed by all men living within a society He argued that egoistic impulses, while they may predominate in the beginning of man's experience, cease at a later period to function as the most fundamental agencies behind moral action. They are largely replaced by the benevolent tendencies when man becomes a member of society. By this line of reasoning he is led to state his fundamental standard of conduct, which is at the same time a definition of the highest good·

The greatest possible benevolence of every rational agent toward all the rest constitutes the happiest state of each and all, so far as depends on their own power and is necessarily required for their happiness, accordingly Common Good will be the Supreme Law [1]

## 2 *Moral Sense Theory the Earl of Shaftesbury*

More significant than either the Cambridge Platonists or Cumberland was the work of the third Earl of Shaftesbury who, was a contemporary of Berkeley Shaftesbury attempted to answer Hobbes more definitely upon his own ground He became interested in analyzing the egoistic basis of morals and discovering upon what ground that theory rested He made no appeal to abstract or rational principles in order to establish the validity of benevolent practices nor did he appeal to religious concepts He directed his attention toward human nature, which he believed to exhibit both social and egoistic tendencies to action. He believed, furthermore, that these were not contradictory Likewise, there is in the experience of each man a strong tendency toward certain types of conduct and aversion to other kinds The guiding principle toward these sorts of behavior appears to be that of a moral sense, somehow a part of essential human nature

Shaftesbury believed it an error to attempt the analysis of a man as an individual, believing him to be a part of a large social whole There is no such thing as a self-contained social atom, for man's real nature is in part determined by those who live about him Man instinctively, as it were, seeks the company of others According to Hobbes, as has been shown, man is made moral by external forces acting upon him, that is, he learns to be good by obeying the arbitrary rules of the social order According to Shaftesbury, man is moral in the true sense whether these regulations are put upon him or not He is not a moral creature merely by the fact of external pressure upon him, he naturally develops habits and dispositions to act morally, and a part of these involve behavior of a social and disinterested character. There is not, therefore, a sharp distinction between the state of nature and the state of society The egoistic and social impulses attain a state of equilibrium in the moral man, excess of either makes for a lack of balance and is bad alike for the individual and for the group Excessive benevolent action may not be a benefit to the group if

[1] Sidgwick, Henry, *History of Ethics*, p 174 By permission of The MacMillan Company, publishers

self-interest is too much neglected There is no way, therefore, of separating the social virtues from the egoistic virtues since they both develop in parallel fashion, one aiding and abetting the other

To be moral means to be happy This happiness or pleasure is derived from two sources· from love, good will, sympathy for others, and from actions that make for a successful personal life Pleasure is derived from the feeling that arises within us when we do a kindness to another, from the fact of our knowing that others are pleased, and from the knowledge that our acts cause others to think well of us Egoistic moralists have overlooked or misemphasized this particular phase of human relationships The good life is one wherein the many impulses, both egoistic and benevolent, are brought into harmony The happiness that results is within us and is more of the mental than of the physical There is no genuine antagonism between self-interest and social good When acts produce bad social consequences, they also produce bad results for the individual

All rational creatures have the capacity to experience a feeling of pleasure or pain when viewing or contemplating behavior This is a fundamental aspect of the moral sense This feeling of pleasure or displeasure in the presence of conduct is not developed equally in all people but may be corrupted by bad training or poor cultural surroundings Uncorrupted, it leads one by its own light in the direction of rational and moral conduct. It guides behavior into channels that promote personal and general welfare It is both a positive and a negative guide, and, as it directs behavior in the pursuit of social good, it simultaneously creates for the individual his happiest condition. This acceptance of what has come to be called the moral-sense theory of ethics has been the subject of much criticism of Shaftesbury The thought behind the moral-sense theory is that a part of human nature is made up of an ability or a capacity to recognize right or wrong as qualities of acts in the same way that one is able to recognize green or red as qualities of objects The theory would maintain that moral acts have intrinsic qualities which belong to them absolutely and that this moral sense is a special faculty which is able to ascertain the good and the bad qualities and so guide conduct accordingly.

### 3. *Private Vices as Public Benefits: Bernard Mandeville*

A rather striking ethical viewpoint was expressed in the early part of the eighteenth century by Bernard Mandeville.

Whereas Shaftesbury had emphasized personal welfare through social action, Mandeville reversed the thesis. Society, he argued, is to gain most from the vigorous pursuit of the most selfish of personal interests This point of view was expressed in a poem that appeared in the streets of London about 1714 under the title, *The Fable of the Bees*. The poem described a colony of bees at the height of prosperity and happiness It was a colony in which all the members worked as individuals to satisfy their personal needs and simultaneously were thus satisfying the needs of society as a whole There was little to restrict the individual initiative and freedom of the members of this society and there was, therefore, prevalence of vanity, deceit, discontent, and sensuality But, in spite of these, or, as Mandeville argued, because of these features, the society prospered mightily What appeared to be evil or corrupt practice where a small part of the society was concerned proved actually to be advantageous to the group as a whole These corruptions were thus not to be eradicated but instead encouraged as the conditions making for a better society.

To show more fully still what will happen when egoistic behavior is restricted, Mandeville drew a picture of the same swarm of bees at a later time after someone had suggested reform Under the new plan the state has given up corrupt practices and the individuals within it have become conscious of a demand for social betterment Those that were foremost in deceitfulness have become models of propriety Those who were the most self-centered have become the most socially minded The class of inhabitants of the colony that have functioned as the directors or the priests of the bureaucracy have been curbed. Instead of permitting the poor and ill to die unattended, the colony now takes adequate precautions to nourish and keep them alive In general all the egoistic or selfish activities of the members of society have been estopped and have been replaced by a very marked growth of social consciousness and benevolent practice

Such a development, according to Mandeville, is against the best interests of this or any other society. The more contented a society becomes with its own activities, the less its members venture forth to make contacts with other people. Navigation and commerce dwindle away and finally cease altogether as society becomes more self-satisfied The population falls off and degeneration sets in straight away. This is all due to its having given up individualism and egoism. The happiness of the individual

is incompatible with any social ideal to be achieved by restricting individual self-seeking Society itself can prosper only through allowing each member full exercise of his egoistic impulses The sentiment expressed by the poem is summarized fairly well in the closing lines

> To enjoy the world's conveniences,
> Be famed in war, yet live in ease,
> Without great vices it is a vain
> Utopia, seated in the brain
> Fraud, Luxury, and Pride must live
> While we the benefits receive

### 4 *Self-love and Conscience Joseph Butler*

Next to Hobbes in the early history of British moral theory Shaftesbury was probably the most influential Among those touched by the latter influence was Joseph Butler He was particularly interested in Shaftesbury's account of the moral sense, and since he was a clergyman he gave to it a theological stamp similar to that of his contemporary, Hutcheson Butler concluded with Shaftesbury that both social and egoistic impulses exist in human nature and that there is no real conflict resulting In the system of Hobbes, Butler saw nothing but baseness He was blind to the more social aspects of the theory and of his predecessor, and his criticism, therefore, loses some of its point

Butler chose to criticize and correct Shaftesbury's concept of the pursuit of pleasure He argued that man is activated by certain impulses to action and that these impulses are really the reasons for his behavior A man acts not in pursuit of pleasure but in pursuance of these natural activities, and the pleasure results during or after the impulses have been satisfied For example, the urge to secure warmth activates human beings and has as its object a condition of higher temperature rather than pleasure as such Pleasure, in other words, is pursued indirectly through obtaining objects sought This is the first clear statement of what has since come to be called the hedonistic paradox. Conduct, argued Butler, is regulated by two principles *self-love* and *conscience* The latter is Butler's modification or alteration of Shaftesbury's moral sense These two regulatory principles are not in conflict though it would seem that self-love has, on occasion, ultimate priority over conscience He says·

When we sit down in a cool hour we can neither justify to ourselves this virtue or any other pursuit, till we are convinced that it will be for our own happiness or at least not contrary to it [1]

At other times he insisted that conscience is by its very nature designed to govern and rule It has the right and the authority though apparently it lacks the strength and power to be an absolute sovereign regulator of human conduct About it he says,

There is a superior principle of reflection or conscience in every man, which distinguishes between the internal principles of his heart as well as his external actions, which passes judgment upon himself and them, and pronounces determinedly some actions to be in themselves just, right, good, others to be in themselves evil, wrong, unjust, which without being consulted, without being advised with, magisterially asserts itself, and approves or condemns him the doer of them accordingly [2]

From this and other similar passages it appears that Butler believed that the calculations of self-interest frequently are less certain and clear than the dictates of conscience, which are characterized by their clarity and certainty If the two should appear to conflict, he urges one to follow the stronger which, it would seem, he believed always to be the conscience Though there appears to be a certain vacillation of opinion as to the ultimate priority of the two principles, it is at the same time indicated that Butler regarded them as not fundamentally opposed He reasoned that the violation of one involves the violation of the other They are given to us as essential aspects of our nature Rather optimistically he assumed that this condition makes it necessary to believe that they are completely harmonious At any rate, he believed that there was no significant evidence that one is contrary to the other

There is a strong tendency in Butler to regard moral acts as good over and above the consequences which may follow upon them in terms of general or personal happiness Ultimately the virtuous man is happy, and ultimately his happiness is tied in with social welfare, but the guide to this condition is intuition rather than calculation This does not mean that man should make no attempt to calculate the consequences of his behavior, for many

[1] Sorley, W R , *A History of English Philosophy*, p 161 By permission of G P Putnam's Sons, publishers.

[2] Quoted by Thilly, Frank, *A History of Philosophy*, p 333 By permission of Henry Holt & Company, publishers

times he must, otherwise, morality would be a wholly nonrational practice The situation is rather this· in the last analysis, there is attaching to moral rules something of an intrinsic worth which gives them the value they have regardless of the consequences of acting upon them He says,

> We are constituted so as to condemn falsehood, unprovoked violence, injustice, and to approve of benevolence to some preferably to others, abstracted from all consideration which conduct is likeliest to produce an overbalance of happiness or misery [1]

His argument further points out that some of the acts we count most shocking, such as injustice, adultery, murder, and perjury, may not be likely at all to produce more misery than pleasure in this world and yet these are condemned as being bad This was evidence enough for Butler to conclude that it is not fundamentally the consequences of acts that determine their goodness or evil This formalistic tendency finds Butler leaning toward the Platonists and away from Shaftesbury, Hutcheson, and from the ultimately developed principles of British utilitarianism It may also be remarked that his insistence upon the thesis that in order to obtain pleasure we must have a disinterested desire for an object, in the attainment of which we derive our pleasure, offered a significant criticism of the general theory of hedonism Before considering this characteristic modern theory of ethics, we may with profit examine the suggestions offered by Adam Smith, author of *The Wealth of Nations*

### 5 *Doctrine of the Inner Man. Adam Smith*

For some twelve years Adam Smith occupied the chair of moral philosophy at the University of Glasgow During this period his interests were confined chiefly to moral and economic theory His views upon these subjects were advanced chiefly in his widely known and influential treatise, the *Inquiry into the Nature and Causes of the Wealth of Nations* In this document he enunciated some of the basic principles generally recognized as the underlying philosophy of capitalistic economy For purposes of discussion we may conveniently review his conclusions under the heads of ethics and economics, two fields which, so far as Smith developed them, lie more or less isolated. Whatever

[1] Sorley, *op. cit.*, p 162

relatedness he presumed them to have, he was inclined to assume rather than prove

As a moralist he held the familiar opinion, at least as old as Socrates, that ethical principles and ethical conduct arise only in social life. The origin of moral rules can be attributed to the natural impulse on the part of men to imitate others, to put themselves in their places, to be able to feel in some degree the emotional experiences of others This sympathetic activity of thought inevitably results in our approving or disapproving acts according to the way they affect us We approve the behavior of others if we believe that under similar circumstances we would react in the same way Our disapproval follows upon the observation of actions we would not indulge Judging behavior or character as good or bad is possible owing to "our natural sense of merit and propriety" This is not a "moral sense" in the usual manner of interpretation, but a capacity that grows upon us through experience of many particular acts. We develop in time a sort of feeling for what is proper and improper As a result there emerge in the course of experience numerous rules of conduct Since we approve them, there is exhibited by us a certain sense of duty which motivates us to uphold and practice them This sense of duty supplies the backbone of morality, giving it that degree of firmness and permanency necessary if it is to operate in the interest of the individual For most people it is indispensable since it is the only principle strong enough to cause them to act morally Just how this conclusion harmonizes with the thought that man possesses a natural sense of propriety which serves to guide him is not by any means clear Nor is the situation clarified by claiming that moral laws, though originating in the course of human experience, are to be regarded as necessarily divine laws In fact, this contention would appear to take morality largely out of the context of mere experience and place it upon a foundation of fixed law that is not the creation of man but his discovery instead

There is some similarity between Hume's interpretation of the operation of sympathy and that of Smith However, Smith was unwilling to grant Hume's thesis that our sympathy is excited by the factor of utility that is associated with moral acts. Though it is true that moral behavior is conducive to successful living and is, therefore, useful, it is not the usefulness which determines

our approval Nor is it the case that immediate agreeableness or pleasure is the cause of our approval though it is a very considerable part of our judgments of good and bad Actually utility and pleasure, though they always attend moral conduct, are not the essence of morality Approval and disapproval arise involuntarily and occur in the first place without calculation of use or pleasure. When experience reveals these attendants, however, conduct may be occasioned by the desire to realize their values

In the first instance, we discover ourselves judging other people while we play the natural role of sympathetic spectators. Later we discover that we pass similar judgments upon ourselves somewhat in the role of a dual personality When we contemplate an act, the imagination presents to us a forecast of our proposed action and this enables us to approve or disapprove of it The "man within" counsels the "man without" from the standpoint of another person who might at the time be an observer of our proposed behavior. Conscience is the "man within the breast" who acts as our censor It would appear that the "inner man," when allowed to direct our conduct freely, acts always according to the principle of propriety and good taste There are times, however, when the "outer man" is induced by the excitations of passion to overrule, and there are, likewise, occasions when the "inner man" is not on his guard against infractions of the rules of morality Though there is this dividing of the self, one part acting as critic of personal conduct, this situation is inadequate to guarantee virtuous action Rules of morality, together with the presence of others acting as spectators of our behavior, are necessary to give stability to action and to keep the "inner man" alive to his duty

As a politico-economic philosopher, Smith was concerned with determining the circumstances necessary to national prosperity and progress His basic conclusion was that such prosperity depends upon giving free rein to the natural acquisitive impulses that are part of human nature. Wealth, which is indispensable to progress, depends upon thriftiness for its acquisition, and its chief function is that of helping men to satisfy their needs, immediate or future Immediate needs satisfied, the surplus, if any, should be used as capital from which dividends accrue to satisfy future needs Thriftiness springs from our natural desire to improve our position, and, since no one is able to ascertain just how our

position could be made better, it must be personal judgment alone that is the last court of appeal in determining what one is to do This egoistic tendency on the part of all is nowhere in Smith's discussions very well correlated with that other activity by means of which we enter into thoughts and actions of others through the avenue of sympathy

As an economic theory its individualistic nature is obvious and its implications for political philosophy are clear The functions of society as a whole, that is, the state, must be those designed to make possible the free operation of individual judgment and action The state is not to interfere with any individual's effort to acquire for himself those goods which he judges necessary for his comfort. Neither by commands nor prohibitions is it to interfere with individual enterprise Every man should be permitted to bargain in terms of his personal interests, to buy, as it were, in the cheapest market and sell in the dearest The basic law of supply and demand may be presumed to operate as a fundamental law of nature, and if it is allowed to operate unhampered by state interference a natural balance will be struck between commodities offered and demands for their consumption The state must protect itself from external dangers on the one hand and maintain internal peace through the police power on the other, since peace is an essential condition for the free expression of man's natural acquisitiveness. Public enterprises, such as establishing and maintaining libraries, schools, and parks, shall be sanctioned and encouraged so long as it is not profitable and hence desirable for any individual to promote them

The basic thought involved in such a theory is that public welfare can best be enhanced by egoistic pursuits, that society improves only as its separate members improve, that if each member of a society improves his lot as he sees fit the society as a whole will automatically prosper The harmony of egoistic interests, it is assumed, will be guaranteed by the strength of man's natural sympathy His sympathy will act as an inevitable and natural check against his egoism However, if man's egoistic and sympathetic interests ever do conflict, as would appear inevitable, Smith offers no solution. It did not occur to him that serious conflict would arise, and no estimate was made concerning the relative strengths of the two forms of human motivation. Underlying this general analysis of human nature as it unfolds

itself in society, there is the tacit assumption that the world is an ordered, regular concatenation of events and circumstances planned and provided by providence It rests upon the optimistic belief that natural laws supplied by the Deity underlie all events, both physical and social, and that these laws operate in the best interests of mankind if they are allowed to function without hindrance If man will only leave off interfering with natural processes, everything will automatically work to the advantage of all If such be the kind of world in which we live, certainly there is every reason for accepting with Adam Smith that historically famous economic philosophy called *laissez faire* In Smith, Leibnitz would have discovered a kindred spirit

### 6. *The Most Pleasure for Most People Utilitarianism*

Utilitarianism is the name applied to most modern theories of hedonism The best known philosophers who concerned themselves with this ethical theory were Jeremy Bentham, James Mill, and John Stuart Mill Of these, the first and the last are better known The Utilitarian school stressed the importance of social welfare, rather than individual welfare, and defined the highest good in terms of the pleasure of the greatest number of people The term "utility" means, according to Bentham, "that property of any object whereby it tends to produce benefit, advantage, pleasure, good, or happiness." The same point is made by J. S Mill is these words:

> The creed which accepts as the foundation of morals *utility*, or the *greatest 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 By "happiness" is intended pleasure, and the absence of pain, by "unhappiness," pain, and the privation of pleasure [1]

Whereas the most ancient varieties of hedonism had stressed personal happiness, the modern variety is distinctly social in its interest Bentham, who belongs mostly to the eighteenth century, was deeply impressed by the injustices he saw abroad in England These he attributed to the sharp division of social classes, which permitted the ruling class to exploit the less fortunate in order to satisfy their natural cupidity These inequalities could be eradicated by a different form of government that would give to greater

[1] Mill, J S , *Utilitarianism*, Chap II By permission of E. P Dutton & Company, Inc , publishers

numbers of people the privilege of determining what is best for their personal welfare The ballot should be extended so as to reach more people The real objective of Benthamism was to supply a practical device for determining the worth of legislative measures It was not basically a moral theory devised by a philosopher interested in ultimate moral values as such This attitude is reflected in Bentham's most illustrious pupil, James Mill, and in the latter's son, Stuart Mill Interest in immediate social problems was kept alive by these three for approximately a hundred years, until the death of Stuart Mill in 1873. Since then, likewise, social issues have occupied a prominent place in English speculation, as witnessed even today in the work of the recently deceased F C S Schiller, a pragmatist, and Bertrand Russell, a realist

Bentham believed that the principles of Utilitarianism could be applied as a practical guide in originating and executing laws within the social order Before his time, however, the elements of Utilitarianism, as he developed it, are to be traced through such men as Hobbes, Locke, Shaftesbury, Hutcheson, Hume, and Adam Smith These, especially Hobbes, Hutcheson, and Hume, had noted the importance of emotions and feelings as determining agencies in human action They had stressed among these emotions and feelings, pleasure and pain, and had argued that they play an outstanding part as determiners of behavior There was also among these writers, especially Hume and Smith, a marked emphasis given to the operation of sympathetic understanding among people sufficiently strong to support an altruistic moral theory. In Bentham there is an effort to unite social and egoistic interests Theoretically, Bentham accepted what is generally known as psychological hedonism, a theory to the effect that all man's activities are naturally directed and determined by the influence of pleasure and pain In Bentham's words:

> Nature has placed mankind under the governance of two sovereign masters, *pain* and *pleasure* It is for them alone to point out what we are to do, as well as to determine what we shall do On the one hand, the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne They govern us in all we do, and all we say, in all we think every effort we can make to throw off our subjection will serve but to demonstrate and confirm it In words a man may pretend to abjure their empire, but in reality he will remain subject to it all the while [1]

[1] Bentham, Jeremy, *Principles of Morals*, Chap I By permission of The Clarendon Press, London

Among the conclusions drawn by Bentham from this position is a very important one that, since man can only seek happiness and the avoidance of pain, it follows inevitably that the greater the amount of happiness the greater good there will be in the world Hence the ethical ideal may be stated as the achievement of the greatest amount of happiness for the greatest number of people Each man, in seeking his personal happiness, simultaneously increases the total amount of happiness, and egoism is conceived here to be in close harmony with altruism.

Every action may now be judged in terms of the consequences which result or which are forseen to result from it The usefulness or the utility of every act may be determined by measuring it against this standard In order to do this with any degree of accuracy, it is necessary to find some more detailed method of calculation The development of the hedonistic calculus involves, according to Bentham, seven elements Each action is to be weighed against other possible actions according to its ability to produce happiness in terms of these guiding principles Each pleasure has a certain *intensity*, *duration*, *certainty*, *purity*, *extent*, *propinquity*, and *fecundity* Skill, determining the relative value of different pleasures, will amount to an ability to forsee, for example, that frequently the intensity of some pleasures may be followed by pain and must be forgone for the sake of pleasures that are more durable or productive of future pleasures The single consideration in choosing pleasures, according to Bentham, is their *quantity* Motives that lie behind different varieties of action are in reality neither good nor bad except as they lead to actions having happy consequences Quantity only, or the amount, is the guiding factor The *quality* of pleasures is unimportant and "pushpin" is as good as poetry

There are basically four sources of pleasures and pains, called by Bentham *sanctions*. Certain pleasures and pains arise from nature, or the physical sanction These occur in the course of life without human interfering in the processes of nature at all. Other pleasures and pains originate in the social organization, from persons representing the sovereign power, persons who act as judges or administrators This is the political sanction. A third kind of pleasure and pain emerges during ordinary social life through man's dealings with other men. This situation does not involve any organized political codes, but rather a broader, more

generalized social situation This is the moral sanction A fourth sanction he called religious but gave to this little attention in his treatises. Pleasures from this source were due, in his words, "to the immediate hand of a superior, invisible being, either in the thread of life or in the future" Another quotation may further clarify the operation of all the sanctions·

> A man's goods, or his person, are consumed by fire If this happened to him by what is called an accident, it was a calamity, if by reason of his own imprudence (for instance, from his neglecting to put his candle out), it may be styled a punishment of the physical sanction, if it happened to him by the sentence of a political magistrate, a punishment of the political sanction—that is, what is commonly called a punishment, if for want of any assistance which his *neighbor* withheld from him out of some dislike to his moral character, a punishment of the *moral* sanction, if by an immediate act by *God's* displeasure, manifested on account of some *sin* committed by him, or through any distraction of mind occasioned by the dread of such displeasure, a punishment of the *religious* sanction [1]

It is clear that Bentham accepted as factual the harmony of two discrete types of interest, the personal and the social His assumption that the individual's good is identical with that of the general good is something he never clearly established and he apparently failed to see that there was more of incompatibility contained therein than he supposed The underlying ground for his universalistic hedonism is what has come to be called psychological hedonism This theory is in reality a statement concerning the fundamental character of human nature, stating as it does that there are no things man can do other than those designed to give him pleasure or to permit him to avoid pain There is no ready transition between this position and that which claims general happiness to be the object of human conduct It may likewise be noted that though Bentham conceived his calculus of pleasure to work entirely in terms of quantity of pleasure, he provided no unit of measurement capable of determining degrees of quantity His arithmetic of morality, therefore, could scarcely work Furthermore, there is no concept of "ought" in his moral theory On the basis of psychological hedonism, there can be no significance for that particular term

Throughout his entire work Bentham remained interested chiefly in political reform and his moral theory was incidental to this He believed that the selfishness of men in authority must

[1] *Ibid*, Chap III

somehow be curbed if the general good is to be promoted to best advantage The restriction of this selfishness could best be obtained, he believed, by reducing the authority held by a few. The logic of this position led him to advocate a democratic or representative form of government as the best type.

Bentham's most eminent follower was James Mill Mill was for most of his life associated with the India Company and gained considerable fame from writing a history of its activities He is identified with the development of association psychology, the type that had already been introduced roughly by such men as Locke, Berkeley, and Hume James Mill's contribution to Utilitarianism lies chiefly in his effort to supply a sound psychological foundation for it in terms of associationism He argued that mental habits develop with experience and can, therefore, be changed There is no fixity of human nature which would make some kinds of acts inevitable He saw in this type of theory the source of much prejudice on the part of thinkers who adhered to the reality of static principles of morality The principles of morality, instead of being fixed, are themselves simply products of the association of ideas and arise in the course of experience They are therefore lacking in absoluteness and are capable of being reorganized and changed, especially through education Only by considering consequences is it possible to produce more enlightened conduct This is never possible by referring it to a system of changeless rules of morality Results may be judged according to the fulfillment of a proper set of intentions, this process being one which makes of primary importance the consequences of acts Conduct may be changed in the course of years by changing human nature Human nature is constantly changing, though slowly, and because of these changes new forms of social intercourse are possible and the realization of the idea of the greatest happiness for the greatest number is a practical goal.

There is contained in this general statement of Mill two important deviations from Benthamism There is clearly a softening of the theory of psychological hedonism Education can cause men to change in the course of time, and it may not be true necessarily, therefore, that the only things man can pursue are pleasure and avoidance of pain Likewise there is introduced the concept of duty or the notion that man *ought* to seek the welfare of other people, that he *ought* to seek to bring about changes in his social

environment which will make for happier living This concept of *ought* is made possible by the fact that the principle of psychological hedonism is in large measure given up

The most famous of the three Utilitarians is John Stuart Mill, the son of James Mill One of his chief interests was to correct the defects he saw in Bentham's view He was influenced by his father's notion that human nature can be changed through education and that moral feelings are not innate He recognized certain shortcomings in the argument from egoism to altruism in the matter of seeking happiness or pleasure He recognized that Bentham had failed to establish any relationship between self-seeking and the promotion of social welfare Likewise he saw great difficulties in the hedonistic calculus if it were continued wholly upon the basis of quantitative estimations alone The calculus, Mill argued, must take into consideration in addition to quantity the factor of quality of pleasures

With regard to the difficulties that cluster around the egoistic position of Bentham, we may be reminded that his position was one which states that only pleasure or the avoidance of pain can be sought by each It is not easy to see how self-interest works for general good, and at this point Mill takes up the argument Fundamentally, it is true, Mill accepted the thesis of Bentham that what each man wants is his own pleasure in the greatest amount possible, though there may be considerable difference of opinion as to what it is that produces it There is no disputing about tastes, as it were, that is, there is no disputing about ultimate ends of conduct Nonetheless, it is the case that some form or measure of reasonable argument may be offered for the thesis that each should seek the general welfare

Whatever a man desires, by the fact of that desire it becomes *desirable*—for him About this there can be no dispute The pleasure each seeks being desirable, constant striving of each for whatever it is he considers desirable adds with each achievement to the total amount of pleasure in the world The more people there are who are happy, the greater is the total sum of happiness To strive for the greatest total happiness is, for this reason, an ultimate good, general happiness is valuable for all people If there is an increase in the amount of pleasure of *A* and *B* and *C* and *D*, etc , and it is granted that for each the pleasure is a good, then the sum of the pleasures must be good If general happiness is good, it *ought*

to be the object of each to pursue it. By this argument Mill felt he had given a reasonable groundwork for the acceptance of the greatest-happiness principle However, it is clear that the argument fails to bridge the gap between egoism and altruism though it may be the best that logic can produce considering the complexity of the situation Actually Mill placed much more emphasis upon what we may call his social argument.

According to this view, it is quite natural for man to desire the good of the group since his own welfare is tied in with it Habits which have developed through generations cause the individual to identify his own happiness with that of other people, especially those who live immediately around him He comes to recognize that the conditions which promote the welfare of society are also the means of his own well-being as an individual The real strength of the utilitarian standard is taken from the fact that it is based upon a "powerful natural sentiment."

> This firm foundation is that of the social feelings of mankind, the desire to be in unity with our fellow-creatures, which is already a powerful principle in human nature, and happily one of those which tend to become stronger, even without express inculcation, from the influences of advancing civilization The social state is at once so natural, so necessary, and so habitual to man, that, except in some unusual circumstances or by an effort of voluntary abstraction, he never conceives himself otherwise than as a member of a body, and this association is riveted more and more as mankind are further removed from the state of savage independence Any condition, therefore, which is essential to a state of society becomes more and more an inseparable part of every person's conception of the state of things which he is born into and which is the destiny of a human being [1]

It is only upon the basis of human equality that a society can achieve the stability necessary for its own best interests It is a condition that demands consideration of the general welfare History indicates that advance is being made toward a condition wherein it will be impossible to live permanently in any other way than on terms of equality A stage has already been reached which no longer permits the individual to live a life that disregards the interests of other people. If the citizen does not feel this necessity strong upon him, then political sanction operates to bring it forcibly to his attention The individual also learns by living in society that his own best interests are promoted by cooperation with others, during which time personal aims are identified with group aims. The conditions operating upon the individual during

[1] Mill, J S , *op cit*, Chap. III

the years of his life cause him to organize his behavior and thought patterns in such a fashion that he conceives himself as an integral part of a larger social whole.

> He comes, as though instinctively, to be conscious of himself as a being who *of course* pays regard to others The good of others becomes to him a thing naturally and necessarily to be attended to, like any of the physical conditions of our existence [1]

In this process all the sanctions designated by Bentham operate as contributing forces in the shaping of social ideals The product of these forces takes the form of sympathetic, benevolent social action that aims at the well-being of all people The feeling that in promoting the interests of society individuals simultaneously advance their own interests

> does not present itself to their minds as a superstition of education, or a law despotically imposed by the power of society, but as an attribute which it would not be well for them to be without This conviction is the ultimate sanction of the greatest happiness morality [1]

The interpretation of Utilitarianism by Stuart Mill adheres to the thesis that all men pursue pleasure and only pleasure indirectly or directly All things are done as means to the enjoyment of pleasure or they are the activity of immediate enjoyment itself When objectives are pursued disinterestedly, it may be said that these have become parts of the end The miser first saw in money a means to his happiness, but in time it becomes the end or that which constitutes his pleasure Thus what is a means at a given time may in due course become identified with the end or with pleasure. This is likewise true in the case of such a pursuit as that of virtue Being good or being honest, for example, may be practiced first as a means for more successful and happy living After much practice and after the activity has become somewhat habitual, it may be that the individual obtains intrinsic pleasure from acting honestly without any thought of the consequences of his honesty Thus virtue may well be a part of the Utilitarian ideal of pleasure In fact, any activity, any objective which is pursued for itself is a part of the end, and all things men do are either in pursuit of these things as ends or in pursuit of other objectives which serve as the means to this end There is a great variety in the things that produce happiness, says Mill, but

[1] *Ibid.*

there is in reality nothing desired except happiness Whatever is desired otherwise than as a means to some end beyond itself, and ultimately to happiness, is desired as itself a part of happiness and is not desired for itself until it has become so [1]

One of the most vigorous criticisms of the moral theory of Bentham was that directed against his attempt to measure pleasure in terms of quantity alone For many it was impossible to see any possibility of adding up the probabilities for pleasure on the credit side and the possibilities for pain on the debit side in order to compare these respective sums and thereby obtain guidance as to which kind of action is to be preferred in the interests of pleasure Bentham was accused by some of offering herein a moral theory that is little better than "a doctrine worthy only of swine" Mill sought to defend Utilitarianism from this attack by declaring that human beings are able to enjoy pleasures more elevated in kind than the pleasures of swine or any other lower animals The pleasures enjoyed by beasts do not satisfy man's conception of being happy The reason for this is the fact that man possesses higher faculties and more refined means for his enjoyment Awareness of this situation makes man dissatisfied unless his higher faculties are allowed to be exercised In these man comes to take the greatest pride and he looks upon them as the source of his most precious pleasures In fact, Mill argued, all pleasure philosophies except the early Cyrenaic have emphasized the importance of pleasures derived from the operation of the higher faculties, the intellect, feeling, imagination. It is entirely compatible with the greatest-happiness philosophy to recognize different kinds of pleasure and to advocate the pursuit of those that are more desirable and valuable Not upon the quantity of pleasure alone are determinations of degrees of value to be made, but likewise upon the basis of their quality It seemed to Mill that the introduction of qualitative differences in the hedonistic calculus served to protect Utilitarianism from the attacks made upon it on the assumption that any kind of pleasure is worthy of striving provided its quantity is great.

This being the stand taken, it was necessary to state more definitely the way that one is to ascertain which pleasures possess a higher degree of quality The manner in which one is to tell whether one pleasure is better than another Mill states as follows.

[1] *Ibid*, Chap IV

If I am asked what I mean by difference of quality in pleasures, or what makes one pleasure more valuable than another merely as a pleasure, except its being greater in amount, there is but one possible answer Of two pleasures, if there be one to which all or almost all who have experience of both give a decided preference, irrespective of any feeling of moral obligation to prefer it, that is the more desirable pleasure If one of the two is, by those who are competently acquainted with both, placed so far above the other that they prefer it, even though knowing it to be attended with a greater amount of discontent, and would not resign it for any quantity of the other pleasure which their nature is capable of, we are justified in ascribing to the preferred enjoyment a superiority in quality, so far outweighing quantity as to render it, in comparison, of small account [1]

There are some circumstances of life which an enlightened person would not choose even if he could be persuaded that there would be greater quantity of happiness for him The higher the human being's faculties, the more difficult is it for him to be happy, for it requires more to make him so He is likewise capable of greater suffering, since he may be influenced from a greater number of avenues However this may be, the important thing is that he would not exchange his lot for any other less refined mode of life even though he would obtain thereby a greater quantity of pleasure He is concerned much more with the kind or quality of pleasure he enjoys than with its mere bulk

It is better to be a human being dissatisfied than a pig satisfied, better to be Socrates dissatisfied than a fool satisfied And if the fool, or the pig, are of a different opinion, it is because they only know their own side of the question The other party to the comparison knows both sides [2]

The opponents of Utilitarianism were prompt to point out that Mill in suggesting the qualitative variation of pleasure gave the lie to the whole position The ground for this claim is that if one is to measure pleasures as higher or lower, good, better, or best, there must be some criterion in terms of which these qualitative differences are ascertained If this is true, then pleasure as the criterion has been given up and something else has been substituted in its place So long as pleasure alone is the ultimate goal, all one can do is the thing that Bentham attempted, ascertain different quantities of pleasures This criticism offered of Mill's correction of Bentham is sponsored chiefly by that type of ethical theorist who calls himself the self-realizationist The self-realizationist argues that the criterion for the good is a type of character,

[1] *Ibid*, Chap II
[2] *Ibid*

personality, or self He argues that Mill really has in mind a higher type of personality when he says that those with higher faculties prefer higher forms of pleasure instead of mere quantity However this may be, it is certain that Mill succeeded in complicating the Utilitarian position considerably by introducing qualitative differences, although it remains rather obvious that some such alteration is demanded by the theory itself

Perhaps the best known recent advocate of the greatest-happiness morality is Henry Sidgwick Sidgwick, while adhering to the fundamental contention that the happiness of the greatest number ought to be pursued, at the same time recognized a much larger element of intuitive behavior than the traditional Utilitarian. This, however, is not contradictory so far as the theory is concerned, for even Mill admitted that much of human behavior is done unconsciously from habit without any conscious attempt at estimating the amount of pleasure which will follow Sidgwick offered an intuitive self-evident principle as a part of the very foundation of the Utilitarian theory He maintained that, granting that pleasure is good, it necessarily follows that more pleasure is better than less and it *ought*, therefore, to be sought Sidgwick endeavored to combine utility and intuition The typical Utilitarian arguments he rejected as inadequate to support the doctrine He held that man can and does pursue other ends than pleasure and that he does not usually calculate results in terms of pleasure However, it remains true that nothing is considered worth having unless it is attended by pleasure He recognized the so-called paradox of hedonism—that pleasure cannot be pursued directly —the while that he supported the basic hedonistic position

The fundamental basis of Utilitarianism must rest upon "axioms" not entirely explained by mere experience They are formal principles, such as prudence, benevolence, and justice, which serve to guide conduct They are in a sense discovered or intuited Their validity is self-evident. What, in specific instances, shall be called prudent, benevolent, or just must perforce depend upon a calculation of consequences guided by the products of experience Two elements are included here, it being presumed that harmony is possible Without entering into the problem, it is perhaps the case that between intuition and calculation there may be worked out an agreement But there is a more perplexing problem permeating Sidgwick's moral theory. It is the same

familiar problem that puzzled Bentham and Stuart Mill—the relationship between egoism and altruism, between prudence and benevolence Once again it seems to be the case that two antagonistic principles are accepted as essentially characteristic of human conduct. How it is that they are to be brought into harmony is no clearer in the work of Sidgwick than in that of Butler or Mill before him, though quite obviously he is more aware of the perplexities involved in the problem

The good may be known directly or intuitively, likewise, it is that which is calculated to be prudent for the individual's pleasure and that which contributes to the well-being and happiness of the group Determinations of the good by intuition will influence evaluations of the other two sorts The formal aspect of morality underlies specific examples of it, and altogether conduct is directed toward the achievement of the greatest possible happiness for all people This is true in so far as theory is concerned just as it is true that in all common-sense deliberations the desire for pleasure and the absence of pain is the fundamental determiner of conduct

## DISCUSSION TOPICS

1 In what general respects did the ethical theory of Hobbes influence the development of ethical theory in England?

2 How did the Cambridge Platonists explain the origin of moral rules? How was this explanation different from that of Hobbes?

3 Discuss the problem of egoism and benevolence as treated by (*a*) the Platonists, (*b*) Shaftesbury, (*c*) Butler, (*d*) Smith, (*e*) Stuart Mill

4 What relationship do you find between Shaftesbury and the Utilitarians?

5 Compare the views of Mandeville and Smith Are there any elements of similarity?

6 What is the meaning of "moral sense"? How is it supposed to operate? What place would "conscience" have in a *moral sense* theory of ethics?

7 In what respects did Butler develop his theory upon the foundations laid by Shaftesbury? What two basic principles did he believe were regulative of human conduct? How did he conceive these to operate?

8 According to Adam Smith, it is possible for people to live sociably because of the operation of what principle? Evaluate this claim

9 In what respects did Smith's moral theory enunciate basic principles of capitalistic philosophy?

10 Discuss the possibility of harmonizing Smith's basic principle of ethics with his basic principle of human nature

11 Describe the theory called *psychological hedonism* Why, according to this theory, is the word *ought* of little significance?

12 What do the Utilitarians mean by the term *utility*? What do they mean by the term, *summum bonum*?

13 What was the general nature of the social philosophy of the Utilitarians?

14 Discuss and evaluate the *hedonistic calculus*

15 How did Stuart Mill propose to correct the defects of Benthamism? To what extent do you feel that he was successful?

16 Of what importance in the Utilitarian tradition was the work of James Mill?

17 In what fundamental way does Utilitarianism differ from the ethical theory of Kant?

18 Ascertain the basic differences between formal and teleological ethics

## PARALLEL READINGS

FULLER, B A G *History of Philosophy*, Vol II, Chap III, Sec 4
ROGERS, A K *English and American Philosophy Since* 1800, Chap II
SIDGWICK, HENRY *History of Ethics*
SORLEY, W R *A History of English Philosophy*, Chaps V, IX, XI, XII
URBAN, W M *Fundamentals of Ethics*, Part I, Chaps III–VII

# Chapter XX

# CURRENTS OF THE FRENCH ENLIGHTENMENT

## 1. *Meaning of the Enlightenment*

As a period of French intellectual history, the Enlightenment may be dated as belonging to the eighteenth century The first part of the period was characterized by a very marked emphasis upon a rational or intellectualistic approach to social and scientific problems This phase of the Enlightenment preached the doctrine that each person is best able to enjoy the values of life if he devotes himself to intellectual endeavor To live wisely is to live well Knowledge, as Bacon once said, is power The exercise of human reason, the application of scientific techniques, had opened vast intellectual horizons to mankind There was reason to suppose that still greater achievements of the mind lay in the immediate future Man was conceived to be standing upon the brink of a new age, a new era of insight into the complexities of the universe Of this sort was the intellectual optimism of the early Enlightenment To this period belong Montesquieu, Voltaire, Condillac, and the Encyclopedists

To a considerable degree the spirit of the Enlightenment is reflected in the bold and uncompromising stand taken by those who were a part of it against all orders of superstition One of the most powerful unifying forces of the period was this common ground of agreement upon the project of eradicating false beliefs The bitterest attacks of such men as Voltaire, Diderot, and Holbach were directed against the causes of ignorance and superstition as they visualized the human scene These men were all agreed that the official church was responsible for most of the evils that were abroad in the land, and it therefore became their favorite object of attack They were convinced that the age had arrived wherein reason should rule as supreme dictator of the realm of learning. All beliefs must be approved by reason before they can be accepted

by the intelligent man This requirement that beliefs be reasonable afforded a common meeting ground for the enlighteners It has already been observed that it was widely believed by thinkers of the early eighteenth century that the power of reason to arrive at sound conclusions is for practical purposes unlimited.

D'Alembert's *Discours Préliminaire* of the Encyclopedia appeared in 1751 at the midway point of the century In the course of twenty years developments occurred within the tradition of the Enlightenment that produced a change of attitude For one thing the emphasis of the first half of the century upon individual effort in working out the problems of rational existence began to give way between 1750 and 1770 to a much more social emphasis One's welfare can be achieved best and the security of its enjoyment be most lasting if the individual will identify his personal interests with those of the group However, the underlying motive of the Enlightenment—freedom from the bondage of superstition—still was fundamental. Revolt against the past was still the underlying spirit The latter half of the period was different from the first chiefly in that the means presumed to be most effacacious in realizing the end were differently conceived Emphasis shifted in the latter half of the century from the individual to society The state replaced the church as the object of attack In this movement the outstanding figure was Rousseau

Another change which contributed to the general altering of viewpoint should not go unmentioned Early confidence in reason's ability to penetrate the secrets of nature was checked by the critical analysis of knowledge offered by such men as Diderot and D'Alembert In somewhat the same spirit as that with which Locke set out to determine the limits of human understanding, these men, with more faithfulness of purpose than was displayed by Locke, concluded that ultimate metaphysical problems cannot be solved by reason They concluded that knowledge is beset with its own peculiar limitations and that the knower must be content with the data his senses supply him D'Alembert went so far as to contend that all knowledge is purely hypothetical or probable All this aided in the development of a spirit which may be designated *anti-intellectualistic* If reason fails to obtain ultimate truth, perhaps there is some other avenue to it by intuition or feeling. Of those who chose this path it is the name of Rousseau that will be the longest remembered

Throughout the century English influence was marked. England gave to those who opposed the official church during the first period of the Enlightenment the gift of Deism. Here was what purported to be a natural, rational religion to put in the place of the old supernatural and superstitious religion inherited from the Middle Ages Particularly impressed by the contrasting religions was Voltaire. Among the Englishmen who exerted this influence the outstanding ones were Locke and Hume It was Locke also who more than any other was responsible for laying the groundwork of the movement in France against the monarchy, which drew to its climax in the latter part of the century When the emphasis shifted with the sixth and seventh decades from the individual to society it was Locke's theory of government that became the basic creed of French reformers like Rousseau. Simultaneously with the shift of critical attack from church to state there were developed the positive aspects of the late Enlightenment, which took the form of democratic theories of government and growing prevalance of distinctly human interests and ideals.

### 2 *Absolute Sensationalism Condillac*

Elements of the British tradition, especially those traceable to Locke, were introduced into France chiefly through the work of Voltaire and Condillac Voltaire seized upon the broader outlines and implications of the empirical position, whereas Condillac attempted to give a systematic interpretation of the sensationalism of Locke He is one of the few systematic thinkers in the period of the French Enlightenment and his influence upon French psychology and philosophy lasted more than a hundred years. Locke, it will be remembered, distinguished two sources of ideas, sensation and reflection. Condillac was much impressed by this conclusion though he was led to disagree upon the point of the twofold origin of ideas. He held that the total content of mind and all mental activities as well are products of sensations received originally when the mind is passive. They are the transformations wrought by simple passive sensation. There are no mental processes nor any content of mind that are derived from reflection or any source other than sensation For this reason his philosophy has been labeled *absolute sensationalism*

The proof offered by Condillac was rather ingenious in that he proposed that a living statue be imagined with but one sense

avenue opened to the external world He proposed to show that sensations received by means of this single sensory channel could produce the complicated forms of mental activity possessed by man After having shown the development of these capacities by recourse to this single sense avenue, Condillac proceeded to add one at a time the other sense avenues to show how the entire content of knowledge and the function of the mind can be explained wholly as the product of pure sensation

The single sense he used was that of smell He suggested that to the imaginary statue there be presented a rose. Only scent is present so far as its sense organs are concerned and, presuming the odor to be stronger than any others present, attention will follow immediately upon the presentation of the odor When the rose is removed and a trace of the experience remains afterward, the result is the phenomenon of memory If other odors are presented, there comes to be comparison in terms of vividness or in terms of different varieties of odors Some of them will be pleasant and others will be unpleasant. Preferences and aversions, fears and hopes necessarily will arise as the result of this type of experience Even the most intricate mental process—reflective abstraction—can be explained in terms of the experiences received through this one sense avenue From the experience of many pleasant odors the mind is capable of abstracting from each particular that quality attending all which is pleasantness In the same way other abstract ideas emerge Signs are invented to designate them and the phenomena of language, scientific analysis, and logical reasoning are possible An idea of the self comes about when memory of past sensations is given along with present ones

When the other senses are uncovered one by one, the intellectual life becomes more and more complex Among these senses touch is of particular importance Through it the idea of extension is given The ideas about the external world and of objects are formed thereby If it were not for touch, Condillac argued, there would be no ground for supposing that there were objects existing in a world independently of us and experience would be completely confined to our subjective states However, what that external world is Condillac refused to say and thus retained much of the agnostic spirit of the British tradition

He believed that the phenomenon of attention indicated that probably the body is composed of one substance, since it is only a

single substance that could give attention simultaneously to two sensations in order to make possible a comparison of them However, this metaphysical aspect of the problem was not pursued to any great extent, though it is accepted that spiritualistic foundations were presumed by Condillac. The rather dogmatic claim was made that there certainly is something other than ourselves in the world It seems to be the general consensus of Condillac that by the very nature of knowing we cannot be sure what the world is like or what we ourselves are though we can be reasonably sure that both the world and the self do exist

Helvetius saw in Condillac's interpretation the implications of materialistic philosophy and proceeded to develop this viewpoint Helvetius in turn influenced many of his contemporaries and successors, and by the time the Encyclopedic movement had got under way sensationalism and materialism together were the characteristic philosophies of the French Enlightenment This materialism continued to the end of the century and beyond, until it was replaced chiefly through the efforts of Victor Cousin, Maine de Brian, and August Comte, who were instrumental in the rise of positivistic philosophy

### 3. *Voltaire: Voice of the Second Estate*

Voltaire was deeply influenced by the English institutions, with which he became familiar through a visit to England as a young man There he made acquaintance with the works of Locke, and later with those of the other two empiricists, Berkeley and Hume, and the English moralists But it was to Locke that he always returned for fresh insight and new inspiration after his intellectual excursions into various realms of thought His deistic inclinations were strengthened while in England owing chiefly to the influence of Bolingbroke, whose religious attitude was particularly fitted to the man-of-the-world attitude of Voltaire

Upon returning to France from England, Voltaire published his famous *Letters to the English*, in 1732 In this treatise he so ardently criticized French institutions and praised the English that the French people looked upon him as a traitor to the country and felt that his book was detrimental to the patriotic development of French citizens Though Voltaire was declared a poor patriot and his literary efforts were consigned to the flames, it is by no means true that the effect of his opinions was laid in ashes.

He served to introduce English ideas into France and assumed leadership in the movement which marked a reaction against French traditions At first the opposition directed its efforts against religious dogmas but with time the reaction was extended to political, economic, and social practice.

The introduction of English ideas into France during the early decades of the eighteenth century is of great significance for the understanding of subsequent social trends in that country toward the end of the century Liberalism as a characteristic of British theory and practice stood in sharp contrast with the situation in France Voltaire was not the only Frenchman to call attention to that contrast. Montesquieu returned from England with Voltaire in 1729, having spent a year there in study and observation He immediately resumed his attack upon French political institutions, an attack begun in 1721. Montesquieu was more impressed by Locke's political philosophy than Voltaire, who apparently took Locke's religious views most to heart According to Montesquieu the laws upon which political institutions are founded have a natural origin and history They are not the arbitrary dictates of a ruling power If such be brought into being and enforced they are opposed to the laws of nature These natural laws vary according to geographical and cultural circumstances and must be understood in relationship to these Such is the general theory expressed in Montesquieu's *Spirit of the Laws* Its encouragement of a historical approach to an understanding of social institutions has had a deep effect upon the writing of history That the treatise was well received and widely read is indicated by the fact that in less than two years from the date of publication it had sold through twenty-two editions

It has been pointed out that Voltaire was not a particularly original thinker but is chiefly to be remembered as a propagandist of new ideas, ideas that were new at least in France. This criticism Voltaire would have admitted, since he more than once referred to himself as the "ignorant philosopher." He had, however, as a popularizer of new ideas, a marked talent at phrasing them so that they had a strong appeal for the masses of people. The theory had to be a very complicated or a very dull one which could not be transformed by Voltaire into one very readable and interesting. One of the reasons his writings provoked so much reaction was his tendency to be a bit skeptical about all things, and this, coupled

with his ability to write interestingly upon all subjects, opened hundreds of avenues for speculation which had heretofore been scarcely known to vast numbers of readers who came to be familiar with Voltaire.

In his *Philosophical Letters* he again contrasted British practice and custom with French, always trying to show that the French institutions were inferior. He compared the English parliamentarian type of government with the French monarchial form, the deistic religion of the English with the Catholicism of the French In philosophy he compared the British empirical tradition with the French rationalistic tradition growing from the work of Descartes. His general thesis with regard to these comparisons was that France, if it is to advance in enlightenment, must change radically from the practice of the past and adopt from the English the institutions and philosophy which he felt he had shown to be clearly superior

In *Candide* Voltaire brought vigorously to the attention of the French what he considered to be the ridiculousness of an optimistic view of the world In fact, Voltaire took delight in calling attention to the darker, more pessimistic aspects of life In *Candide* he called attention to individual suffering in France, caused by conditions which certainly belied the claim that the world is a good and beautiful place For this view Voltaire had no respect In *Candide* he asks "If this is the best world, what must the others be like?" He was indignant with the optimistic poets and writers of his day, such as Leibnitz, Pope, and Shaftesbury The opinion that everything is good in the world and that the state of man is the best possible is unsupported by the facts of experience He did not see any reason why man should not attempt to improve his lot nor any reason for believing that things as they were could not be vastly improved. He fastened upon the tragedy of the Lisbon earthquake to call to man's attention the harshness of nature and the lack of divine planning. That God had not planned that man build many-storied houses which could be knocked down by earthquakes was a futile and nonsensical argument to offer in order to account for the disaster at Lisbon.

This speculation upon man's sad plight and the nature of the world in which he lives led naturally to many dissertions upon the subject of religion. It was Voltaire's mature opinion that the God of Christianity was a false god, that not nearly so much could be

known of the real God as was argued, though it is likely that the existence of God could be known even though His nature remained a riddle In Voltaire's opinion, God is less than an omnipotent being If He were not less than an omnipotent being, the world would not be the miserable thing that it is The very suffering and hardship everywhere seen were to him sufficient evidence that the optimists were wrong and that God was not the all-powerful being Christianity supposed Him to be. He developed almost a fanatical hatred for Christianity, and his violent denunciations of Catholicism led to the common belief that he was an atheist He was, however, not irreligious if we are willing to accept deism as a religion He did not deny the existence of God, denying only the existence of that kind of God traditionally accepted by Christianity He believed that religion should not adopt the practice of worshiping an almighty God and that such worship amounted to superstition Religion should be basically moral training, and man should be encouraged to direct his energies toward improving his state by changing decadent and perverted social institutions No amount of prayer can ever achieve this end

The best of Voltaire's writings are probably those which make the subject of religion the central theme The following remark is rather typical of the man and does much to show his character in general. In this way he makes official obeisance to the Church "After our own holy religion, which is undoubtedly the only one, what religion would be the least objectionable?" He then proceeds to a discussion of what he thinks religion should be In substance, it is a religion of a simple order, one that does not make use of elaborate ritual and worship of an omnipotent deity but rather that kind which seeks to know nature and find in nature such evidence as is available concerning the existence of a supreme being

Voltaire belongs with the Enlightenment owing chiefly to his conviction that the time was right for a movement to abolish and remove all prejudices which had through history grown up with civilization. He believed, optimistically in this respect at least, that the human reason properly applied, unencumbered by superstition, can arrive at sound judgments with respect to the order of the world and that the individual can, by means of this knowledge, emerge upon a new cultural level unrestricted by the arbitrary beliefs and dogmas of traditional church and society. In the declin-

ing power of both church and state during his era, he saw the possibilities for the emergence of a new life and a new man

Because of his great interest in new individualism and the overthrow of old institutions, Voltaire was mistaken by many of masses of the people as the sponsor of a democratic, popular form of government However, this is not true of Voltaire, for he at no time had great confidence in the capacity of the average man to regulate either his own life or that of others He believed that government was not to be made by butchers and bakers, but that these instead were to be told what to do by a more enlightened group which perhaps may be called the middle class He was as much opposed to the proletariat as rulers as he was opposed to the clergy and the nobility as rulers Though he was probably less important than Rousseau as an inciter of popular political movements, it cannot be denied that his writings were highly inflammatory and were a genuine factor in bringing about the ultimate disposition of the nobility in France at the time of the French Revolution

### 4 *Diderot and the Encyclopedists*

The life and ideas of Diderot are inseparable from the famous Encyclopedia which was designed to incorporate within its pages all the important knowledge then available It was a colossal undertaking, and its achievement was largely attributable to the untiring work and versatility of Diderot, its editor Many of the leading thinkers of the eighteenth century contributed to it and the variety of its articles and the liberalism evident in its pages are remarkable Voltaire, Montesquieu, D'Alembert, Rousseau, Helvetius, the physiocrats, and others all were contributors Numerous articles on all manner of subjects from industrial problems to metaphysical essays were written by Diderot himself. The work was widely read and its influence was great enough to account in large part for a new burst of intellectual growth in France It assuredly added wood to the fires of unrest that were being prepared for the conflagration of 1789

Diderot possessed the peculiar knack of seeing into the heart of controversial issues and extracting from them the essential and best elements These he was able to assimilate and rephrase in a style suitable for public consumption He was not noted for originality of viewpoint nor for the consistency of his ideas, though this

is partly compensated for by his enthusiasm and his universality of knowledge. Most of his philosophic ideas he got from Leibnitz, Locke, Shaftesbury, and the developments taking place in the physical sciences These ideas took shape partly under the influence of fellow Encyclopedists. D'Alembert, Helvetius, Holbach, and La Grange Many of the conclusions reached by him were incorporated in the pages of the Encyclopedia and served in numerous instances to bind its different and rather unrelated parts together At this task Diderot labored for more than twenty years until at last the Encyclopedia was complete This did not occur, however, before much dissension had taken place in the ranks of those who were its most important contributors Many of those like Rousseau, who wrote for it in its early stages, had nothing to do with the movement in its later years

Diderot, during the early years of compiling the Encyclopedia, was strongly inclined to deism, along with many other Frenchmen of his day He was however not favorably inclined to the eighteenth-century trend toward mechanism and materialism that had been an outgrowth of the philosophy of Condillac He favored a view traceable to Leibnitzian influence and his knowledge of contemporary developments in science. His ultimate interpretation of the world inclined to the Leibnitzian position, which considered the universe to be made up of particles or molecules of stuff which enjoy cognitive experiences, such as feeling, desire, and thought He, like Leibnitz, considered the difference between living and dead as quite superficial so far as ultimate reality is concerned All things are alive in measure The whole of natural history is evolutionary in character, species as well as individuals develop and change There are no eternal forms, no fixity of species

Knowledge necessarily is limited, owing to the shortcomings of man's capacity to know. The only reason for knowledge in the first place is its usefulness In the eyes of Diderot and most of the other men of his age the usefulness of knowledge was conceived to reside in its ability to cure most of the ills that afflicted man It was an optimistic view that emerged as a by-product of the tremendous advances which had been going on in the mechanical sciences. If it is possible for the human mind to penetrate as deeply as it had into the secrets of nature, there is every reason to suppose that if it is properly applied to human problems of all sorts it will be able to solve them This was the characteristic attitude of the

early Enlightenment and marks it as an era intensely intellectualistic

No matter how important knowledge is, it is essential, according to Diderot and others, that one entertain the proper attitude toward it and interpretation of it The most satisfactory attitude to take toward the pursuit of knowledge is this: that we must remain content with whatever it is possible for us to know We can know things only in so far as human capacities permit. Certain limitations are set and reason must be willing to abide by them Ultimate metaphysical problems are probably of very little importance and the time spent upon them is for the most part profitless We see in this view the beginnings of an attitude that later developed the philosophy of positivism.

A final estimate of Diderot would have to admit that his chief contribution to the history of thought is probably that he succeeded in clarifying and disseminating all manner of ideas at a time when people were eager to receive them and susceptible to their influence In this activity he remained constantly opposed to the influences of the Catholic church and to all those social organizations which were supported by the clergy. He believed to the end that ultimate and lasting knowledge must come from science and that this kind of knowledge will revolutionize human ideas and institutions

The project of writing an Encyclopedia was first introduced to the reading public of France by the mathematician, D'Alembert, who, at Diderot's request, published an article which gave its broad outline It has been remarked that this was a fortunate introduction to the enterprise since, had the article been written by Diderot himself, it is probable that the enterprise would have been doomed to immediate and vigorous opposition, owing to the fact that already Diderot had gained for himself a reputation for religious radicalism

According to D'Alembert, the only source of knowledge is science and the best examples are not given in the form of a priori principles They originate altogether in the activity of sensation. His argument supporting this position is similar to that used by Stuart Mill to explain mathematical entities Mathematical truths are entirely hypothetical, since they are derived a posteriori. They are nonetheless highly useful and of all our knowledge the most certain. D'Alembert was even more intensely antimeta-

physical than Diderot He held that metaphysics is completely empty of results and highly pretentious in its claims Its pursuance is not to be recommended to the serious-minded He believed that the stand Locke had taken in his *Essay* is the correct one for both epistemology and metaphysics. Sensation supplies us with all the knowledge it is useful to have Going beyond sensationalistic epistemology into the realm of speculative metaphysics is a procedure which has no justification since it bears no fruit This general position, that all knowledge is derived from experience, even the most fundamental of mathematical truths, is carried over into all the fields of human endeavor by D'Alembert Morality, for example, possesses no absolute principles, its admonitions growing entirely from the roots of experience. Its rules are wholly hypothetical and subject to alteration and growth

In D'Alembert one discovers the influence of the British school as it was communicated chiefly through the sensationalism of Condillac There are both criticism and confidence, criticism of dogmatic epistemology and confidence in the power of human reason to meet and solve the basic issues of life The fact that D'Alembert was one of the ablest mathematicians of his day lent a great deal of support to the writings contributed by him to the Encyclopedia, writings which frequently had to do with subjects other than mathematics

Holbach is usually considered the bad boy among the Encyclopedists At least over his writings more controversies arose and more disagreements took place than over those of any other person He was a follower of the materialist, La Mettrie, and accepted the materialistic position completely Upon this foundation he opposed religion in all its forms The prevailing religious views he attacked included deism and theism Both of these, he argued, were useless and full of contradictions There were many superstitions included therein, and they were the source of much oppression and hardship All the usual religious concepts he believed to be quite meaningless—soul, spirit, God, freedom—all these are completely without significance One of his fundamental conclusions, which was a product of his materialism and irreligion, was this, that there should be an absolute separation of religion and science The reason for this separation lies chiefly in the fact that scientific study of nature is restricted and confused by the unsubstantiated claims of the religious point of view The most reliable

knowledge available is that of science It is, at the same time, the most useful So-called religious knowledge, on the other hand, can be shown to be exactly the reverse of this It has introduced more confused thinking and more oppressive social institutions into the life of man than any other body of doctrine Whereas scientific knowledge frees man, religious knowledge enfolds him ever more in superstition Therefore the separation of religion and science is absolutely essential Nature must replace God as the object of human devotion In this there can be no compromise Man must have confidence in himself He must acquire an understanding of his own racial talents and learn to use them to obtain those goods which human nature pronounces to be valuable, unencumbered by the false values of religion

Holbach's uncompromising stand for materialism and against religion called forth considerable reaction both from men like Voltaire and D'Alembert and from orthodox theologians His view caused a rift to occur in the group, for there were some who maintained that there is a place in human life for religious feeling They could not accept the complete irreligion of Holbach even though they were quite eager to agree that present forms of religion were in need of change There is, however a difference between denying the reality of religious values and denying that ecclesiastical institutions as they stand secure these values Many Encylopedists were of the opinion that religious values were genuine but that the church was too corrupt to make them available In addition to this there was a tendency growing within the group to reject the out-and-out materialistic position as being inadequate to account for all the phenomena of experience Materialism had just about run its course with Holbach The future witnesses a definite turn away from materialism and intellectualism toward spiritualism and romanticism It was romanticism cropping out in the emotional Rousseau that caused him to break with the whole Encyclopedic movement and to write articles the spirit of which was sharply opposed to the intellectualistic spirit of the early Enlightenment

### 5. *Prophet of the Revolution. Rousseau*

Rousseau was a product of the Enlightenment and a severe critic of it He was a philosopher in name only although his significance in the field of social theory was considerable and many

of his ideas took root, especially during the reconstruction period in France after the Revolution To offer him the title *philosopher* is perhaps as meaningful as the practice of rural inhabitants of calling the village schoolmaster *professor* Though his place in the history of philosophy perhaps does not rank very high, he was of sufficient influence during his period and the hundred years following it in fields allied to philosophy that he is worthy of receiving attention

He was ever a temperamental and unstable individual, who always put feeling ahead of intellect, where intellect failed it was inevitable that feeling was there to lend him whatever assurance he needed for his convictions His early training was haphazard and undisciplined He was alone much of the time and, though his youth was far from being happy and ideal, he came to regard it during his later years as the best period of his entire life From the age of sixteen to thirty-six, he led a life of vagabondage, during which time he made small effort to train himself for any vocation His employment was varied and his study desultory During this period he met Diderot, who interested him in philosophical and social problems Through Diderot, Rousseau made the acquaintance of Voltaire and afterward came to disagree with Voltaire's pessimistic viewpoint. Later he lived with an ignorant, unimaginative servant by whom he had five children, who were eventually consigned to an orphan asylum and apparently forgotten This is sometimes mentioned in connection with Rousseau's later dissertations upon the subject of family morality and the proper rearing and care of children

Rousseau wrote his first essay as a denunciation of the alleged advantages of the arts and sciences as then practiced in France This was in 1750 It started him definitely on his course of thinking, for his thesis was that social betterment was impossible in terms of knowledge of the day and that there must be a reconstruction and a reapplication of the sciences and arts in order for a better civilization to ensue He was inclined to be individualistic in his general attitude, though this was chiefly because of his intense desire that within a society each individual should develop into a complete and well-rounded individual.

During part of his later life he became somewhat of a recluse and gave away all the worldly goods which were his He broke with most of his friends, including Diderot During a period of approxi-

mately six years he wrote the three most influential treatises. *The New Héloise*, *Émile*, and *The Social Contract*. These were published between the years 1761 and 1762 About this time he was overtaken by the well-publicized delusions of persecution which led to his ultimate break with what few friends remained

Upon publication of *Émile*, Rousseau was forced to leave France because the educational theory advocated in the book was so far in advance of contemporary theory and practice as to cause considerable furor He lived for a time thereafter in Geneva, where the imagined persecutions continued He was invited to England by Hume about this time, but the visit was short-lived for Rousseau became suspicious of his host, quarreled with him, and soon returned to Geneva There he married Thérèse, the ignorant servant with whom he had formerly lived, and with her returned to Paris about 1770, where he died eight years later

The basic thesis of Rousseau is that society must reform, since the social practices of the day had become corrupt and made impossible the realization of human good The object of reform must be that of reorganizing society upon a plan that is commensurate with the essential nature of man In order to ascertain this essential nature, Rousseau undertook an analysis which consisted chiefly of showing that contemporary phases of society were caused by the various educational, scientific, and artistic developments that comprised modern civilization When he had shown the baseness of these, he concluded that what remained of human inclinations, impulses, and desires made up the essential nature of man He undertook introspectivly to evaluate and describe the state of nature as he saw it before the inception of civilization The purpose of this analysis was to get behind contemporary sham to seek out a new point of departure for social reform

Originally man lived alone Later the family institution came into being. To original man disease was practically unknown, the weak were naturally eliminated in the struggle for existence. He was a harmless, speechless, ignorant, amiable, two-legged animal. Potentially he was capable of becoming a reasoning, speaking, moral, social human being This is the characteristic which distinguishes primitive man from other creatures. For reasons unstated by Rousseau, because of necessity, apparently, the solitary savage turned toward the formation of societies This was due perhaps to the emergence of new desires which created a demand

for new inventions possible only through cooperative effort Communities necessarily expanded, larger groups formed, common traditions and beliefs emerged In due course the institution of private property came about, when the first man drew a line around a field and declared it his own In time societies gave a legal recognition to the rights of property and the inevitable consequent, gross social inequalities Classes arose of the wealthy and the poor, those who have and those who have not. Most of social ills trace to property evils The worst of these evils is the master-slave relationship, which arises when riches reside side by side with abject poverty. It is a condition that encourages antisocial sentiments of jealousy, envy, craftiness, and all manner of wicked practices. This situation was excellently illustrated to the mind of Rousseau in France of the eighteenth century

Correction of present evils, Rousseau held, demands a re-examination after the fashion just stated of the original nature of man In order to reform it is necessary to return to a place where a fresh start may be made from the native potential capacities of man It is not a plea for return to life in the state of nature, but rather for return to a state of nature in order to begin again, to develop this time a better and more glorious civilization than the one which has emerged in the course of history Present society is not an inevitable historical consequence of man's nature, for other alternatives are possible One of these alternatives must give rise to a new social life The new social man must be the product of extensive education that will distinguish the sham from natural aspects of human nature.

Man is basically good by nature but has been spoiled by civilization Present society stultifies ambition, restricts freedom, and inhibits contentment Through a new understanding of man's nature, a new start may be made, and this is possible only through properly conducted education This educational program so essential to the new social order was chiefly outlined in the *Émile*, which appeared in 1762 Traditionally the theory of education was that of changing natural man into some ideal of civilized man Rousseau maintained that this ought to be reversed Education thus should seek to capitalize upon the capacities of the natural man rather than to give them an artificial expression and should use the development of capacities natural to children as a basis for educational practice

The educated man will not be a pedant but one who will be able to meet adequately and adjust to the exigencies of life situations In essence man must be taught how to live. In the *Émile* Rousseau states, after much discussion of how he would conduct the education of his pupil "Upon leaving my hands he will not be a soldier, a lawyer, or a priest, but if I am successful he will deserve first of all to be called a man, and although fate may change his position, whatever profession she may call him to he will know how to make it his own "

Each person in process of becoming educated experiences three sorts of influence There are lessons to be learned from the natural development of one's mind and body Secondly, there are lessons to be learned from the things and events in the external environment Thirdly, there are lessons to be learned from our fellow creatures, as formally offered in schools, imposed upon us by force, or unconsciously adopted through social intercourse

Education must follow and use the maturing mental and physical stages of child growth It must recognize the intrinsic values of childhood A child is not for adulthood but retains its own values, and any educational system which refuses to recognize them misses much of the point of successful education This was a direct attack upon traditional practice and theory in France, which regarded the child as nothing more than an adult in miniature. The practice therefore was to dress the child and train him in the mannerisms of an adult It completely ignored the worth of youth as youth Education should seek to suit the system of training to the needs of the child rather than to fit the child to the arbitrary principles of the system. No knowledge should be forced upon him before he is prepared to assimilate it As a child matures, his curiosity grows and he will naturally require the instructor to inform him of the things which have aroused his curiosity This is the proper procedure No child should have information forced upon him until he is mature enough to receive it, digest it, and apply it to the problems of his own life.

Rousseau was of the opinion that the most dangerous period of one's life is that prior to the age of twelve, during which time all manner of false beliefs, superstitions, and erroneous judgments are presented to him as absolute truth He is at that time too young to be critical and thus will grow up with a mass of half-assimilated truths and many false doctrines Therefore education during this

period must be particularly alert that proper training may be offered The most fruitful educative period is that between the years of twelve and sixteen, or the general period of adolescence. Here the individual is well on the way to physical and mental maturity, his curiosity is alert, and he is in open readiness to receive instruction.

Rousseau's plea then is for a new start and for a new society made possible by a new system of education It must be a social order that will stabilize living and guarantee the values which life inherently possesses. The new society will be devoid of the artificialities and superficialities that so characterize contemporary civilization An outline of the organization of the new society which he envisioned is presented chiefly in *The Social Contract.*

The ardor of Rousseau's attack on contemporary institutions must not be inferred to mean that social life is not best suited to man's ideal state The attack was called forth by the results of what to Rousseau appeared as cold intellectualism This he believed must give place to the warmth of feeling Morality must develop not from the intellect but out of the inherent goodness of the human heart Feeling has been encrusted over by the intellectualism of decades, chiefly owing to the influence of the arts and sciences Under a new social system recognizing the common people as the body of the human race, civil distinctions will disappear, each person will seek the good of others, and the common will shall guide and direct the destinies of mankind. Under these conditions the artificiality of civilization will be replaced by genuine institutions that are the natural outgrowths of an intrinsically excellent human nature.

In modern civilization man has no freedom, and these inequalities which make for bondage among men can be overcome only by removing the cause That cause lies in the institutions that form the very structure of civilization. A new society must come into being by going back to discover a fresh basis for social life This new foundation shall begin with the adoption of a contract which will bind the citizens together as a group and establish an agreement between that group and a governmental agency. Man, originally independent, will become a new being in this society This is to his advantage. The contract once entered upon substitutes civil and moral freedom for original natural freedom The liberties which are relinquished when the contract is inaugurated

are given back under conditions more favorable to their enjoyment and security when society is organized.

Each man gives up his unlimited right to whatever his desires may dictate for that kind of liberty under a democratic social organization which guarantees him the right to possess and use such goods as he may acquire lawfully and by the exercise of his own initiative. A dull, stupid animal develops into an intelligent human being with ennobled ideals, a greater depth and breadth of ideas, and a truer appreciation of the genuine worth of humanity. The real human self can develop only within a society of this sort. Changing from the state of nature to the state of civil liberty is not so much for the sake of material gain as for the opportunity offered the individual to develop a more noble character. In measure society forces the individual to act in such ways that his own best interests will be thereby enhanced The group *will* shall be recognized as superior both in power and in wisdom to the judgment of the individual citizen

The expression of the will of the group is made through the ballot box The result of popular vote will take precedence over private desires. The laws so made by the body of the citizens are of an impersonal order and are objective Furthermore, according to Rousseau, they are always right Minority opinion, which is bound to occur, must recognize its error, and those of its judgments which differ from the group judgments must be changed to fit with the consensus of group will The criterion of truth in political issues thus is the agreement of individual opinion with majority vote. Recognition of this sort of error will encourage the individual whose opinion differs from the group to change his judgment in order to be right This will rescue him from the bondage of his private opinion and he will achieve freedom almost in spite of himself.

Rousseau has been accused so often of inconsistency, illogicalness, and sentimentalism that it is scarcely worth repeating those criticisms here That he was an ardent democrat who put feeling ahead of the intellect and enthusiasm ahead of thought is undoubtedly true. It must not be overlooked, however, that many of the ideas he so energetically and emotionally sponsored did take root and influenced social theory and social change for decades As a reformer he was ardent in the support of government for the good of all through the abolition of class inequalities He argued for a

less artificial form of education, for more humane and natural sentiments within the family, and for the recognition of intrinsic human values If his personal practice in moral matters was usually below the standard set by his theories, that is perhaps less important than the fact that his theories were of vast influence upon thousands who came within the range of their influence Even if the argument in *The Social Contract* is historically erroneous, logically unsound, and internally inconsistent, there were yet enough sound thought and certainly sufficient eloquence and fervor to command reader interest The argument achieved at least a semblance of cogency and possessed an appeal for the masses of people and this gave direction to their thinking One may be reminded that there are those who hold it to be more important to arouse people to think at all about something than to cause them to accept specific doctrines.

## DISCUSSION TOPICS

1 What were the dominant interests and objectives of the two periods of the French Enlightenment?

2 In what respect is it the case that the Enlightenment was an optimistic movement?

3 What specific influences were exerted upon French thought of the eighteenth century by the British empirical tradition?

4. Why may Voltaire be said to be the voice of the second estate?

5 Explain the meaning of the phrase *absolute sensationalism*

6 What was the objective of the Encyclopedists? During what period of the century did the Encyclopedic movement take place?

7 Of what influence upon French thought were the conclusions of Holbach?

8 Interpret Rousseau's thesis that progress must be ushered in by a *return to nature*

9 Why did Rousseau's *Émile* bring forth such violent reactions?

10 What was Rousseau's explanation of corrupt social institutions?

11 Describe the role of a citizen in Rousseau's proposed society

12 Why is it said that Rousseau's philosophy was an important influence in provoking the outbreak of the French revolution?

## PARALLEL READINGS

ALEXANDER, A B D *A Short History of Philosophy*, Sec 2, Chaps I, II
CUSHMAN, H E *A Beginner's History of Philosophy*, Vol II, Chap IX, pp 212–228
HOFFDING, HARALD *A History of Modern Philosophy*, Vol I, Book V
LÉVY-BRUHL, LUCIEN *History of Modern Philosophy in France*, Chaps V–X.
ROGERS, A K *A Student's History of Philosophy*, 3d ed, Sec 34
THILLY, FRANK: *A History of Philosophy*, Sec 55

been and is in process of historical growth and development This order is all that there is of reality There is no self-dependent world of bodies, no material substratum discovered to man through experience. One must begin with the proposition *I think*, with the intuitive certainty of *self-consciousness*, in order to avoid dogmatism

As Fichte states it, the *ego* "posits" the *nonego* even though it may be far from clear why it does so. The active ego demands something upon which to work, something to resist, to fight for. Positing the nonego is the second stage But it is found that in so doing the ego has merely checked or limited itself and the ego and nonego are seen to limit each other The third stage is the synthesis of the two. It is found that nothing exists but what is produced by the ego Everything is determined by its activity though the nonego elicits reaction to it as if it were an independently existing order Ultimately there is but one basic entity, the ego, for in positing itself in the first stage the ego creates itself, in positing the nonego in the second stage it merely limits itself, and in the third stage the two are synthesized and the unity implied in the beginning is achieved

Man is himself the creator of the world There appears to be no other possible conclusion, yet Fichte was interested in pleading more than this Certainly there is more in the universe than consciousness of one's private mental states But at the same time there is no independent world of things-in-themselves awaiting discovery or determining the content of mind. That which the ego reacts to is something it has already created and projected outward in the form of objects in space and time Why this happens can only be explained upon moral grounds The outer world serves as a means for the ego to achieve its purposes, its freedom. The self-active ego demands something to react to and creates the world to meet this demand The world must be one ordered by law, one that may serve as a means for the achievement of self-consciousness and freedom.

It turns out, however, that the nonego or objective world must not be interpreted to be the product of the *individual* ego It is instead posited by the universal or pure *Ego*—universal reason This pure active Ego is above all individual egos though each of these participates in it and follows identical thought patterns. The objective world, then, is projected or posited by the

absolute Ego but becomes known to particular egos as the phenomenal world It is a world fundamentally active and growing, a product of basic spiritual activity It is a world governed by universal moral law in process of unfolding

By this interpretation Fichte sought to save his view from subjective idealism or the thesis that this world is the product of individual thought processes There are many individual or empirical egos, none of which creates the world but all of which can will to know it, strive in it, and ultimately achieve moral freedom However, it is scarcely clear just what is the relationship between the universal Ego and the countless particular egos Are the many egos together the absolute Ego or is the latter one thing and the many egos yet another? Fichte's answer is that the absolute Ego can obtain to self-consciousness only by becoming particularized It therefore creates the egos and because of its infinite nature will continue producing them endlessly Yet all this happens not *with* the will of the absolute Ego nor *against* it Neither the individual-created ego nor the absolute Ego is aware of the happening In this way the absolute Ego unfolds the moral purpose of the universe, each ego being an expression of universal reason The empirical ego so originating is dominated by the necessary laws of sensation and at the same time by the inherent universal moral purpose By free choice the individual may elect to make the universal purpose the keynote of his own life or not Regardless of which choice he makes the purpose will realize itself in the world We may become ignorant puppets of the moral order or voluntary supporters of it The latter course marks our real destiny as beings capable of free moral choice Once this course is chosen our duty becomes clear and our moral life unfolds as ordered by principles not of our individual creation but derived from an overpersonal source By a single act of will we may become good or bad In the realization of moral principles, in duty, lies our final good It is not a goal at once achieved but rather it is one that calls for constant moral struggle, which brings us ever closer to the goal. Even in endless world after world the goal may not be reached The good lies in the striving to be better, in serving the moral ideal by doing one's duty always In this the individual ego is relatively insignificant and the consequences of acting according to one's duty are of no importance The ultimate reality and fountain of all value is the moral order

In its service all men find their only good through complete self-subordination to the absolute. This demands freedom from the senses and such freedom can come only by knowing what is transpiring in the world. We must obtain knowledge for the sake of being good Disinterested learning, science, has no place in the life of reason Moral purpose is indicated by the dictates of conscience, which is infallible even in the most concrete of life situations

Virtue is for the sake of virtue; duty is for duty's sake Yet it was Fichte's thesis that moral goodness must be expressed in moral acts Morality should seek to employ the laws of nature in the service of moral ends To do this successfully man must have knowledge His education cannot be neglected In actuality, his conscience can unfold only with learning Necessarily, the struggle toward the good cannot be a noncooperative enterprise Man belongs in society, where he must, by the aid of reason and knowledge, find his appropriate place There he must strive for the common good Not only is it true that each man belongs within a society, but also each society has its place among other societies A nation has its place among all the other nations and all of them together can find ultimate good in seeking universal moral goodness In his *Addresses* Fichte appealed to the German nation to take its place among societies as the spiritual leader in Europe, as the apostle of freedom, equality, and enlightenment and the sponsor of a moral world-civilization. Germany should arise to lead the way to world peace and universal morality Germany did arise to Fichte's cry and under able political leadership became a power upon the Continent, albeit there may be considerable doubt that its leaders either understood or were aware of the point that Fichte so earnestly endeavored to drive home. It is likely that he would see in modern Germany a sad commentary on his fervent appeal for spiritual leadership

*b Schelling* Though Friedrich von Schelling became the recognized leader of the German Romantic movement, he was never so important an intellectual leader as Kant, Fichte, or the learned Hegel, the philosophical god of the nineteenth century Schelling taught at Jena simultaneously with Fichte and Hegel He was, however, not particularly popular and managed to make and keep a growing number of enemies Before he taught at Jena he had studied theology at Tubingen and the effects of this experience reveal themselves in the works written during

the last decade of his life and published after his death He likewise developed a deep interest in things natural, and his preoccupation with the meaning of the natural order consumed most of the period of his active speculation It became his basic conviction that his predecessors, particularly Fichte, had neglected to give any adequate explanation of nature

Fichte's identification of the nonego with the objective world gave no satisfactory account of the latter As a limiting agent of the Ego, the nonego was left for the most part contentless. That nature, or nonego, originated as a "posit" of the Ego was a thesis that appeared to Schelling to make the nonego dependent upon the Ego This, he argued, cannot be the true status of nature. It is just as original as mind or Ego and cannot be reduced to the latter nor be interpreted as an effect of it It is true that mind and nature are not themselves self-explanatory, neither can exist without the other It is just as necessary to the Ego that nature shall exist as it is to nature that the Ego exist But this reciprocal relation does not imply any causal connection between them. Schelling believed that this issue was confused in the work of Fichte To him the situation appeared capable of clarification only if the absoluteness of both nature and mind be given up This appeared to be implied by the fact of their reciprocal relationship Anything that depends upon something else in any way cannot itself be absolute However, if it be understood that both mind and nature are manifestations of something other than themselves, a common denominator, an absolute reality, clarification of the situation is possible Having arrived at this conclusion, Schelling devoted a great deal of his philosophical effort to showing the logic of this position That his solution clarified the problem proved not to be particularly evident either to Fichte or to the more brilliant Hegel.

The higher reality that Schelling proposed may be defined as that which synthesizes all differences and makes of all things together a single unity It is neither mind nor nature but both simultaneously Therefore there is but one principle or force operative in the entire universe and all observable phenomena are its manifestations The provinces of philosophy may be easily determined One is the philosophy of nature, which has as its object the understanding of the Absolute as it manifests itself in the sphere of physical things. The other is the philosophy of

mind and it has as its province the sphere of conscious activity, sensation, intuition, reason. For the purpose of understanding the ultimate character of reality it makes no difference whether one starts with the phenomena of nature or of mind Ultimately they both lead to the same source of being and dissolve in a single unity.

The underlying unity of all things and that from which they spring is absolute *will* In this Schelling anticipates the fundamental thought of Schopenhauer Both mind and nature have their origin in the striving of will At this stage there is nothing but its blind, unconscious surge Later the will attains self-consciousness, becomes intelligent, rational in the realm of mind The domain of nature remains unconscious striving, except upon the final level of human action Mind takes its place by the side of nature. However, it is not merely an effect or product of nature The two stand to each other in something of the manner that Spinoza's *thought* and *extension* stand to each other Yet, while Spinoza identified his attributes with substance, Schelling adhered to the notion that both mind and nature are the manifestations of an underlying nonmaterial reality essential dynamic and intelligent. Kant's thing-in-itself reappears as Schelling's Absolute. Though he was confident that the Absolute can be known, more obscurity than clarity attended his effort He became involved in theosophy and mysticism in his attempts to state its nature. Hegel made this part of Schelling's philosophy the object of some of his most telling criticism

According to Schelling, the Absolute can best be approached through the avenue of feeling This thesis has already been noted in the work of both Kant and Fichte, who gave to morality a central place in their systems Though Schelling recognized the significance of the moral life somewhat after the fashion of his predecessors, he inclined more strongly than they to the theory that it is through art that the opposition between the self and the not-self may be most satisfactorily overcome In the aesthetic experience one feels himself at one with all things, through, momentarily at least, forgetting the individual self This thought will be found to play an important part in the work of both Hegel and Schopenhauer, though each goes beyond the concept in his final answer to the problem of achieving adequate solution of the riddle of human existence

The most influential concept in Schelling's philosophy of nature was one which interpreted nature as an objectification of a system of reason There is intelligence in nature, nature is intelligence in a state of change and development The whole is a living unity which is to be understood as a teleological system As an unfoldment of the Absolute, Idea, or Reason, nature cannot be properly understood by means of an approach organized on the foundations of materialism and mechanism This technique may produce valid results in so far as the superficial and external aspects of nature are concerned, but it cannot attain to comprehension of the underlying principle of reality The essential truth to grasp is this, that nature is fundamentally a unity and that all parts of the universe are to be understood adequately only if their proper place within the unity or Absolute can be understood This contention along with the thesis that the universe is reason in process of becoming objectified both reappear with greater emphasis in the system of Hegel That reality has rational meaning was the firm conviction of the Romantic movement, of which Schelling was one of the moving forces The system of development by which reality unfolds was for Schelling, and likewise for Fichte before him and Hegel after him, an evolution of thought

## DISCUSSION TOPICS

1 What elements of empiricism and rationalism are to be found in the *Critique of Pure Reason?*

2 What does Kant mean by the expression, *dogmatic philosophy?*

3 Why did Kant refer to his philosophy as transcendental?

4 Distinguish *synthetic* from *analytic* judgments What is the respective significance of each?

5 Explain how Kant and Hume disagree with respect to the interpretation of causality

6 State clearly the form of the categories What is the source of these? Name the fourfold division of them To which categories did Kant give the most consideration? Why?

7 In the Kantian epistemology what is the nature and significance of space and time? Give arguments on the side of objectivity and the side of subjectivity with reference to these concepts

8 What is meant by the statement "Percepts without concepts are blind, concepts without percepts are empty"

9 What is an antinomy? What are the antinomies in the *Critique of Pure Reason?* Why do they occur in the Kantian system?

10 What function have the *Ideas self, nature,* and *God?*

Right expresses itself through the medium of *property* Each individual attains to self-realization and the enjoyment of right through the accumulation, use, and enjoyment of private property Each has the right to make such acquisitions and accumulations of property as pleases him and to transfer such possessions as he desires The only proviso in this procedure is that he does nothing in his manipulation of property which interferes with the right of all others to do likewise Since property is the concrete medium of self-expression, and since the attainment of freedom is above all things desired and desirable, property is sacred It may be transferred from one person to another at his desire, and its disposal is accomplished through contracts with other persons. The contract is thus a basic institution of the social order along with private property All this does not mean that all persons necessarily have rights to equal amounts of property. The individual differences among people require society to recognize individual differences in the matter of the amount of property that different individuals should be permitted to enjoy Thus the kind and amount of property is subject to the sanction of others, and these sanctions take the form of rules or laws objectified in the organization of the governmental agencies Through mutual respect for the rights of one another, the means for self-expression, that is, private property, is made possible The enjoyment of self-expression in reality amounts to the realization of human freedom

In spite of the more or less widespread mutual respect for the rights of others, there is certain still to be a conflict of wills over property and contracts There will yet be a few who plan deceit, such as graft, and there is bound to be inadvertent trespass upon the rights of others In this activity the concept of wrong emerges Wrong occurs when the will of an individual induces conduct that is contrary to the rules by which society governs itself Another way of putting it is that wrong is the action of an individual that runs contrary to the rules of Reason This statement is proper because the laws of society are Reason objectified Thus violations of laws constitute an infringement upon basic rational principles, and the reaction of society must be that of punishing the offender. This punishment is not for the purpose of correcting the offender but for the purpose of affirming the rationality of the law itself Justice is in this sense retributive and punishment amounts to retaliation for a wrong done The degree of punishment

must correlate with a reflective determination of the degree of infraction of the law. On these grounds capital punishment is quite justifiable and necessary, this is because, as just stated, punishment is not for correction but for retaliation.

Early in the development of the social order it no doubt seems to the individual that rules are imposed upon him externally and that they are often against his own best interests. He may conform through fear yet inwardly rebel against organized society. Until this condition disappears man cannot achieve, cannot attain moral character. Not until the will of society, as expressed in the laws of its organization, is accepted as the individual's personal will can a man be moral Morality emerges when the individual wills of the members of society discover that obedience to the universal rules of public good is the only means of realizing genuine individual freedom In a moral society acts hitherto done unreflectively assume the character of reasonableness when they are seen to coincide with the universal principles of right and good In this manner conscience is given an adequate direction and is no longer the victim of personal whims or desires. Conscience is thus disciplined when subjective judgment is replaced by objective judgment or, otherwise stated, when the subjective and the objective judgments become identified It must not be thought that the principles of public benefit which comprise the framework of the social order are artificial and man-constructed They exist before the time of each individual Persons are born into society and find rational principles already there. From the standpoint of time, Reason has not unfolded first an objectified man and, secondly, an objectified society which is wholly his product It is the same Reason in both, man is not the cause of society nor is society the cause of man. They both emerge as objectifications of the one reality, and, though there is development in this process, it is not the development of a later thing from a prior thing in the usual interpretation of evolution. Laws prescribe the external structure of the social order, while morality achieves the inner order and rationality that displays itself in the behavior of individuals acting in the interest of good and right. In this activity it is not the observable act itself that is alone good or bad, for even more important is the character of the motives and the intentions that prompt such actions. Right intention and motives along with conformity to the social structure make a man

moral He is given both internal and external guidance. In being moral man achieves that which is the *summum bonum*—happiness

Morality is exhibited objectively as social institutions, the family, civil society, and the state. Within these larger wholes each man must find his place, and the realization of his full human potentialities can arise only as each discovers his place within these spheres of action. The state is the most fundamental ethical institution and rests upon the institution of the family For this reason marriage is a rational duty of each person If it is entered into in the interest of society, it is moral and sacred, if for personal satisfaction merely, it is immoral Within the family personal inclination is modified by the other person or persons in the family group The individual comes to identify his personal good with that of the family, and each member is influenced to respect the rights and the welfare of each of the other members Each person through this larger social relationship is made to feel himself a part of the larger world with which his ultimate good is identified. What may seem at first to be a loss of individual freedom through entering into the marriage relationship proves ultimately to be a gain Therein develop common aims, interests, rights, duties, and properties In the recognition of these and in the attempts to secure and maintain them, each individual achieves to a higher condition of personality than is possible so long as he remains a mere individual

The family, however, is a very incomplete institution though a much better one than a state of personal isolation Its membership is perforce limited and its basic interests tend to concentrate upon the welfare of its particular members As an institution it finds its true place only as a part of a still larger whole, which may be called civil society Just as the individual is incomplete when separate from the family, so is the family incomplete when it is divorced from the larger whole of the social order A civil society is made up of many families which together develop a greater community of interests There is an expansion of duties and a considerable enlargement of social consciousness Thereby an added meaning is given to the family as an institution, for its true meaning and purpose and reason are determined by the fact that it is a part of a larger scheme of things. Civil society has as its boundaries the community, except in such instances where the people live in a relatively small geographical area. It is thus not

the largest unit of the social order, for in larger groups, in larger organizations of families, there is discovered the interrelatedness of communities within these larger boundaries The state, which is composed of numerous communities, subordinates the individual interests of communities in much the same way that a "united states" gathers together the interests of the individual states into a larger unity The limitations of the civil society are to be found in the fact that its interests are still confined to promoting the welfare of a large group of individuals

Finally, in the realm of society Spirit reaches its most adequate objectivity in the rational *state*, which embraces the elements of civil society and rests upon the foundation of the family institution In the state Reason transcends all private interests by virtue of their being included in the larger sphere of humanity Man achieves his highest good and most adequate realization of freedom by an identification of his ego with the good of humanity If he is unable to do this, and it is necessary for the good of the state that he do it, the individual may be sacrificed by the state in the interest of a vastly greater good that transcends all private interest which may for one reason or another run counter to it The state is not confined in its activities to the problem of guaranteeing the greatest amount of freedom to the individual if by freedom one means the license of individual whim The indulgence of subjective desires is a false freedom, since, as we have already pointed out, true freedom is possible only through the identification of personal interests with public interests The chief function of the state is to make this latter type of freedom possible in the greatest abundance In this endeavor each lesser institution must lend its own ardent support and in so doing each realizes its own best interests Yet so vast and so important is the structure of the state that, should any member or institution within it fail to support it, the state has the right to crush that member or institution entirely This is true for the reason that the state is not a mere sum of its parts and is in nowise responsible to those parts. The state *is* its parts and *more*, since, as a greater whole than any of its parts or all of them together, it is a more adequate objectification of the Absolute and is therefore more ultimate

The state which is to realize the best interests of all of its members cannot be of the republican or democratic form These represent no unity of interests and they are characterized by an

abundance of disorganization and confusion. There is likewise in them altogether too much emphasis placed upon private interests Furthermore, all history indicates that these types of government are unstable The only adequate form of government is that of a limited monarchy. The best example of such form of government in Hegel's time was that developed in England This English form, however, seemed to Hegel to be mistaken in its intent Its division of function appeared to him not to be aimed at unity and efficiency of action, rather the division aimed simply to be a system of checks which offered negative control and lent rather to disunity than to unity. It was, therefore, considered by him a highly inefficient form of government though in substance it was perhaps the best that had emerged to date The difficulties of the English form could be overcome if the so-called legislative, executive, and judicial functions were to be concentrated in the person of a single man The reason of the state thus would find its most complete expression in the monarch He has this advantage that enactments may be made, enforced, and judged with promptness and efficiency whereas, unless these functions are concentrated in a single person, there is much inefficiency in their operation The foremost duty of the monarch must be that of preserving and promoting the welfare of the whole state The greatest possible freedom must be sought—freedom of press, speech, and opinion However, in the last analysis, though there should be granted abundance of freedom of expression, the decision as to what has worth and what has not rests with the monarch He is to decide what will be permitted to be freely said and done, and these determinations are to be made upon the basis of the criterion of universal good.

There is no more ultimate social institution than the state. No international social organization is possible since there are no coercive agencies to keep the separate parts together The elements of any international organization are too loosely knit and there is too great a sum of national interests and selfish purposes to make for coherence of action and unification of purpose. Each nation itself must be the ultimate unit of human groups and each should be understood, judged, and organized upon the grounds of common history, common language, common customs of the people which make it up The conquest of other peoples is unjustified unless they have nothing to offer as an expression of Reason Thus

in some instances annexation is justifiable In fact, the intimation of Hegel is that when one nation better expresses the Idea than another, when its culture, achievements, and strength are superior to another, the lesser nation may be annexed with impunity In this manner Reason is conceded to unfold itself on an ever more encompassing scale Ultimately Reason will triumph and unify all the peoples of the universe in one group The various nations which express the Idea do it with various degrees of adequacy, and progress toward the objectification of Reason in institutional form takes its way by means of absorption and annexation rather than by means of international cooperation of diverse groups

This takes us to the consideration of Hegel's views upon the manner of Spirit's unfolding throughout the historical period This development is one which transpires through constant struggle Each era and each nation is the expression of Reason in some degree or phase The decline or conquest of a nation indicates by that event its incompleteness and inadequacy as an expression of the Absolute Idea A state always gives way to a more adequate objectification of Reason The state that ultimately wins is always the best state There can be no doubt, therefore, that history as it has taken place is the only history that could have taken place and, furthermore, that as things have happened all has been for the best History then is merely the unfolding of the Idea, states succeed states and in the process the objectivity of Idea becomes more evident Each state in turn is a temporary expression of it and in due course gives place to another and better expression History therefore is no mere chronicle of dates The explanation of historical events is not to be found in their antecedents What has happened has been inevitable but not in the sense of causal determination The restless surge of Reason seeking objective expression has brought the events about History has an inner meaning and that inner meaning is the story of Reason producing the world o human agencies

History began in Asia. It will culminate in Germany, accordin to Hegel It has moved westward from Asia, and as it has move in this direction it has increasingly improved upon its objectific tion of Spirit. Thus it had its infancy in Asia, it reached adolescen in Greece and Rome; its maturity is achieved in Germany From here there is no further advance so far as a historical state is concerned, and the greater objectivity of Spirit and the incorpora-

tion of all mankind within the entirety of the Absolute must take place upon some other and still higher level than the social Thus the social order finds its true meaning and place within what may be called the *absolute order* This final unification occurs in the spheres of art, religion, and philosophy

## 5. *The Absolute Order*

The highest manifestation of Spirit goes far beyond the limits of the social order No matter how exalted the state may be it is yet bounded on all sides by physical things To attain utmost freedom Spirit seeks expression of full self-consciousness in the realms of *art*, *religion*, and *philosophy* These know no boundaries and have no limitations placed upon them They find expression in all lands and among all people and transcend the confines of particular states or eras Having already identified himself with the social order, man next engages in his most genuine activity as a human being through identifying himself with pure Spirit as objectified successively in art, religion, and philosophy In these realms the opposition between subject and object grows less and less and in the true life of the spirit it disappears altogether This condition is made possible by the centuries-long unfolding or evolving of the Absolute At last, having produced nature and the state, Reason builds upon them the edifices of the three realms of freedom Without nature and the state these would not originate nor could they continue to exist once they had emerged, no matter how completely they might unfold the true essence of Spirit Just as the state could not exist without being sustained by the world of plants and animals, so too art, religion, and philosophy demand the sustaining power of the organized state They are the final synthesis in which the Whole becomes conscious of itself as an all-encompassing unity

> Man was, first of all, an individual (subjective mind) shut up in his native egoism, then, emerging from himself and recognizing himself in other men, he formed a community, society, and State (objective mind), finally, returning into himself, he finds at the bottom of his being the ideal of art or the beautiful, the religious ideal or God, the philosophical ideal or truth, and in the realization of this threefold ideal, the supreme independence to which he aspires he becomes *absolute mind* [1]

[1] Weber, A., and R. B Perry, *History of Philosophy*, p 523 By permission of Charles Scribner's Sons, publishers

In the world of nature Spirit variously appears to the senses as the beautiful This natural beauty man learns to approve and appreciate, the artist is inspired by it and attempts consciously to reproduce Spirit, which appears unconsciously embodied in nature. The artist seeks to translate Spirit in forms capable of presentation to the senses At first, employing imitation mainly, the artist moves toward idealization, which is achieved through expressing a universal idea through the mediums of matter and meaning Likewise, the artist perceives the possibilities for improving upon the less adequate expressions of the beauties of Spirit in nature In this way he puts something of himself into his product and identifies himself in measure with it The product of the artist's creative genius no longer appears set off from the artist as merely an object. The distinction between subject and object tends to disappear in this situation, for in a sense the work of art is a part of the character, spirit, or personality of its creator This activity Hegel conceived to be the work of Spirit coming to self-conscious through the person of the artist The artist is, of course, an objectification of Spirit while the work of art is an objectification of the artist's inner being Actually they spring from the same source, the artist and his work, and the identity of the two is actual In no instance of the familiar subject-object relationship is the truth of this more evident except in the two other spheres of religion and philosophy.

In art this negation of the subject-object relationship is but partially achieved At best the artist must use the materials of the physical world as his medium of expression. This condition makes for a natural classification of the arts Those which can best dispense with the material medium are higher in the scale of the arts as devices for unifying the world and the individual Thus architecture is the most elementary of the arts and most of all restricted by the material medium It symbolizes the Spirit but can do little else, owing to the fact that form and matter stand too strongly opposed The highest achievement of architecture is the towering cathedral Greater freedom is achieved in sculpture for, while a material medium is necessary, it is more docile in the hands of the artist The work of the sculptor has greater unity, there is less in it that contributes nothing directly to the expression of the artist's ideas. Still, there are difficulties and the limitations imposed by the three-dimensional medium of sculpture are largely dissi-

pated when art takes the form of painting. Here the idea is expressed in two dimensions, the portrayal of the third being left to perspective Still there remain the same limiting factors in painting as beset sculpture and architecture though in less degree In music all these difficulties of medium disappear since there is nothing material about it. The finer shades of feeling, the diverse and immaterial states of the Spirit can here find expression Yet even so it is not a perfect art since it incorporates too much of the subjective and, therefore, partial aspect of human experience.

This place is occupied by poetry, which is also able to express every shade of meaning, every variety of feeling, every phase of the inner life But it does not merely symbolize Spirit as do the other arts In poetry symbols are given concrete form, they are expressed in language and acquire meaning The vagueness that characterizes the other arts tends to fall away from poetry. There is, however, a development within this field whereby Spirit comes to ever more adequate expression The youngest and least capable variety of poetry is the epic It inclines to the imaginative and is apt to be dominated by temporal and spatial events which form much of its content It stands to the other types of poetry as the grossest and most extravagant It is reminiscent somewhat of the material arts, architecture, sculpture, and painting Lyric poetry is more like music but is able to express itself more adequately, but at the same time it is inclined to lose touch with actuality and leans toward the mystical For this reason it must be corrected by the highest form of poetry, the dramatic This is able to lay bare, to objectify the most intricate and intimate feelings, passions, emotions, hopes, and aspirations of the race of men. One bit of evidence of the high rank of dramatic poetry is that it has appeared among only the most civilized peoples. It thus may be interpreted as a late evolvement of Spirit

Art has evolved through the historical period, beginning with the ancient forms of Oriental symbolism These lack clarity since the symbols used are apt to be confused with that for which they stand Spirit achieves but poor expression of itself At best Oriental art, as developed by the Chinese, Hindus, and Egyptians, has been able to do no better than indicate that a mysterious something stands behind the concrete things of the world And in this it is mistaken Greater clarity was obtained by the Greeks through giving little attention to the symbolic and by striving for concrete-

ness of expression But if Oriental art erred in attempting to symbolize the infinite and leaned toward the mystical, Greek art, in moving the other way, became too preoccupied with the finite It spent its effort upon giving ideal expression to individual human figures. It attained the peak of perfection in giving to them the maximum of balance, symmetry, and form However, this very perfection was at the same time the chief defect of Greek art It served to fix attention upon the sensuous qualities of art objects at the expense of the Idea that resides within them The human figure came to be *too* beautifully portrayed! The art of Christianity marked a return to the expression of inner feeling, since its object was to reveal the spiritual qualities of Christianity through presentation of leading characters and chief events in its development. This activity served to indicate that art, even developed to its peak of perfection, cannot achieve adequate portrayal of Spirit in sensuous form Through the centuries religious art gave less and less emphasis to the form of its expression and led, in the modern period, to the development of the Romantic movement Art failed, as it must, to give adequate expression to the reality of Spirit.

By way of art the subject-object relationship assumes less the character of antithesis while through religion the opposition is further dissipated When the individual develops a deep religious experience, he feels himself less at cross-purposes with things and more closely identifies himself with the movement of the larger whole of events Since the expression of religious feeling is freed from the restrictions imposed by the material medium of the arts, human reason is able to effect a more lasting degree of identity with universal Reason as it unfolds itself in the religious experience of men This comes about gradually At first man stood in awe of nature and bowed before it The distinction between himself and his world was strongly marked In time man felt less a helpless pawn in the world of things and began to find in nature characteristics which he seemed to find within himself His worship became more spiritualized and, at the same time, more anthropomorphic. He came by the conviction that his moral and religious experiences have a fundamental relationship with a larger world that is in essence like his own fundamental being Gradually he felt less a stranger in the world as he grew to a rising consciousness of his affinity with it. His imagination led him to the fundamental truth

that he is truly at home in his world only when he conceives the distinction between the finite and the infinite, the one and the many, himself and the Absolute to have vanished.

Through the ages man has groped for this concept and finally in the development of Christianity he has attained to it. All other religions are inadequate, partial, and unsatisfactory. They have been necessary developments without which Christianity could not have emerged. They were the historical unfoldings of Spirit, and Christianity has retained and preserved all that is valuable in them Still, though man has at last arrived at the concept of an absolute order through religious experience, he has done so through feeling and imagination rather than by the route of reason. The last act by which the finite being becomes one with the Absolute is an act of reason Through reason faith is transcended, and man comes to the wisdom of his maturity through knowing that the whole of things is a cosmic unity, concrete in its manifestations and totally an unfoldment of Spirit. This is the truth that Hegel believed his philosophy to have brought to final expression The social order achieves fruition in Hegel's Prussian state; the absolute order is revealed in Hegel's philosophy.

### 6 *Hegelian Influences*

It was but a short time after the sudden death of Hegel before much controversy arose within the ranks of those who had come to recognize in him the philosophical leader in Germany These debates which occasionally became somewhat bitter were in part induced by obscurities inherent in the Hegelian system. Among those who supported him most vigorously there were often differences of opinion regarding what the master had really taught. Likewise there were those who found fundamental fault with the general method used and the conclusions reached by Hegel. In order to understand better the post-Hegelian controversies it is necessary to examine briefly some of the inherent vulnerable points of his absolute idealism

One of these is his excessive and exclusive use of a priori metaphysics. The employment of this mode of approach seemed to many to have yielded few conclusions offering a more satisfactory understanding of the world. Hegel had been so preoccupied with outlining the organization of the social and the absolute orders that he gave but little consideration to the order of nature.

Though it was clear that his analysis contained much penetrating insight into the social aspects of human life, it was equally clear that there was little of consequence to be learned from Hegel from the standpoint of physical science. In fact, Hegel set his method over against that of science and rejected some of the most productive elements of scientific method, including causality He presumed, as it were, to "go over the head" of science for ultimate truth about the universe and in so doing referred slightingly of some of the greatest names in science To many it appeared obvious that the results of Hegel's Dialectic compared unfavorably with the results of experimental science There were, therefore, those who preferred to reject Hegelianism altogether for the more likely fields of science

Other thinkers objected to Hegel's interpretation of history on the ground that it advocated the acceptance of changes in nature and society as inevitable and fundamentally good In asserting that it is man's duty to study nature and society as it unfolds in order to keep in tune with it seemed to some to place altogether too much stress upon a one-sided adaptive process Living is more than a process of adapting one's self to conditions as they are, it is in part a process of adjustment wherein conditions are altered better to suit human desires and ideals Furthermore, to those who were interested in liberal movements Hegel was clearly a reactionary, standing as he did firmly against all governmental forms other than that of a strongly centralized government Other vulnerable points could be mentioned but from those given it is indicated that from the standpoint of both external and internal criticism Hegel's system contained controversial issues These immediately moved into the field of attention following his death

One of these internal points of debate became the immediate cause of a split among his followers This may be called the religious-philosophical problem Hegel had argued that there is no fundamental difference between religion and philosophy except that Spirit appears to the imagination in religion while it appears to reason in philosophy The liberal wing of the Hegelians, composed chiefly of Strauss, Feuerbach, Marx, and Engels, inclined to interpret Hegel as giving no support to religious orthodoxy His denial of the genuineness of theism, creation, immortality, and free will appeared to support such a contention. This group, therefore, inclined more and more to a scientific, naturalistic,

materialistic interpretation of the world This tendency may likewise be remarked in the work of some of those who advocated a return to Kant, among these notably Lange and Mach, both influential figures in the positivistic tradition Others among the Hegelians preferred to adhere more closely to Hegel, believing that with certain alterations his system was fundamentally correct In offering the proper corrections, however, there was disagreement and frequently the alterations made took the alterers about as far away from the master as those who made up the liberal wing This is particularly true of Weisse and Schleiermacher Perhaps the most fundamental agreement to be found among those who made up this, the conservative wing, was their desire to uphold the reality of religious and spiritual aspects of human life To preserve these, they saw it necessary to make such alterations of Hegel as they individually believed proper. Among this group may also be mentioned Fechner, Lotze, and I H Fichte

During the hundred-odd years since Hegel's death, there have been further splits among the groups who took their inspiration from him Whether any of these will rise to genuine prominence, it is impossible now to state Beyond the boundaries of Germany Hegel's influence has been revealed in the work of T H Green, F H Bradley, and B Bosanquet in England, in Italy, Croce and Gentile, in France, Renouvier, in America, Josiah Royce Whatever the end product of Hegelianism may be it must be admitted that Hegel's philosophy has been one of the most ambitious, admired, and attacked system in the history of modern philosophy

## DISCUSSION TOPICS

1 What was probably the chief criticism Hegel had to offer of Kant's system of philosophy?

2 Discuss Hegel's relationship to his two predecessors, Fichte and Schelling How did he disagree with them?

3 What do you understand to be the nature of Hegel's dialectical method?

4 What is Hegel's solution of the problem of the one and the many? In what way should one go about understanding the true nature of any given object in our world?

5 Explain how Hegel would interpret the concepts of cause, determinism, evolution, right, property, punishment, moral goodness

6 Describe the manner by which a person becomes a moral being

7 Outline as clearly as possible Hegel's philosophy of history Do you discover any points of similarity with that of St Augustine?

8 By means of what line of reasoning did Hegel arrive at his classification of the arts? What is the function of art? Do you find yourself in agreement with this interpretation of its function?

9 Describe the parts played by the Orient, ancient Greece, and modern Europe in the development or unfolding of Spirit

10 What were some of the aspects of Hegelian philosophy which gave rise to controversy following 1830?

## PARALLEL READINGS

ALEXANDER, A B D *A Short History of Philosophy*, Part VI, Sec 3, Chaps I, II
FULLER, B A G *History of Philosophy*, Vol II, Chap VII
HOFFDING, HARALD *A History of Modern Philosophy*, Vol II, Book VIII, Part A, Chap 3
ROGERS, A K *A Student's History of Philosophy*, 3d ed, Sec 37
THILLY, FRANK *History of Philosophy*, Sec 61.
WEBER, A, and R B PERRY *History of Philosophy*, Sec 66

# Chapter XXIII

# PHILOSOPHY OF PESSIMISM

## ARTHUR SCHOPENHAUER

### 1. *Background of His Pessimism*

Schopenhauer's parents lived in the Free City of Danzig, his father belonging to the mercantile aristocracy of that city There in 1788 Schopenhauer was born and for five years it was his home. At the fall of the city to Prussia, the elder Schopenhauer removed his family to Hamburg and there reengaged in business He desired for his son the most liberal education possible and with this in mind traveled with his family in England, France, and other parts of Europe Ultimately the object of Schopenhauer's education was to prepare him for engaging in the business which had been the source of income for the Schopenhauer family. However, the young man had no liking for this work and early developed a desire to study instead Regardless of his desires his father placed him in the business organization, much to the disgust and dissatisfaction of the young Arthur. It is at this time that his pessimistic attitude began to take root.

After his father's death, he went with his mother to Weimar and with her consent he continued his studies, especially of literature, philosophy, and science. There too he met Goethe. These together undertook a study of the phenomena of vision and came finally to disagreement upon ultimate explanations Goethe, however, retained considerable interest in Schopenhauer and was one of the earliest to recognize the mark of genius in him. It is reported that a remark to this effect to Schopenhauer's mother did nothing to cement amicable relations between mother and son since it only fanned the flames of her growing jealousy Officially Schopenhauer's studies were undertaken at Gottingen and Berlin. He wrote his doctor's dissertation in 1813 after having rather suddenly decided that he would not participate in the Napoleonic Wars

Five years later appeared the first edition of his masterpiece, *The World as Will and Idea* Having completed this treatise, he traveled to Italy, where he remained some time at Venice and met Byron, in whom he found a kindred spirit In 1822 he was invited to return to Berlin to give lectures in philosophy. He was sufficiently proud of his knowledge and so satisfied with his interpretation of the world that he scheduled his lectures at the same hours that Hegel gave his popular lectures Since he was practically unknown in academic circles, his lectures were not attended, and, much chagrined by the outcome, he retired permanently from academic life and took to writing scathing articles about philosophers and academic philosophy

Upon the outbreak of a cholera epidemic, he retired to Frankfurt, where the remaining part of his life was spent in study and writing He had during this whole period an income from his father's business and the money he wisely invested For the last thirty years of his life, he lived in a boardinghouse by himself, having as his only companion a dog called by the wiseacres of the village The Young Schopenhauer It was there he died rather suddenly and alone at breakfast, September 1, 1860

Several circumstances of this man's life may be mentioned as contributing factors to the growth of his pessimistic point of view For one thing his heritage was sufficiently faulty to give rise to rather a neurotic and unstable temperament His paternal grandmother died insane His father was melancholy, irritable, and paranoiac He finally died, probably a suicide His mother was fiery-tempered, emotional, neurotic, and brilliant She was a popular novelist of her day. According to Schopenhauer's own estimate of himself, he inherited his father's temperament and his mother's intellect Although this is not entirely true, it is sufficiently accurate to explain much of the peculiar melancholy and irritableness of Schopenhauer's own temperament as well as his genius

As a youth he was impressed much more with the misery of life than with its beauty and found great difficulty in seeing the beauty because of the prevalence of ugliness. He was easily angered and suspicious of others and egotistical above all Since these were poor social virtues his friends from the beginning were few and none of them was retained over a long period of time This goes far to explain why he later argued that friends were of no importance in the ultimate solution of the problems of living

His experiences with his mother were far from congenial. At Weimar his mother's lax moral behavior shocked and angered Schopenhauer Because of this attitude she naturally preferred to have him away and had early consented to his studying at points removed from Weimar. Though he lived at her residence for a brief time later on, there was no remaining because of numerous heated quarrels There was never any maternal affection and always lack of understanding This developed later into irritation in his presence and finally into dislike, jealousy, and hatred. After a particularly bitter quarrel the final separation came, and Schopenhauer left Weimar never to see his mother again during the remainder of her twenty-four years of life Many of the remarks in his famous *Essay on Women* may be traced to these unfortunate early experiences

There were literary and academic disappointments which preyed upon his mind The publication of his masterpiece went almost unnoticed It was not until after almost thirty years that he obtained much recognition, but when it did come it steadily grew During these thirty years Schopenhauer's writings bore upon the original theme of *The World as Will and Idea* and they became ever more bitter because of the blow given his egoism and vanity. These were years of brooding melancholy in which the man became more ingrown as the years passed His vanity was pleased in 1822 when he was invited to lecture at Berlin, but the subsequent events which led to his resignation embittered him further. He developed a great dislike, no doubt largely as an outgrowth of jealousy and wounded pride, for the philosophies of Fichte, Schelling, and Hegel This dislike extended to their successors in the chairs of philosophy in the universities throughout Germany. As far as Schopenhauer was concerned, he believed that he had a sounder explanation for the universe than any of them

Specific philosophic influences that exerted their sway upon the thoughts of Schopenhauer were the writings of Kant and Plato. He learned of these at first chiefly through the work of Schulze at Gottingen and Fichte at Berlin. He came to believe that Fichte misunderstood Kant's critical position and concluded that his own interpretation was the only valid one and that nothing original had occurred in all German philosophy from the time of Kant to his own Both Kant and Plato had drawn the distinction between a world of appearance and a world of reality This

made a fundamental impression upon Schopenhauer, the theme runs through his own metaphysics. For Plato there was the world of phenomena and of *ideas,* for Kant, a world of phenomena and a world of *things-in-themselves,* for Schopenhauer, a world of phenomena and a world of *will* behind it. A third influence exerted upon his thought was derived from reading the sacred Sanscrit writings, particularly the Upanishads, together with commentaries upon them In these writings he found portrayed in glowing style the familiar problem of moral and physical evil

A factor adding to the pessimistic outlook of Schopenhauer which cannot go unmentioned is the political and economic situation in Europe at the time he wrote It was the period just following the Napoleonic era, and Napoleon had been banished to Elba Disorder was rampant In France the Bourbons had been restored and the landed aristocracy had moved back to occupy the land Consequently, there was much suffering and hardship on the part of the masses of people. Millions of lives had been lost in the struggle, lands and cities had been destroyed, particularly in Germany There was famine even in England, which had been the victor in the struggle The hopes of the revolution that were glowingly portrayed by Rousseau had died with the rise of Napoleon The misery of Europe was all too prevalent to go unnoticed, especially by one whose pessimism had already taken firm root The poor reception given the publication of *The World as Will and Idea* is explained in part by the fact that the people were too "sick" to read of the misery which they felt all too keenly themselves

It was another major European struggle which led the way back to Schopenhauer Just prior to 1848 a movement had emerged in Germany particularly favoring a more popular form of government This movement came to its end chiefly through the inexperience of the leaders and the activity of reactionaries, who profited by their indecisiveness. The members of the Frankfurt assemblies were unable to agree and the ideas that had given new hope to many were dashed As a result pessimism again became the mental attitude of thousands of people, but this time they were more inclined to read from one who wrote during another period wherein circumstances were much the same Schopenhauer's ideas appeared to them more in keeping with experience than the optimism of Hegel and his followers

Within philosophy, also, there was a condition favorable to a growth of interest in Schopenhauer, owing to a split in the Hegelian school into right and left wings, which was accompanied by a strong move to return to the original writings of Kant The claim of Schopenhauer to be offering the most valid interpretation of Kant led those who were interested in the movement to give him attention where before he had received only neglect. The brilliancy of his expositions was then discovered amidst the general cry of "Back to Kant" His school of much-longed-for admirers at last gathered. To the very end of his life he implored them to send him every notice of himself that appeared in the newspapers and magazines of the land The fires of his egoism so long dampened burned intensely, fed by every scrap of praise The black pessimism of nearly sixty years found more than emptiness in life That his last years were his happiest ones cannot be doubted.

## 2. *Appearance and Reality*

"The world is my idea" With these words Schopenhauer began his famous work—*The World as Will and Idea.*

> This is a truth which holds good for everything that lives and knows, though man alone can bring it into reflective and abstract consciousness If he really does this, he has attained to philosophical wisdom It then becomes clear and certain to him that what he knows is not a sun and an earth, but only an eye that sees a sun, a hand that feels an earth, that the world which surrounds him is there only as idea, only in relation to something else, the consciousness, which is himself [1]

The Kantian distinction between the world as known and the world as it is in itself is here incorporated in Schopenhauer's analysis Interposed between the thing-in-itself and knowledge is the knowing mind possessed of its own a priori principles of knowing What the mind is determines the character of nature. It can only be what the knower allows it to be It is a realm of phenomena, of appearances It is idea, it is my idea Through the medium of the senses we obtain the data of experience which the understanding immediately projects into the outer world as cause Actually sensation is no more than modifications of our own bodies. Phenomena are experienced in space and time and as causally related because the mind is so constituted as to prescribe these conditions. This process arises involuntarily on our part immediately following the excitation of the senses It is because of the peculiar nature

[1] By permission of Kegan Paul, Trench, Trubner & Co Ltd , London

of the knowing mind that we can have experiences such as ours at all. Were we differently constituted our experience would necessarily be different also. What we know as the world, therefore, is surely dependent upon the creature who knows

Since our world is completely ordered by the causal principle, science may proceed in its usual fashion of relating phenomena to phenomena, searching always for constant forms and principles that hold good among the multifarious appearances The materialistic assumptions of science are fruitful, though they are mistaken as descriptions of reality Nature is the product of mind and as such is idea, not matter What reality is in the last analysis is neither idea nor matter but the dynamic driving force of *will* All those devices for studying and understanding the phenomenal world avail nothing at all when applied to the project of understanding the underlying ground of the whole structure of nature. As a knowing creature only, man is confined to the realm of phenomena, but as a creature who also wills he has access to a grasp of the reality behind appearances

If the activities of man are thoroughly studied, it is revealed that his most characteristic action is not knowing but willing. A grasp of the essential nature of man affords a clue for the understanding of the universe. By turning to inner experience, or better yet by studying them together, we learn of the essence of reality As man is, so is nature The force that works within us, likewise works in the external world Man, as something more than appearance, must be the same with the thing-in-itself. The activity of will is immediately perceived within us. All other behavior, including the activity of the intellect, has its ground in and receives its motivating energy from will. Our entire activity serves as a means to the satisfaction of will, which is conceived to be in essence striving. It displays itself as feeling, want, wish, hope, fear, pain, love, though in itself it is blind striving for self-perpetuation All things, including the human body, are manifestations of will They are its sensible appearances Mind, the intellect, is likewise a product of will Will is an all-pervasive force everywhere exhibiting itself in struggle. Only its highest manifestation, the human being, is so constituted as to become conscious of its operation. It lies hidden beneath the multitude of its objective appearances and reveals itself alone to man in the consciousness of willing It is the cosmic force, the total reality, the true thing-in-itself.

There will be a world so long as there is will and only so long It reveals itself as phenomena, each phenomenon succeeding others according to uniform patterns or types These form an ascending scale from mineral to man Its highest and most intense form of expression is the will to live.

### 3 *The Will to Live*

Life means struggle, want, suffering, and pain. The higher the manifestations of will, the greater is the attending pain There is very little sense in plant life and therefore there is no pain In the lowest species of animals there is but a small degree of suffering It appears in large measure with the development of the complete nervous system of vertebrate animals It is always on the higher levels of the animal groups that pain is most intense, for it is here that greater intelligence resides As consciousness ascends in the scale of animal life, pain increases with it, reaching its greatest intensity in man Among men themselves the more intelligent suffer the most, and the man who is gifted with genius suffers most of all There can be no positive happiness in a world of constant strife, there can be only cessation of pain, which is a negative state.

The wise do not seek pleasure but only freedom from care. Those who are not wise constantly pursue the satisfaction of desire and want. But each satisfied desire gives rise to additional wants; the satisfaction of one leaves ten unsatisfied Such satisfaction is found to be incommensurate with the duration of the want which preceded it and the pain which the want put one to in order that it might be satisfied Even when we have obtained a degree of satisfaction, we become bored with our condition and ennui ensues, leading us to seek diversion which in turn creates new wants and therefore new suffering. There is no satisfying the demands of will, which feeds upon itself and grows stronger as we strive. Each success is the mother of new wants.

On the animal level the striving of will is wholly blind and planless. It is an urge to live, to feed, to procreate; an endless struggle and endless pain attend it. The same is true of man, but it is even worse upon the human level. There, too, are war and strife, intrigue and suffering. Men group together, struggle, and die—for what? Only in order to live, to enjoy, to satisfy want, to seek freedom from pain or privation. It is again the blind, pur-

poseless, irrational surge of the will to live It was this world that Dante had in mind when he wrote *The Divine Comedy* and he took all the materials with which he built his hell from the actual things of this world At the same time, he made a "very proper hell" out of it On the other hand, thought Schopenhauer, when Dante sought to describe heaven he was at a tremendous loss, for, though he sought to portray its delights in his best fashion, he was unable to find materials with which to construct it for he could find no examples in the world On the human level we set goals as objectives for our striving These always lie in the future In this respect we are worse off than the brutes for we can think and plan and thus increase our failures This impulse is strong in all men but strongest of all in youth, where striving still seems a joyous venture Maturity of thought should bring with it the realization that striving is the world's failure.

The will perpetuates itself through procreation and therefore this is one of the greatest of all evils That it is evil Schopenhauer believed demonstrated by the feeling of shame associated with sex He believed it far better for man not to have been born at all than to be born to carry on the blind surge of will However, once man is born, the problem of solving life's difficulties is confronted and must be faced in the interests of the best sort of life for the individual Somehow the source of pain must be attacked. The driving power of will must be quieted so that a state of freedom from it can result

### 4 *Salvation*

What can be done to still the urge of the will to live? How can one become free from its demands? The first answer to this might appear to be the obvious one of suicide If one ceases to live by his own hand, he thereby ceases to suffer since where there are no more wants there can be no more pain To this solution Schopenhauer could not subscribe The way out is not by suicide This procedure attacks the product of will, the phenomenon, the individual only, and does nothing to defeat the underlying surge of cosmic will This must be denied if true salvation is to be achieved. When we kill ourselves that which we seek to escape really remains untouched by our death We must not give up life, but rather give up the *desire* to live Ending one's life does nothing to will as it endures in the species Suicide is therefore "a vain and

foolish act" It is knowledge and the intellect which must finally utterly subordinate the will to them

Salvation may be partially achieved through art Momentarily the self may be forgotten in the act of contemplation Art strives to portray the eternal forms or patterns of will and thus transcends its particular manifestations Though art presents these universal forms or ideas through the medium of particulars, it is not the aim of art to offer photographic representations Rather it seeks to employ the particular as the means for conveying an understanding of the universal principles embodied in them An understanding of these ideas as art portrays them is derived through contemplation that searches behind the complex world of appearances to discover the types which find phenomenal expression in particular things Art is more eternal than things and from it a better understanding of the world is obtained It expresses universal qualities intuitively, failing in this it fails as art Of all art music ranks first as best able to achieve this end The enjoyment of art encourages a disinterestedness which for a time removes one from the strivings of will This is because, in contemplation, one forgets his particular self and becomes, momentarily at least, will-less The shortcomings of this mode of achieving peace are to be found in two facts first, that none but a few can accomplish the state of artistic contemplation, and, second, for those who can achieve it, it is but momentary and, once over, the old struggle and strife resume

The ideal goal of life may be in part achieved through morality Pity and sympathy are the highest virtues, both of them encouraged and practiced by Christianity By means of these a degree of negation of egoistic striving may be obtained Through them comes a measure of self-denial Basically all men are phenomena of the same source The differences between men are therefore phenomenal only and unimportant For this reason, I as a person should seek nothing for myself which others are denied Sympathy is the recognition of this likeness and fellow feeling is its consequence. Egotism is checked by recognizing the kindred reality of mankind and this is the contribution made by morality

Religion, too, has its influence The great truth of Christianity is that the world and man are evil and that there is need of salvation through renunciation This interpretation is still more firmly implanted in the world view of Buddhism. The other-worldliness of both Buddhism and early Christianity offers a superior way of

life Both of these religious philosophies are pessimistic and, in large measure, present the same interpretation of the world and man as that accepted by Schopenhauer.

The final answer to the problem of salvation is to be found in the realm of the intellect Will must be negated wholly through renouncing all struggle, and the possibility of the renunciation comes about through understanding the universe we live in Even denying egoistic impulses and desiring nothing that another cannot have, as morality teaches, leave room for the struggle of mankind to continue One must deny all the demands of objectified will arising in the form of our physical needs All desire, fear, envy, anger must cease their urging, then no pain of unfulfilled desire can ensue There must be recognition of the delusions of the world and of the futility attending their pursuit Indifference to them must be developed which will result in a calm peace of soul. For those who still feel the impulse to gratify want, there is little to commend this view, but to those who deny the will, all that the world has to offer is nothing

How is it possible to achieve this condition by means of the intellect? The answer to this is that the intellect, a product of will, recognizes the character of the latter, sees its blind striving and its results, and turns will against itself to overcome it. Occasionally when the will commands the intellect to function in its interest, as in remembering, the intellect refuses or resists. Strive as we may our memory fails us This opposition may with effort be made more complete until the intellect dominates the will At other times men do what is against the animal drive of will They risk their lives for their honor, they engage in hazardous ventures knowing that their lives are at stake. Here there is clearly an opposition between what man knows and what his will to live commands The latter may be sacrificed in the interests of the intellect Desire may thus be dampened by knowledge; impulse may undergo moderation Knowing the world we live in and understanding the relationships and the causes of events places us in a position to restrain activity Nothing reconciles us so thoroughly to the circumstances of existence as a clear knowledge of it This is achieved only through firsthand contact and study. Life cannot be learned secondhand.

This study of life is the root and stock of all philosophizing The kind of world a man lives in is determined mostly by himself.

Other people are not highly important and we must not be dependent upon their acts or thoughts Schopenhauer says, "A friend in need, is a friend indeed, is not a friend in deed, but only a borrower" We must discount, then, those values ordinarily believed to be derived from intercourse with humankind These are not necessary to the wise man We must become entirely self-sufficient in a chaotic, purposeless world The way out is the way of the comtemplator of life rather than the way of the intense liver of it.

Most men pursue wealth thinking it to be the means for obtaining all there is of the best in life, but this pursuit is usually attended by a lack of insight into the real uses of wealth Its proper employment is to enable man to achieve culture and wisdom, which may serve to defeat the blind striving of will What a man *is* is more important than what he *has* The usual seeking is for satisfaction of the senses Men want new adventures, and satisfying them results in increasing their desire for more. The end of such striving is frequently dulled sensitivities and a state of increasing ennui. Only if culture and knowledge are the objects of wealth can it serve in the interest of achieving a state of calm serenity that will lift one above the strife of the world One escapes by understanding instead of desiring things This means we must cultivate a comprehension of things in the world freed from any personal interest in them It is an objective point of view which must be substituted for a subjective one. When this state is achieved, it is painless because it is free from all want and desire.

A state of complete objectivity Schopenhauer called *genius* This means the capacity to lose consciousness or awareness of one's individuality This is a state which, we may remark in passing, Schopenhauer believed woman incapable of achieving. Genius means capacity to deny one's wishes, aims, and interests, the product being a view of the world that is uncolored and unbiased From the standpoint of pure contemplation, all things fall into their proper places and thus are known in proper perspective. This ability to achieve an objective, contemplative point of view sets the genius off from his fellow men. He does not need people any more than he needs the things men ordinarily strive to enjoy The sociable man is prone to egoism and vulgarity There is also a close affiliation between genius and madness, so marked is the difference between the genius and the ordinary man. Few people, however, are given the quality of genius, and those who have it

more and more are sundered from the rest of mankind by the fact Though this would seem to be the very last step on the road to salvation, it is in reality the next to the last To achieve a state of will-lessness as in the case of the genius is yet a condition affecting only the individual The world will lives on in succeeding generations To defeat it ultimately must entail the complete eradication of life

On the animal level the strongest perpetuating force is reproduction, and this is true of man as it is true of the lowest of the animals In this activity will as objectified in woman sets a clever snare for man The beauty and charm of women becloud his intellect, he is lured into marrying them and fathering their children This happens mostly before men have aged enough to understand the true significance of the circumstances, and if they ever do come to realize it, it is then too late

> It is only a man whose intellect is clouded by his sexual impulse that could give the name of the *fair sex* to that undersized, narrow-shouldered broad-hipped, and short-legged race, for the whole beauty of the sex is bound up with this impulse "[1]

The wisdom of life alone can combat this unfortunate circumstance

All life is blind striving that swings upon an eternal pendulum between pain and ennui

> As want is the scourge of the people, so ennui is that of the fashionable world In middle class life ennui is represented by the Sunday, and want by the six week-days [2]

The realization of this condition will prompt the intelligent man to take steps to defeat it The best that the genius can do ordinarily is to retire from life, denying its promptings He will do nothing to add to the misery of life by bringing new life into it The final solution must be the stopping of all life, the stilling of the most powerful drive of will which leads to racial reproduction

For the one whose intellect has guided his will, his state is one of complete self-negation In this condition no tumult of desires prevails, all things become indifferent to him, for he is the spectator only of all things This asceticism is cultivated with no thought of its being a means to an end here or hereafter It is

[1] Schopenhauer, Arthur, *Essay on Women*

[2] Schopenhauer, Arthur, *The World as Will and Idea, Book IV*, p 404. By permission of Kegan Paul, Trench, Trübner & Co Ltd , London

itself the end, resulting inevitably when the urge to gratify the promptings of will has died Though this condition is usually achieved only by those with deep religious convictions, as in the case of the Christian mystics and Buddhists, it is possible for the man who is not a saint By understanding the world one may achieve freedom from it This state of freedom may be otherwise described as a condition of calm and resigned imperturbability

Although the intellect is the way of salvation, feeling lies at the core of Schopenhauer's thought The world was interpreted by him in terms of his own experience and his personal reactions to it These reactions were always those of an individualist, one intensely conscious that his own desires one by one found no avenue of satisfaction In his own struggle for recognition, in his craving to satisfy an insatiable ego, he saw the drama of all existence unfolded His disappointments he read largely upon the face of nature in its strife, its misery, its ugliness, its eternal seeking without apparent rest At finding and describing these circumstances of existence he became a master He shook to its foundations the edifice of optimism With more glowing terms than Leibnitz could find to describe the "best of possible worlds," Schopenhauer painted word masterpieces descriptive of the "worst of possible worlds" No simpering sentimentality found place in his final estimate of the world and life upon it The presence of evil therein he depicted in the clearest light of biased perception He made it shine from a thousand facets, and the world will not soon forget Those who read him may not like him, but none can read and forget that dark world specter of will he sketches If there is place for sweetness and beauty and optimism in the world, it must ever be that there is place for bitterness and ugliness and pessimism, too

## 5 *Later Pessimism*

The modern tradition of philosophic pessimism was carried on after Schopenhauer by Eduard von Hartmann His work is somewhat of a combination of ideas formerly expressed by Schopenhauer, Hegel, and Schelling In the main he followed Schopenhauer in his ultimate evaluation of life and the world in which it is found Fundamentally he was a pessimist so far as theory is concerned, though practically there are elements of optimism in his view It was his opinion that the world force which had been

discussed by his predecessors had been given in each instance a lopsided role. In the instance of Hegel reality was considered to be too rational, in the case of Schopenhauer too much emphasis had been placed upon the function of will According to von Hartmann these views are in part both correct in that it is necessary to interpret the world as both will and idea Though Schopenhauer had expressed this thought in the opening sentence of his famous treatise, nonetheless he subordinated the idea or reason to the will The Hegelian interpretation failed to give sufficient place to the function of will It is possible to interpret the world adequately only if both will and idea are given a substantial place in the scheme of things One cannot be subordinated to the other or derived from it

To effect this relationship as he conceived it, von Hartmann made use of a familiar concept taken presumably from Schelling that underlying both will and idea is a more ultimate reality which has given rise to both in the course of world development This underlying principle he called The Unconscious In the beginning of things The Unconscious reveals itself in a world process as unconscious will This finds expression ultimately in plant, animal, and human life Upon the human level that which was unconscious becomes conscious and idea emerges Ultimately the human being becomes aware of himself and the world in which he lives.

His immediate reaction to it is to presume that he may obtain from life certain blessings and happiness. As experience continues the individual discovers that this is but an illusion and his next move is to construct for himself a fresh illusion, which would have it that, though well-being is not to be achieved in a single lifetime, rewards for the properly lived life will be had in another world after death Thus religion is born, and for those who do not pursue the problem further this remains for them the ideal of life One who investigates further discovers in due course that this future life is but an illusion too, and the individual returns, as it were, to his mundane life to seek therein the satisfactions which he craves. Aware of the impossibility of deriving ultimate satisfaction in a single lifetime, he creates a third illusion, in which he conceives that in some distant age of human existence an ideal form of life will arise However, to those who still persist it is discovered ultimately that this too is actually an illusion and that

there is no possibility for obtaining pleasure and satisfaction in the world of which man finally becomes conscious At this point arises a philosophical affirmation of pessimism According to von Hartmann's way of thinking, the initial error was made, if it may be called such, when The Unconscious became first will and then idea and in this manner produced the world It would have been far better considering results if this had never occurred at all and The Unconscious had remained unconscious Though the pain and privations of the world outweigh its pleasure and benefits, it is nonetheless the best possible world This, however, is to say nothing in its favor, as Leibnitz had supposed.

With the progression of civilization, during which the world becomes more and more complex for the individual, there is less and less opportunity for him to obtain satisfaction from life His wants increase and his ability to satisfy them decreases Salvation is not to be found in renunciation, as Schopenhauer thought, but rather it is to be found in plunging boldly into the activity of living No partial steps will suffice Only through suffering will it be possible ever to overcome the initial mistake through which the world came into being That which came into being as a product of blind will, that which became conscious, must itself aid in the process of the ultimate denial of the will to exist It remains for each individual to accept as his duty the experiencing of a certain amount of suffering in order that in the distant future existence itself shall cease to be and the world will once more return to its original state of unconsciousness.

Whatever may be said in defense of this philosophical apology of pessimism, the conclusions von Hartmann drew are clear enough. The world is a bad place in which to be, for it will not give to the individual the goods he craves Furthermore, there is very little he can do about it, it would seem, except live life, accepting its discomforts and pain with the best grace possible, consoling himself that ultimately things will not be as they are The view therefore is not particularly a hopeful one

The tradition of pessimism since Schopenhauer and von Hartmann has been carried on chiefly outside the ranks of official philosophy. It has since their time obtained most of its support from the field of the natural scences. One of the strongest factors in this was the influence of the Darwinian theory. This gave somewhat of a scientific ground for belief in a cold, relentless, and

indifferent nature in which man is conceived to struggle as best he can toward no particular ends and no particular objectives other than those he himself is able to imagine. This naturalism, as the general point of view is called, has found its expression in many sources, among them notably the literature of the last half of the nineteenth century and the first part of the twentieth. Many writers have turned their attention to the problem of what man shall do in order to achieve a satisfactory life under circumstances that are completely indifferent to his desires A notable tradition in literature has emerged stressing determinism and pessimism From the deterministic standpoint the thought has emerged that nature proceeds wholly regulated by that which has preceded, and in the instance of human activities whatever a man does is mostly, if not altogether, a product of his own past

One view that has been suggested by the novelist James Branch Cabell is that man saves himself by creating an imaginary world into which he withdraws whenever actual living becomes intolerable By building illusions man is able to effect a partial escape from cosmic indifference One of the strongest illusions that Cabell comments upon is that of personal importance This attitude he throws into sharp contrast with the status of man as it would be viewed from a purely naturalistic point of view In one of his best known novels, *Jurgen*, this thought is brought out clearly Jurgen is sent by Merlin into a forest to see the Brown Man with the Queer Feet who is everything that was and is to be This man reveals a cosmic sight which causes Jurgen to comment in this fashion

> Were there a bit of truth in your silly puppetry this world of time and space and consciousness would be a bubble, a bubble which contained the sun and moon and high stars, and still was but a bubble in fermenting swill! I must go cleanse my mind of all this foulness You would have me believe that men, that all men who have ever lived or shall ever live hereafter, that even I am of no importance! Why, there would be no justice in any such arrangement, no justice anywhere! . You can kill me if you choose, but it is beyond your power to make me believe that there is no justice anywhere, and that I am unimportant For I would have you know that I am a monstrous clever fellow As for you, you are either a delusion or a god or a degraded Realist . . Still, I seem to detect in myself something which is permanent and rather fine What role that something is to enact after the death of my body, and upon what stage, I cannot guess . There is something in Jurgen far too admirable for any intelligent arbiter ever to fling into the dust heap I am, if nothing else, a monstrous clever fellow . . . I believe I can contrive some trick to cheat oblivion when the need arises

The Brown Man answers:

Now, but before a fool's opinion of himself, the Gods are powerless Oh, yes, and envious, too[1]

Another interpretation of the plight of a human being in a completely indifferent world is found in a brief passage from Ernest Hemingway's *A Farewell to Arms* He says in one place [2]

If people bring so much courage to this world the world has to kill them to break them, so of course it kills them The world breaks every one and afterwards many are strong at the broken places But those that will not break it kills It kills the very good and the very gentle and the very brave impartially If you are none of these you can be sure it will kill you too but there will be no special hurry.

A good picture of nature as a planless arrangement of events is to be found in Edna St Vincent Millay's "Interim".[3]

I see the universe unrolled
Before me like a scroll and read thereon
Chaos and Doom, where helpless planets whirl
Dizzily round and round and round and round,
Like tops across a table, gathering speed
With every spin, to waver on the edge
One instant—looking over—and the next
To shudder and lurch forward out of sight

One of the best modern poets expressing the pessimistic tone is Edwin Arlington Robinson, and we may complete our analysis of pessimism with two quotations from his work In "The Man Against the Sky"[4] he says

What have we seen beyond our sunset fires
That lights again the way by which we came?
Why pay we such a price, and one we give
So clamoringly, for each racked empty day
That leads one more last human hope away,
As quiet fiends would lead past our crazed eyes
Our children to an unseen sacrifice?
If after all that we have lived and thought,
All comes to Nought—

[1] Chap XIX, storisende edition By permission of Robert M McBride & Company, publishers, and special permission of the author

[2] P 267 By permission of Charles Scribner's Sons, publishers

[3] From *Renascence and Other Poems*, published by Harper & Brothers Copyright 1917 by Edna St Vincent Millay Reprinted by permission of the auther

[4] By permission of The Macmillan Company, publishers

If there be nothing after Now,
And we be nothing anyhow,
And we know that—why live?
'Twere sure but weaklings' vain distress
To suffer dungeons where so many doors
Will open on the cold eternal shores
That look sheer down
To the dark tideless floods of Nothingness
Where all who know may drown

In another poem, "Ben Jonson Entertains a Man From Stratford" [1]

He flies, and flies, and flies,
And in his fly's mind has a brave appearance,
And then your spider gets him in her net,
And eats him out, and hangs him up to dry
That's Nature, the kind mother of us all
And then your slattern housemaid swings her broom,
And where's your spider? And that's Nature, also
It's Nature, and it's Nothing It's all Nothing
It's all a world where bugs and emperors
Go singularly back to the same dust,
Each in his time, and the old, ordered stars
That sang together, Ben, will sing the same
Old stave tomorrow

## DISCUSSION TOPICS

1 In what respects did the events of Schopenhauer's life contribute to the growth of his pessimistic philosophy?

2 How do you interpret the statement of Schopenhauer, "The world is my idea"?

3 Give the gist of the philosophical argument by means of which he sought to justify a pessimistic view of life?

4 In what respect does the philosophy of Schopenhauer show the influence of Oriental philosophy?

5 Describe the world we live in as viewed by Schopenhauer How do you like the view personally? How would you go about offering criticisms of it?

6 In a world as bad as he conceived it, how did he propose to solve the problem of individual existence? Do you think his analysis of one's aesthetic experience satisfactory?

7 What did Schopenhauer mean by the term *genius*?

8 Show how von Hartmann was related in his thinking to Hegel, Schopenhauer, and Schelling

[1] By permission of The Macmillan Company, publishers

9 How does his pessimistic view compare with that of Schopenhauer?

10 After looking up the word *naturalism*, explain why it is that both determinism and pessimism frequently attend it

## PARALLEL READINGS

DURANT, WILL *The Story of Philosophy*, Chap VII.
FULLER, B A G *History of Philosophy*, Vol II, Chap VIII, Sec 1
HOFFDING, HARALD *A History of Modern Philosophy*, Vol II, Book VIII, Part B
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Sec 38
THILLY, FRANK *A Student's History of Philosophy*, Sec 63
WEBER, A , & R B PERRY *A Student's History of Philosophy*, Sec 68

# Chapter XXIV

# POSITIVISM AND PRAGMATISM

## A THE POSITIVISTIC TRADITION

### 1 *Founding of Positivism Comte*

Positivism is a variety of naturalism that reasserts the empirical thesis that knowledge must be confined to the data of experience It is antimetaphysical in spirit and insists upon accepting the findings of science as ultimate knowledge Its chief object is to learn from nature the laws which describe the occurrence of events rather than to attempt the discovery, behind experience, of some hidden, unseen substance or force which purportedly gives rise to the phenomena observable by man The existence of such a substance cannot be demonstrated If substance is taken to be an existing reality, it must be recognized that such a conclusion rests upon an unprovable assumption It likewise raises the question of whether it is necessary to make that assumption in order for knowledge to be possible That science and therefore knowledge are possible without assuming the reality of substance is perhaps the most fundamental principle of positive philosophy.

Within the field of positivism there have been distinguished at least three general kinds, depending upon the amount of influence the knowing mind exerts in the process of research. The empirical variety of positivism, best represented by the founder, Comte, and Stuart Mill, asserts that descriptive law emerges in the course of investigating observable phenomena and is by those phenomena completely determined The mind may be assumed not to supply any of the content of natural law but is merely the recipient organ and is impelled by experience to organize the data of science under the form of laws. The economic type of positivism, best represented by Lange, Mach, and Poincaré, affirms the thesis that laws are, in part at least, the constructs of the mind and are determined in degree by the needs and nature of man. Mind therefore, according to this view, is not a passive organ but an active

one, at least in measure The third variety of positivism, known as the sociological type, is best represented by Durkheim The emphasis is here placed upon the problem of ascertaining scientifically the laws of the social order Though it is true that the other varieties likewise seek to understand society, the sociological positivists give the study of society a central place in their philosophy

Auguste Comte is recognized as the originator of the school of positivism He was influenced in the formation of his philosophical views chiefly by the events and attempts at social reformation following the disturbances of the French Revolution He was out of sympathy with all men who advocated a return to some past social form, believing that it is only in the future that the "Golden Age" will be found, and that, while no utopian view will be adequate, it is nonetheless possible so to organize society as to retain the best products of the past and provide avenues for future progress It is possible to do this, however, only if all mankind can be brought to a new point of view This must be dependent upon a new understanding of the place of man and a reevaluation of the world in which he lives The fundamental thought that guided Comte throughout was that of finding a new and stable basis for social reconstruction He believed that it is only by the application of scientific method and attitude to the problems of humanity that the latter may be elevated to its intrinsic height He rejected the proposal of his predecessor Saint-Simon that society should be organized on the basis of Christian socialism on the ground that this is a point of view that is outmoded and unworkable The new humanitarian state must be organized upon a unity of new ideas rather than upon old ones This general system of coherent ideas which Comte sought he believed could be obtained by adopting common ideals, such as those obtainable from a science of humanity, from sociology [1] All the materials for this procedure are to be found in science By tracing the development of science it is possible to show the manner in which the human mind has developed from childhood through adolescence to maturity so far as its thinking is concerned The maturity of thought already achieved in physical science is likewise possible in the departments of social sciences denoted by sociology

This belief led to Comte's formulation of "the law of the three stages" of thought through which the mind develops to

[1] The term *sociology* was coined by Comte

reach at last a final or positive stage The first stage he calls the theological or the fictive, and it is characterized chiefly by the tendency of man to explain nature by recourse to supernatural agencies or spirits believed to inhabit all nature This animistic view slowly developed through time into polytheism and culminated in monotheism. The view is essentially religious and superstitious It does not possess as part of its content the concept of natural law but looks upon nature as a concourse of events which is inspired by the capricious wills of unpredictable agents throughout nature There is at least throughout the period gradual development of the belief in the unity of nature, a belief shown in the culmination of the religious point of view in monotheism However, to the last there is a strong tendency toward anthropomorphic interpretation, which had to be corrected Man in the fictive stage tends to explain nature in terms of purposive activity He is inclined to regard the world as centering about himself and somehow for himself

The theological stage drew to a close when the mind in pursuit of knowledge outgrew it It had served its end and thought pushed beyond it to the second stage of its growth This stage is the metaphysical or abstract Nature is still explained in terms of hidden forces, but these are no longer personified, but are regarded instead as inanimate, all-pervading agencies There is no longer the notion that events occur capriciously, and the idea of necessary concurrence of events is introduced As knowledge increases there is less and less demand that all things be interpreted in terms of one's personal wishes or plans There is less of teleological explanation and more of a tendency to regard nature impersonally, even though it is regarded as activated by forces beyond human comprehension This stage of the growing mind is characterized by the search for substances having fixed properties which would account for the regularities observed in the world and for forces producing the observed effects but themselves not observable These concepts of substance and force, however, must be outgrown and rejected as explanatory principles on the ground that they are mere abstractions, supposed realities that never can be proved by any manner of investigation. If they can never get into experience as data but are such as to be assumed to exist by virtue of observed events, then there seems to be little ground for retaining them within the body of science It is not necessary to recognize

their existence in order to organize and use all the data of science. It remains, then, to confine attention to the empirical data of science and to confine the scientific effort to an organization of these data The program is that of discovering the general laws or principles under which lesser relationships, constant in nature, may be gathered together. Thus thorough and practical knowledge of the world in which we live is obtainable, unencumbered by unverifiable metaphysical assumptions

When this condition of development has been reached, it may be called the scientific or positive stage It is basically different from the metaphysical stage in that there is no effort to discover *why* things happen as they do, but only an effort to describe *how* events occur without assuming anything over and above the order of the given. The senses supply us with our experiences, which appear to be presented to us in sufficiently regular and uniform patterns that it is possible to organize them simply as experiences. This stage recognizes that any other procedure is perfectly superfluous to the scientific endeavor Relationships of succession and similarity which show themselves in the study of experience give to the scientist the necessary laws of prediction that afford him some degree of control over natural processes The inductive method used by science leads to the discovery of general rules and principles organized under empirical criteria, and these principles then may operate to guide and direct the application of knowledge to specific problems by deductive procedure. Knowledge is thus first of the a posteriori order, but, once obtained, further judgments are possible by a process of a priori reasoning based upon them Laws of nature derived in the manner outlined are not assumed to hold inevitably for all future events, but rather are descriptions of events as they have occurred and hypotheses about the manner in which events will likely continue to occur in the future As such, they are useful and practical and they avoid the stigma of dogmatism.

In the process of development from the fictive through the metaphysical to the positive stage, the several sciences have emerged as more or less distinct departments of knowledge. They have not emerged together, but rather one by one as freedom from nonpositive assumptions has been gained. In fact it is even doubtful that the first science to achieve positive status, mathematics, ever did pass through the theological stage Of the depart-

ments of knowledge, Comte distinguished six, mathematics, astronomy, physics, chemistry, biology, and sociology It is not necessary to assume that this classification is exhaustive though Comte believed it was The notable omission of psychology, called to our attention by Stuart Mill and Herbert Spencer, is accounted for by Comte's belief that that part of psychology which could not be classified under biology could certainly be classified as sociology Comte's basic design was to show that the sciences may be organized or classified upon the basis of four principles, complexity, dependence, order, and fatality That is, each of the six sciences is related to the others as either more or less complex, as emerging before or after, as more or less dependent, and as possessing a subject matter more or less completely self-determined Mathematics, for example, is the simplest or least complex of the sciences from the standpoint of its subject matter as well as being dependent upon none of the other sciences It is first in order of achieving positiveness, and the subject matter has most of the element of fatality in the sense that there is no comprehensive set of variables to disrupt the validity of its principles Each of the sciences is in turn dependent upon that which precedes it but, at the same time, cannot be reduced to it Thus, astronomy depends upon mathematics but is more than mathematics Likewise biology is dependent upon chemistry, physics, and, to a certain extent at least, mathematics, but again has a subject matter that is incapable of being reduced to those sciences With respect to the order of appearance, the most complex and the most dependent of the sciences appear last in the historical order, mathematics was first and sociology last With respect to the fourth classificatory method, that of fatality, it appears that the subject matter of sociology possesses a vast degree of unpredictability as compared to the subject matter of biology, chemistry, or any of the other sciences Predictability attends most completely the sciences that first achieve the positive stage and least of all the last

Comte believed that he himself had made a remarkable step forward in being the first to have described the positive stage of development in science and to have been the first to announce the latest and most important of the sciences to have reached the positive stage—sociology He included in this field ethics, logic, epistemology, in general the various philosophical disciplines These were to be developed, unified, and organized into a new

philosophy, a philosophy with its central emphasis upon mankind Sociology is the center and culminating point of the entire philosophy of Comte It is the science of all the sciences and the focal point, at least practically speaking, for all of them. Ultimately Comte became almost fanatical in his interpretation of the importance of sociology as the science of humanity He was inclined to regard humanity rather than human beings as the legitimate object of worship and through this medium he sought to combine science, philosophy, and religion all in one unified system of ideas On the basis of this unity of ideas, social reorganization will be possible and a new era may proceed out of the chaos of social disintegration which Comte saw everywhere about him as the aftermath of the history-making episodes of the last quarter of the eighteenth century in France

Sociology is thus seen to constitute the fundamental unity in the whole system of modern philosophy Comte believed that the necessary conditions making this possible were at hand while previously they were in process of formation Particularly the moral, religious, and intellectual achievements of early nineteenth century France were such as to be approached through the medium of scientific method. As the other sciences achieved the positive stage, the latest member of them was enabled to emerge from the obscurity of metaphysical, moral, and religious shibboleths that impeded in turn the development of each science Possessing the most complex and least fatalistic subject matter, positive sociology necessarily had to wait and depend upon the adequate organization of the other sciences, especially biology In this newest field of the sciences, it is proper to make humanity the object of study rather than man as an individual When the laws of humanity are obtained by scientific procedure and organized under universal theory, the resulting body of knowledge may act as the organizing agency for all the other sciences Each may be assigned its field, its function determined No universal metaphysical substance is sought as the organizing principle The best human achievement can produce is knowledge as it is available to man In this state it is bound to be variously relative rather than absolute Its highest synthesis is sociology, which depends upon the other sciences and at the same time is the organizer of them.

The study of human societies of a given time and place Comte designated "social statics", the study of societies through their

historical development he called "social dynamics" Each study reveals basic laws Social statics shows that societies organize on the basis of division of function, each function being intimately related to the others The resulting combination of effort gives the solidarity and form necessary for the existence of society The genetic study of society, which is the approach of social dynamics, indicates that the fundamental principle is progress, which means not necessarily improvement but rather progressive stages of development Society develops during time, building upon past achievements into an organization which is the product of its history yet by its progressive synthesis is something more than a mere sum of its parts It is irreducible to them, yet wholly dependent upon them in so far as its condition would have at any stage been impossible without antecedent developments This is essentially the meaning of Comte's "law of the three stages" Positive philosophy will pursue an ardent study of history and will find in it the struggle of humanity toward a perspective of the world that accepts it as it is experienced unencumbered by ideas that the past should have been other than it has been or that the future will or must conform to any preconceived ideal or form No period of history is less significant than that which preceded There are no "dark ages," for in each there is contained the indispensable elements of the next stage of social evolution The medieval period is superior to the "Golden Age" of Athens, for in it developed the spiritual and moral leadership and dominance of Catholic Christianity. Its chief defect was the encumbrance of uncritical systems of beliefs The positive stage having been attained, these dogmas will be cast aside.

Moral progress was a principal interest of Comte, for he saw in its clarification a means to the organization of positive society His ultimate contention was that man finds his highest good through service to others. Each man has natural inclinations toward egoism and altruism [1] In the past the egoistic impulse has necessarily been the stronger and finds expression in the manifold self-preservative activities so obvious on the animal or biological level of human development With the positive stage, society is able to allow and encourage expression of the altruistic side of human nature The moral problem becomes that of promoting the hitherto weaker aspect of man's nature over the stronger It is

[1] This term was coined by Comte.

a problem of achieving the ascendency of altruism over egoism rather than that of seeking eradication of the latter Both are natural features of human nature but the proper relationship is predominance of fellow feeling over self-feeling. The happiness of each is best found in the happiness of others As knowledge of our world becomes more abundant and people come to act with intelligence, this sort of morality automatically unfolds but it can do so only through the attainment of proper perspective Man is made for society and through social solidarity he finds his greatest good

Comte's positivism culminates in a religion of humanity. Humanity is a Great Being incorporating all men, past, present, and future. Man may find immortality through service, and, if his job is well done and he makes his mark upon the Great Being, he will live in its memory, revered by successive generations for the good he has done As a social being man lives an active life within the body of all humanity and after death is caught up in the continuous development of the spiritual life of humanity. The true object of reverence is humanity itself, and holidays should honor the memory of those who most vitally contributed to social progress Positive religion will forsake the worship of absolute perfection, goodness, the traditional deity, and substitute for it worship of an imperfect, relatively good, and developing humanity of which each man is a part and which is comprised of "more dead than living men."

## 2. *Empirical Positivism*

The basic elements of the several varieties of positivism are to be found in the philosophy of Comte and are really particular developments of certain phases of the founder's views The best representative of empirical positivism is the Englishman, John Stuart Mill, who belongs to the tradition of British empiricism begun by Bacon and continued through Hobbes, Locke, Berkeley, and Hume This accounts in part for his sympathetic attitude toward the general spirit of positivism, elements of which are apparent in the philosophy of Hume.

Mill was born in 1806, and, under the influence of his father, James Mill, became thoroughly acquainted with empirical ideals and with the association psychology which his father had done much to establish He also came under the influence of Jeremy

Bentham, whose efforts in the field of social reform made a lasting impression upon Mill, this influence being reflected chiefly in his well-known treatise, *Utilitarianism*. Before Mill ever came to read Saint-Simon and Comte, he was already in possession of the basic principles found also in the views of these men. He found Comte's ideas congenial to his own way of thinking and was led therefore to accept them. He looked upon Comte more as a co-worker than as a teacher. The points of agreement rested mostly upon adherence to empirical procedure and metaphysical agnosticism, together with an interest in social problems and a desire to limit knowledge to the field of phenomena. Mill disagreed chiefly with Comte's later views on the religion of humanity. Besides this Mill was less interested in developing a science of sociology and was more concerned with psychology, logic, and general ethical theory.

Mill is most famous for his book, *System of Logic*, in which he discusses at length the method of science and lays the foundation for a systematic statement of scientific induction. The method of science, according to Mill, may be summarized under the head of four inductive methods. These are known as the methods of agreement, difference, concomitant variations, and residues. The thesis of Mill was that, once these methods are carefully applied in the process of scientific study, the resulting product will be a body of principles empirically derived and capable of empirical verification, all of them descriptive of natural phenomena.

The method of agreement as a procedure of experimental inquiry concentrates attention upon the occurrence of events in conjunction. One of these events, regarded as cause, is found by experience to be followed in repeated instances by another event which is called its effect. The method urges the study of as many of these concurrences of event $A$, as cause, and event $B$, as effect, as are available. The object of the study is to discover as many constant factors occurring prior to the occurrence of $B$ as is possible. If, in the course of study, it is found that some events observed prior to $B$ are absent in some instances of $B$, it is legitimate to conclude that these desultory-appearing events cannot be the cause of event $B$. It is thus possible to eliminate as possible causes all events except those which invariably occur prior to the effect. The conclusion to be drawn from this procedure is that an event which is an invariable antecedent of $B$ *may* be significant as the

cause of it. This method, however, is distinctly a method of observation rather than experimentation, and the method of difference should be used in conjunction with it

The method of difference applies specifically to those situations wherein control is possible Taking the events which have been found to be the invariable antecedents of the effect, the method seeks, by a process of eliminating one of them at a time, to ascertain which one or ones, when eliminated, result in the elimination of the event or the effect under study. If antecedents *K*, *L*, *M*, and *N* have been found by the method of agreement to be the invariable antecedents of the effect, the method of difference may be able to prove that these are the *necessary* antecedents or it may establish the truth that only one or possibly two of them are the essential antecedents or causes If, by removing one of the antecedents under controlled conditions, the event still appears, that event which has been eliminated certainly cannot be the cause. If the removal of *K* as an antecedent of *B* always is followed by the disappearance of *B* and conversely is invariably followed when present by the appearance of *B*, then the relationship of cause and effect between *K* and *B* has been established That is to say, if the only difference between the presence or absence of *B* is the presence or absence of *K*, then *K* is the cause of *B* Under absolutely controlled conditions, the method of difference is thus able to establish conclusively a universal law of nature

In many instances, however, more is desired to be known about natural events than merely which event invariably and necessarily precedes another It is important to know *how much* of the one is needed to produce an alteration in the appearance or constitution of the other. This information may be derived, according to Mill, by applying the method of concomitant variations. This method seeks to ascertain what changes are induced in the effect when known changes are produced in the cause. It seeks to state this relationship in terms of a mathematical principle or formula By way of illustration examine the phenomenon of heat as caused by friction. The method of agreement and difference may establish that friction is invariably followed by the occurrence of heat, but we remain uninformed as to the amount of heat generated with various quantities of friction The method of concomitant variations is able to ascertain that, given an increase of *n* amount of friction, this will be followed by *m* as the increased amount of heat. By

this procedure it is possible to ascertain that the relationship between friction and heat is a constant one and that the amount of heat varies directly with the amount of friction This is what science has come to call a functional relationship. Otherwise stated, heat may be spoken of as the function of friction. It enables science to determine more precise relationships among natural phenomena

The method of residues applies to studies wherein the events under observation do not submit very readily to experimentation because of the complexities of their component parts If it is known that several events occur antecedently to the so-called effects, it is possible in some instances, by pairing off the known cause-and-effect relationships among these component parts, to have left as residue on both sides of the column events which now may be amenable to further investigation That is, the method advocates the elimination of connections between causes and effects which are already known Then, if certain aspects of the effect remain after these eliminations, it is clear that some of the antecedent factors remain yet to be discovered, or if there remains a residue of events as antecedents as well as a residue of components of the effect, the latter may be studied in terms of their relationship to those elements among the antecedents which yet remain. By the use of the four methods in conjunction, in so far as it is possible to do this, Mill maintained that the method of science is able to secure the most accurate and practical knowledge that is available The methods concern only the appearance of phenomena, they are directed toward the data of experience, and their findings are limited by those data No metaphysical presuppositions are involved, and no metaphysical proofs are sought Cause-and-effect relationships are presumed to be confined to the realm of experience only In this respect Mill clearly is in agreement with the general spirit of positivistic science.

Mill recognized that in scientific procedure assumptions were necessary in the process of guiding and directing investigation. Chief among these assumptions is the postulate of causality and the uniformity of nature He refused to recognize these as having an a priori ground and sought to explain them in terms of empirical foundations Assuming that events have causal relationships, he felt that every time an event was established as the cause of another, through the application of the methods outlined, simultaneously the principle of causality was itself further verified and

established The same attitude was held by him with respect to the principle of uniformity of nature He recognized the necessity for predicting the future on the basis of knowledge of the past but likewise recognized the limitations of inductive generalizations He leaned heavily toward the belief that the principles of causality and uniformity could be established beyond doubt as true principles For this he is frequently called to task by his critics. In another sense Mill regarded the principles as broad inductive generalizations under which lesser inductive generalizations might be organized. As inductive generalizations they possess the same limitations as the ones of lesser scope but through being constantly verified in the process of scientific endeavor, they assume an importance and support a degree of reliance that are not characteristic of other less comprehensive inductions In spite of this, it must be admitted that the argument tends to run in a circular direction He was inclined to start investigation with causality or uniformity as hypotheses or broad theories and at the same time to feel that with their use they became so sufficiently verified that they could be appealed to in the support of beliefs and principles relative to the future occurrence of events Laws of science depend upon the truth of causality and uniformity, and meanwhile the discovery of invariable laws of nature establishes the truth of both causality and uniformity

The fundamental logical and mathematical principles Mill believed capable of explanation in terms of empirical procedure For example, such repeated events as light and darkness, up and down, motion and rest, past and future, lend to the possibility of summarizing or generalizing these experiences in the form of basic laws In this manner we come, by experience, upon the most general of logical laws, such as contradiction, identity, and excluded middle The same is true of mathematical principles The geometer, for example, may assume that his propositions apply to real entities though as a matter of fact perfect triangles, squares, and circles nowhere exist in nature His propositions actually are directed toward these ideal entities, at least theoretically, and it is easily seen how ideas of such entities are derived from actual experiences of approximations of them found existing We may establish the rule that all parts of a circle are equidistant from its center simply by a process of making a leap from experience of approximations of this to an ideal definition Mill found no diffi-

culty then in explaining, in so far as it seemed to him that they needed explaining, all the principles basic to the most fundamental of the principles of thought, logic, and mathematics, on the basis of absolute empiricism

Empiricism is also able to explain adequately the belief common to mankind that there exists a world of things independently of perceivers The common-sense view holds that sensations had by the perceiver actually reveal a world outside Reflection, however, will show that this belief is not susceptible of verification We cannot verify or prove the existence of an external world though we can account adequately enough for our belief in it We possess memory of past occurrences similar at least to those experiences we are at the moment having We remember that a present sensation was attended in the past by a subsequent event We come to expect that the event now at hand will be followed by its normal attendant of the past simply because in the past these events have been so related We expect to have future experiences that are like the past and our memory enables us to make the transition from an experience of the present to an expected experience in the future The mistake of the naive reasoner is that of supposing that these experiences prove the existence of an external order That we come to form a belief in the existence of an external world in no way proves its existence We know only that associative principles, such as contiguity, cause and effect, and similarity, are found to hold among the phenomena of experience or among the ideas or sensations, which amounts to the same thing We are limited to a knowledge of the order of phenomena We are at the same time led to believe in an external world, especially since we have the feeling that we ourselves do not create the order and content of our personal experience It is an easy conclusion to draw that the order of events and their content exist in and hold for natural events belonging to an independent order The idea of a material world can be explained in terms of the projection of our experience outwardly and rests upon the reasoning that, because of their arbitrary nature, sensations occurring in us cannot be produced by the individual perceiver but have their origin in an external order We have no right to accept the existence of a material substratum as the support of qualities as something proved through experience There are no proofs available in the field of metaphysics We can only say of substance or matter that

it is the permanent possibility of sensations. Of its nature independent of our experience we can say absolutely nothing

The foregoing clearly establishes Mill as belonging to the positivistic tradition His agnostic metaphysical attitude prevents any effort on his part to indulge in speculations as to what lies beyond the given of sensations Phenomena supply the beginning and the end of scientific study It is the business of science to organize and systematize experience, ordering it according to empirical laws, and to judge phenomena in terms of empirical criteria In this procedure the mind of the student of nature plays no part as a determining agent in what shall be the content of science Empirical laws emerged from the study of nature and are limited by natural occurrences This aspect of Mill's philosophy marks him clearly as an empirical positivist, for empirical positivism means nothing more than that knowledge must be confined to the data of experience and that these data of experience shall furnish absolutely the entire content and organization of scientific knowledge

### 3 *Economic Positivism Lange, Mach, Poincaré*

Economic positivism has been sponsored chiefly by three well-known modern men Albert Lange, of Zurich and Marburg, author of *History of Materialism,* Ernst Mach, of Prague and Vienna, author of *The Science of Mechanics,* and Henri Poincaré, of Paris, author of a series of treatises on the method and significance of science published in the early years of the twentieth century The diverse strains of Lange's philosophy are the product of an effort to unite Kantian theory of knowledge with the general position of positivism The result is that positivism is given a turn in the direction of idealism and pragmatism That is to say, the position is defended that scientific procedure is not one wholly determined by the data of experience Instead, science exercises a selective function in the process that is determined in some degree at least by human needs or desires or tastes Observation and experiment never advance prior to the organization of hypotheses formulated to direct the activity Science seeks knowledge about *something* rather than about *anything* The thought that matured into economic positivism is found in the work of Lange along with many other not always consistent points of view.

Advance was made by Mach, who offered in his *Analysis of Sensations* a foundation for his work derived from the British

tradition, which specifically identified objects with their "phenomenal" or sense properties The line of demarcation between materialism, and idealism, is thus not drawn, and the position is taken that events or things are neither mental nor physical but in a sense are both, depending upon the analytical approach in the effort to organize them. The character of an event, therefore, can be declared neither to be wholly self-determined as held by empirical positivism nor formally determined after the fashion of Kantianism Scientific procedure is directed by the purposes of the sciences and limited by the capacities and nature of the knowing mind Science seeks to discover not the essential properties, or substance of things, but instead their interrelatedness Functional analysis proceeding from the application of the method of concomitant variations has as its end the mathematical expression of degrees of change occurring in a given event which follow upon alterations arising in some other one The traditional notion of causality which affirmed a metaphysical relationship, or at least a necessary connection between a cause and its effect, is given up Doubt is cast upon the contention that events as functions of others are wholly given during scientific investigation It is suggested that in part, at least, functional relations are the inventions of psychological needs which arise during the practice of living

Poincaré maintains that science incorporates a subjective element to an extent more marked than that claimed by Mach And it is significant to note that the opinion offered by Poincaré comes from one of the truly great mathematicians and physicists of the near contemporary period The scientist, it would appear, is presented with two phases of his discipline He is forced to verify his hypotheses and theories according to empirical experimentation and observation At the same time, the sort of hypotheses or general theories he formulates appear to be susceptible of some variation of statement In many instances the theory adopted by science is taken not for its greater truth but for its greater simplicity and more efficient application Of summations of investigations, more than one may be demonstrated to hold, that is, not violate empirical verification The principle of parsimony, itself subjective in origin, is allowed to rule out the more complex but equally "true" summaries That economy can be explained in no other way than in terms of human taste, which may be either merely practical or aesthetic or both Thus theories

may change with time though the "facts" remain unchanged The standards used as the bases of organized knowledge are arbitrarily chosen and are limited only by the events they are intended to systematize, and the entire discipline of science has its ear constantly to the ground of the rational and aesthetic demands of human living The data of science cannot be read off as the results of scientific method, as was believed by Francis Bacon at the beginning of modern empirical theory and as Mill argued much later The human mind is not wholly a passive agent in obtaining and organizing the content of knowledge, but, on the other hand, it is far from free to organize anything but that which experience offers

### 4 *The School of Sociological Positivism*

As the positivistic tradition continued through the nineteenth century from Comte, emphasis came more than ever to be placed upon society and the group mind This tendency has become perhaps the leading school of thought in French philosophy Its hope is to establish humanity, reflected in society, as an object of study and reverence distinct from, or at least more than, the individuals that make it up This movement numbers among its supporters Espinas, Durkheim, Tarde, and Lévy-Bruhl Though as individual thinkers their views differ, they show a common interest in seeking to establish sociology as a positive science A common idea is that society is something more than the sum of its parts, something over and above a mere stage of evolutionary development The faith placed in the expression of the group mind is somewhat reminiscent of that which Rousseau supported in *The Social Contract* Men like Durkheim, however, go much beyond Rousseau in their analysis of society as a body in its own right For them it is the point of reference for all human knowledge whatever its particular field, whether it is physical science, logic, religion, psychology, or social science The group mind achieves an impersonal, nonsubjective character that is superior to individual minds and acts as the directive force for the particular agents that comprise society. Humanity lives through generation after generation and accumulates with time the ripe fruit of experience that serves to guide each succeeding group of particular persons who make up its living body Because of this emphasis upon the overindividual character of society, plus the recognition of society's acting in

constraint of individual conduct and its imposing duties and responsibilities upon its citizens, there is a tendency for modern positivism to be vitally concerned with both religion and ethics This is especially true of Durkheim, less of the others, especially Tarde and Lévy-Bruhl Durkheim was first to introduce sociology into the university curriculum at Bordeaux in 1887. Tarde approaches social problems from a psychological and historical standpoint Lévy-Bruhl has taken up more of a philosophical-historical approach, particularly of the development of primitive societies

## B PRAGMATISM

By entering into a discussion of pragmatism it will be necessary to pass from the early decades of the nineteenth century to a period about one hundred years later There is really no direct influence of positivism upon the development of pragmatism, though in some respects the purpose and the results of each have points in common The reason for including pragmatism along with positivism lies chiefly in the fact of such similarities Both proceed upon principles of empiricism, both relegate metaphysics to a secondary place, both are interested in applied knowledge, both are definitely social-minded

The movement called pragmatism is one of the most, if not the most, important recent developments in the history of philosophy and it is identified chiefly with philosophy in the United States Those who have been instrumental in developing the main body and principles of this school have been influenced chiefly by two sources They belong with a considerable group of thinkers who revolted against the growing idealistic tradition that traced its origin chiefly to the work of Hegel Among the pragmatic group are likewise some who objected to certain claims made by the schools of realism Pragmatism, as a philosophy, has points in common with both realism and idealism in spite of the fact that in large measure its broad outlines are determined by its rejection of basic principles accepted by these two philosophical schools Pragmatism belongs in the main stream of British empiricism and in some respects is a continuance of the work of such men as Locke, Hume, and Mill The interests it has in common with the British tradition are psychological and logical, together with the fact that considerable emphasis is placed upon rather an agnostic attitude so far as metaphysics is concerned No single metaphysical view is accepted by

the pragmatists, and it is thought by some that the view does not demand that metaphysics be made an essential part of their philosophy.

The best known names in the development of pragmatic philosophy are William James, F C S Schiller, and John Dewey While these men have their particular interpretations, there is, at least on some of the underlying issues involved, considerable agreement. For purposes of this discussion the differences will be ignored and attention will be called to those features upon which pragmatists ordinarily agree The movement is, strictly speaking, a twentieth century development, though its roots go far back into the history of thought, even to the days of Heraclitus and Protagoras More recently it grew out of the work of Charles Pierce, who wrote in the latter quarter of the nineteenth century William James, who did more than any other single person to popularize this philosophy, accepted Pierce as the modern founder of the pragmatic view It became widely known in America and abroad, especially after the publication of James's two volumes, the first one called *The Will to Believe*, the second one, *Pragmatism* Since his day the pragmatic viewpoint has been carried on, especially by John Dewey in America and F C S Schiller in England

The main points of agreement among the members of this school can perhaps best be discovered by examining into the interpretations they reject. Though there is much in common with the empirical point of view of such a man as Stuart Mill, it is true that on two counts the pragmatist finds himself unable to accept the typical empirical interpretation of knowledge. He rejects completely the familiar association psychology begun by Locke and continued through Hume and the Mills The pragmatist does not believe that the elements of experience are given in isolated bits which only afterward become related To his way of thinking perception reveals to man situations as more or less complete and compact The activity of the mind in perception is analytic rather than synthetic in contrariety to the stand taken by the association psychologists The perception of an apple, for example, is not built up out of elements such as round, red, shiny, smooth, cool, etc , each given singly Rather these are given simultaneously, together with certain possible relations such as on-the-table or in-the-basket These elements emerge afterward in the process of analyzing the percept Once the sections of experience are received

the mind discovers the qualities which together go to make up what our experience of the object is The particular significance of this interpretation of perception for different pragmatists finds varied statement and need not concern this brief analysis.

The second disagreement with the associationists is with regard to the nature of mind itself From Descartes through Locke and the British tradition, the mind has been held to be passive during perception, its content being derived from sensation In this process the mind is not a factor in determining the *kind* of experience that one shall enjoy. It is wholly inactive and receives whatever impressions or ideas it comes to have wholly through the operation of the external environment upon the senses The pragmatist denies that the mind is a purely passive agent in perception, and in this, at least, he agrees with the idealist Contrary to the British tradition the mind must be recognized as intensely active, and this activity must be acknowledged if one is to arrive at a proper understanding of the nature of knowledge or the act of knowing. The mind acts as a selective agent in our experience Our interests, our purposes, our emotions, our beliefs—all of them determine in part what it is that shall be the substance of our experience At least, they determine the type of experience which we *can* have The pragmatist, however, will not go the full way with the idealist to assert that all things are dependent upon mind or are constituted by mind, but he agrees that the mind is an active agent and that what things are for us as individual perceivers is determined in part by that mental activity.

Another point of agreement within the pragmatic school has to do with the traditional tests for truth The empiricist has argued for a correspondence between ideas and things as the only adequate ground for determining the truth or falsity of a belief He argues that whatever we may have in the way of ideas or beliefs must be made to square with things as they are, that is, with reality Otherwise ideas or beliefs are worthless since they are untrue. Our ideas must be made to fit into or correspond to things as they are When our ideas change with experience, it is because we have found that this correspondence between belief and fact is wanting and necessity forces us to alter and change our beliefs accordingly. The pragmatist is prone to say of this view that, while it is the common-sense notion of how truth is determined, it is nonetheless an impossible test to apply The reason for this is that there is

involved an impossible comparison of the two things involved By the very nature of the situation, runs the argument, it is impossible for one ever to know that there is a one-to-one or even an approximate correspondence between idea and object, for the simple reason that it is impossible separately to know the idea on the one hand and the thing to which the idea is to correspond on the other On the face of it, it is absolutely impossible to know a thing or an object except as a knower can know it It is impossible, in other words, to know what a thing is in itself independently of all knowers If it were possible to know things as they are in themselves and at the same time to have ideas which could be compared with these independently existing things, then the correspondence theory would be applicable. But there would really be very little point in making the comparison for, since the perceiver knows the object immediately, there would be no need for forming beliefs about it which are either true or false.

The realist, who is prone to sponsor this type of theory, stands upon the principle that there is a world independently existing which man can know provided he gets into proper relationship with it It is this objective world which acts as the criterion for truth It is that which serves to give to his interpretation of the world the stability that is demanded of an adequate body of knowledge The pragmatist points out, however, that the realist is in a very difficult situation if he insists upon stating definitely the nature of a reality existing independently of the act of knowing The position is one recognized to be impossible if it is maintained that there is an existing world different in essence from knowledge of it Therefore it is necessary for the realist to assert that he is able to have a knowledge of the world and in so saying sets for himself his most fundamental epistemological problem, perception. It is from this general viewpoint that the correspondence theory is an outgrowth Knowledge is true of reality if ideas correspond to it.

The pragmatist also has an objection to the idealist's typical criterion of truth, coherence The things stressed by this theory are inner consistency and wholeness of knowledge This is particularly true of those forms of idealism which affirm the thesis that reality is a single, all-encompassing whole of things in touch with which man must get if he is to obtain truth The pragmatist is opposed to all views which would tend toward asserting that reality is a fixed, complete, and integrated totality He prefers to

regard all nature as essentially dynamic and changing, a condition wherein there may be progress, a forward-looking attitude, an opportunity for society to evolve toward higher levels of cultural achievement His contention is that in asserting the absoluteness of reality and, necessarily, the absoluteness of knowledge of it, there is proneness on the part of those who assert it to backward looking rather than forward looking The test of truth according to the idealist is to see how present beliefs fit into a scheme of knowledge which has accumulated and which purports to be true of reality New knowledge must cohere with other parts of knowledge accumulated to date In general, the pragmatist will agree that beliefs determined as true must fit in with other beliefs found true within the bounds of particular contexts, but he will not accept the fact of coherence as a *test* for truth.

He argues that the truth of beliefs must be determined entirely by the future What they do and how well they succeed are more significant than the mere fact of their fitting into a body of knowledge already possessed Their passport to the category of acceptable beliefs is determined by their function as practicable guides to successful action It is quite possible to develop coherent systems of beliefs all of which may be quite fanciful and useless as guiding principles for action The mere fact of a belief's cohering, fitting into this scheme, would, of course, be no ground for its being true That such systems of knowledge or such systems of truth may be developed is witnessed in the building of non-Euclidian geometries It is quite true, the pragmatist points out, that a belief may cohere perfectly with other *false* beliefs just as easily as it may cohere or fit in with other *true* beliefs, and, for that reason, coherence as such is no adequate test of truth at all. It is useful, and it has its place when it has been shown on other grounds that there are principles or beliefs which are sufficiently demonstrated or proved as to be accepted It is to this problem then that pragmatism comes rather directly, the problem of stating what is the ground or what is the criterion for true beliefs. Having rejected the traditional truth theories of realism and idealism, pragmatism has set for itself the development of a positive epistemology

Against the idealist the pragmatist insists that there is no absolute knowledge, since the idealist's concept of reality cannot be substantiated. In the place of absolute truth or absolutely true beliefs, it is necessary to substitute the concept of relative knowl-

edge, imperfect truths, knowledge that is partial rather than complete Knowledge, like living, involves growth and change It is essentially dynamic rather than static and must be made always to fit the needs of people as these needs arise under the existing conditions prevailing at the time Every belief may be regarded as a truth claim to be tested for truth or falsity in the course of experience. Before this clarification has taken place, every belief we have and act upon *claims* to be true As a belief it forms the groundwork of motivation In our behavior we act because we believe, and, were it the case that we possessed a belief known to be untrue, we would not certainly, if we desired success, act upon it It would seem to be the case, therefore, that the determination of the adequacy of a belief or a truth claim can be ascertained only in the course of experience, in the course of acting upon the supposition that the belief is true If we discover in our experience that the action directed by our beliefs is successful, if it obtains for us the goods or the values we anticipate, we regard the belief as adequate and true If, on the other hand, the action is unsuccessful and the objectives we foresaw are not realized, then we say of the belief that it was a false one. The test of truth, therefore, is not the correspondence of the belief to reality or the coherence of the belief with others, but the success or lack of success our conduct meets with when we act upon our beliefs Consequences determine the truth or the falsity of a belief In a general sense it may be said that a belief is true if it works. By that is meant no more than this that a belief is true if it directs our action in such fashion that it is successful in obtaining for us the goods we desire. It necessarily follows that knowledge can never be fixed and absolute under these conditions It must necessarily be relative to circumstances, to situations. It will be influenced by people's interests, and a belief that is truth today may not be true at all next year if the situations now and then have changed A new attitude must be taken toward beliefs, toward what has been called traditionally truth

A truth is something that is used It is an instrument or a tool There is nothing sacred about it, nothing final and lasting It is a human invention. It is a device which has been developed by man in the course of his experience, the object of it being to aid him in the practice of living Possessing knowledge gives man an added advantage over others who do not have it. It serves the purpose

of assisting him to live more completely and more satisfactorily It is a means to an end For this reason so long as a belief functions in this manner it is a true belief because it is a workable belief. If circumstances alter, if conditions vary and successful action no longer is possible when guided by a specific belief, then that belief is no longer true, and it is no longer true because it no longer works Knowledge must be accepted as a thing that is always more or less unfinished, something that is not merely discovered but rather something that is made, something that grows and changes with time Part, at least, of the change in it is dependent upon the individual, who also grows while he interacts with his environment, both physical and social

If it is granted that knowledge is determined by human purposes, interests, and values, it appears to be evident that knowledge must necessarily be as relative as human purposes and interests are various It likewise throws open the question of the nature of reality It is ordinarily supposed by philosophers that whatever is real is lasting and permanent, and, if knowledge ever is achieved with respect to it, that knowledge must necessarily be of a permanent and definite order It has already been noted that this claim is denied by the pragmatist Does it follow, therefore, that the pragmatist maintains that reality is of a nature to be constantly changing and to be as variable and indeterminate as the interests and purposes of men who live in the midst of it?

In general pragmatists do accept the thesis that there is no supporting evidence for the belief in an unchanging or static reality The leading ones, such as James and Dewey, incline to a pluralistic type of metaphysical theory in so far as they make any definite statements about their theories of reality There is a strong tendency toward an agnostic attitude which is the result, probably of the influence of the empirical tradition together with their reaction against the claim of the absolute idealists The view, however, necessarily involves some consideration of the metaphysical issue

It may be asked how it happens that one truth claim meets human needs better than another in the long run if somehow the more adequate truth claim does not fit more nearly the ultimate reality of things We may ask if we are not forced to accept one truth claim rather than another because the more adequate one better expresses the genuine nature and the truly existing relations of things The fact that there can be successful action at all would

seem to presuppose a world in which successful action is possible and that successful action therefore will reveal, in measure at least, a knowledge of that ultimate reality The pragmatist's answer to this in general is that truth claims achieve a degree of certainty with the duration of their use and with the testimony of the many who act upon them In this respect truth is merely a statement of probability and like all probabilities, as science discovers them, increases in certainty with the number of times it has been found capable of guiding man to successful action In the course of racial experience certain principles descriptive of successful action achieve a high degree of permanence or probability and make up the body of what is man's most permanent and reliable knowledge

Whatever the reality is that lies behind the world in which we live, it is certainly of the sort which permits of planned action There is nothing in the pragmatic view which would preclude the possibility of all reality's being either a changing or an unchanging order, a material or a nonmaterial order If it is assumed that reality is fixed in its nature, it is still quite possible to argue that in learning man proceeds gradually and that necessarily his knowledge or his beliefs will change in the course of time If it is more satisfying under these circumstances to argue that truth becomes more permanent as it more nearly approximates the real, the pragmatist cannot disprove the thesis though he may offer arguments to indicate that another viewpoint may be more fruitful in practice Even on this ground truth still remains that which will work If on the other hand reality changes and develops, it is of course necessary to conclude that knowledge of it, or knowledge of activity which will be successful or not successful in such a world, must necessarily change with it

A similar attitude may be taken with respect to theories which would affirm reality as spiritual or material. The point is that, whatever is assumed to be true of reality, the pragmatic stand is not jeopardized in any respect It is not chiefly interested in metaphysics at all but rather in the epistemological problem. It is more important in the eyes of the pragmatist to know what to do in order to achieve success in life than it is to know what is the ultimate nature of reality Especially is this true when there seem to be no adequate criteria for attaining to the latter ideal With respect to his attitude toward metaphysics, the pragmatist is seen to be somewhat akin in spirit to the movement which goes

under the name of positivism Both maintain that we must accept the world as experience reveals it to us, for this is the world in which we have to react successfully or unsuccessfully The organization of our knowledge concerning it is the most vital of the issues which confront us. Because of this the pragmatist is apt to be rather vitally interested in social movements Since he is interested in applying philosophy to practice, he is alive to the larger issues of practical social problems as well as to those which are of particular interest to the individual

## DISCUSSION TOPICS

1. What is the meaning of the term *positive* as used in the chapter?
2 Distinguish the varieties of positivism
3 Explain Comte's law of the three stages Why is this concept important in his philosophy?
4 According to what principles did Comte classify the sciences? Illustrate
5 What relationship is there between sociology and the general position of positivism?
6 How were the interests of Comte and Stuart Mill similar? In what ways were they different?
7 Describe Mill's inductive methods and indicate their significance for the scientific enterprise
8 Compare Mill's analysis of causation with those of Hume and Kant Do you think Mill's analysis is as significant as the other two?
9 Discuss the stands taken by Comte and Mill respective of the problem of substance
10 Discuss pragmatism's criticisms of the criteria of truth employed by realism and idealism
11 What are the status and use of beliefs according to pragmatism?
12 What is the pragmatist's interpretation of truth?
13 What is there in common between positivism and pragmatism?
14 In what respects are there agreement and disagreement between pragmatism and the British empirical tradition?
15 What is the general attitude of pragmatism toward problems of reality?

## PARALLEL READINGS

DURANT, WILL *The Story of Philosophy*, Chap XI, Parts II and III
HOFFDING, HARALD *A History of Modern Philosophy*, Vol II, Book IX, Part A, Chap II, and Part B, Chap II
JOAD, C E M *Introduction to Modern Philosophy*, Chap IV
LÉVY-BRUHL *History of Modern Philosophy in France*, Chap XIII
PERRY, R B *Philosophy of the Recent Past*, Part II, Secs 9–13, and Part IV, Sec 25
——— *Present Philosophical Tendencies*, Chap IX
ROGERS, A K *A Student's History of Philosophy*, 3d ed , Sec 39
——— *English and American Philosophy Since 1800*, Chap VII

# Chapter XXV

# PHILOSOPHY OF EVOLUTION

## 1. *Hypothetical Evolution*

The Pre-Socratics asked another question How did things originate?, and it is of importance for us to see that this question represents the first attempt to bring the study of *change in time* within the scope of scientific investigation [1]

Since his beginning, man has attempted to explain the *why* and *how* of himself and his world He has noticed changes occurring in his world and has tried to account for them, he has sought to formulate theories that would explain how he came to exist in the beginning and what is to happen to him in the end. This chapter will attempt a picture of some of the major philosophical speculations and theories that have concerned themselves with such explanations and have led to or been a part of the general scientific attitude of today To accomplish this objective it will be necessary to return for a time to the very beginning of Greek speculation

Though there is danger of reading too much importance into the hypotheses of early Greek thinkers, it has to be admitted that their concepts of the origin and development of man and living organisms form the beginnings of a history of evolution These highly speculative thoughts started a hypothesis that was to grow and ramify, to receive strength and clarification from many small and apparently insignificant sources until it graduated to the rank of a full-fledged theory in the work of Charles Darwin.

Gradually eluding the myth-stained fingers of Thales and the early Ionians, whose concept of life springing from Ocean is analogous to theories widely accepted today, the germ of evolution was given its fertilization by Anaximander Like Thales, Anaximander believed that living organisms sprang from the action of the sun on shallow sea water, but, unlike Thales, he believed that man himself was the result of lineal descent from other animals, beginning with fish In this concept of life springing from

[1] Teggart, Fredrick J , The Humanistic Study of Change in Time, *Journal of Philosophy*, Vol 23, No 12, p 310.

the "moist element" later philosophers were to join—Xenophanes and Anaxagoras Indeed, it was Xenophanes who attempted to explain the existence of fossils with the hypothesis that the sea at one time must have covered the earth Anaximander further reasoned that if the first human beings were like those of today none would have survived This thought incorporates two fundamental concepts of evolutionary theory, development and survival

In the writings of Heraclitus is found the first affirmation of the idea of a dynamic reality, a *flux* in which everything is *becoming* Empedocles must be accorded credit for having suggested that organisms originated by pure chance, though his chaos of heterogeneous organic parts seems rather like a caricature of what is generally known as chance variation It is likewise evident that he entertained some concept of natural selection, for he reasoned that the unfit among the organisms that chance produced must perforce die out Only those fortuitous combinations of parts which are adequate to meet environmental exigencies can survive

In the sense that he believed *nous* to be the original impulse that started an ever-growing, ever-widening series of changes, like the ripples in a pool, Anaxagoras had an evolutionary hypothesis This idea of a *primum mobile* carries on through Plato, until with Aristotle we find it an integral part of the first concept of an evolutionary chain from lower to higher organisms With Aristotle we reach the culmination of the Greek overtures to modern thought He based his argument for evolution on the continuity of nature's organic forms and by so doing made his greatest contribution to biological theory He was a systematizer who saw a life scale running from the lower, more simple forms to the higher, more complicated organisms, a scale on which the higher animals were represented by a progressive complication of sensory function Probably influenced by the earlier Greek philosophers, particularly Heraclitus, Aristotle conceived of this developmental movement in the field of social organization, science, and art as one that

> has already reached its goal times without number and has as often been compelled to ebb back to its starting point For secular catastrophes, repeated with immeasurable frequency, have laid the earth waste, destroyed the race of mankind down to a small remnant, and then allowed that race to rise anew and enter upon and retravel its ascending path of civilization again and again and again [1]

[1] Gomperz, Theodor, *Greek Thinkers*, Vol IV, p 126 By permission of Charles Scribner's Sons, publishers

Aristotle thus entertained a cosmic view of an advancing human race achieving its goal through a natural and teleological series of cycles Since he not only devised a system of classification of natural objects but also aligned them with his general metaphysical principles, Aristotle attained an eminent historical position for having paved the way for the development of biology as a *science*. Although it was an ideal system based on a guiding will, his writings do put forth a rather clear concept of the progress of evolution from the primordial mass to the specialized forms showing advancement toward perfection

Reaching the medieval period, however, we find that his influence was of much more dubious value [1] During the earlier Dark Ages, the writings of Aristotle were in Eastern custody When they came West in the early Middle Ages, they contained the influence of Arabian scientists and commentators While St Augustine and Gregory of Nyssa, as representatives of the most liberal of the Schoolmen, tended to accept with some charity certain of these naturalistic interpretations, the official church dogmatically refused to give any credit or recognition to the views and kept speculative thought within the limits of the orthodox and accepted beliefs No progress in evolutionary hypothesis was made within these confines Throughout the medieval period the Aristotelian emphasis on abiogenesis held sway over the minds of laymen and scientists alike, and it was not until two thousand years after Aristotle that the theory of spontaneous generation was finally attacked and destroyed by the pliant mind of Louis Pasteur

Reasons for the retardation of speculation during this period must include among them certain philosophical implications of the Aristotelian system Lack of speculative progress was in part due to acceptance of an ideal concept of evolution based on a guiding intelligence and subject to rigid, teleological laws This ideal concept developed under Scholasticism into an attitude of unquestioned obedience to authority that retarded the acceptance of evolution as a description of natural organic changes until the nineteenth century It was not until then that the world began to feel the full, cumulative effect of the preceding seventeenth and eighteenth centuries, the centuries that brought forth the thoughts of Bacon, Descartes, Leibnitz, Hume, and Kant.

[1] See Russell, Bertrand, *The Scientific Outlook*, p 42

These philosophers laid the foundations for a fruitful approach to the evolutionary problem. Bacon stressed the importance of an empirical and unprejudiced approach to the study of natural phenomena As a step toward a naturalistic explanation of the world, Descartes set forth the view that the physical world, excepting man, is through and through mechanical in structure and function The *Monadology* of Leibnitz later influenced the work of Buffon and Kant, and Leibnitz's presentation of the principles of *continuity* and *indiscernibles* showed a definite affinity for the basic principle of evolution.

All natural orders of beings present but a single chain, in which the different classes of animals, like so many rings, are so closely united that it is not possible either by observation or imagination to determine where one ends and the other begins [1]

Most important among the philosophers who bridged the past and future of evolutionary speculation is Immanuel Kant His work occurred during a period in which the findings of natural science had been to some extent popularized, and the layman's interest had been aroused by the clear and cleverly written *Histoire Naturelle* of Buffon Inspired by Buffon, Kant offered a theory that the world was formed by the coalescence of dust particles, an explanation utilizing mechanical laws As he proceeded, however, he accredited to the inhabiants of the lighter, outer planets, like Jupiter and Saturn, an intelligence of a higher order than man, and he attempted to substantiate this highly speculative hypothesis by Newtonian principles Kant's earlier position was based on the belief that all of nature is capable of being classed under the realm of natural causes, but in his later work he mirrors the influence both of Aristotle and of the Atomists [2] He divided all nature into the inorganic and the organic The inorganic was the first matter, the basic stuff subject to natural causes, the organic division was the domain of living things, a domain actively governed by teleological principles. Toward the close of the eighteenth century, influenced by the Enlightenment, Kant endeavored to amalgamate mechanism and teleology and to transcend the shortcomings of both. Impressed by the skepticism of Hume and convinced of the limitations of human knowledge, he advanced the thesis

[1] Osborn, H F, *From the Greeks to Darwin*, pp 142–143 By permission of Charles Scribner's Sons, publishers

[2] *Ibid*, pp 146–152.

that natural science cannot tell us what reality actually is. It can, however, he contended, tell us about phenomena and finds its true province in systematically developing our knowledge of appearances This attitude is in fundamental accord with the ideas of Bacon, Spinoza, Hume, and Buffon It was the latter who said that, although first causes must remain hidden, it is the duty of science to formulate the regular sequences of events through the comparison of natural phenomena.

During all this time the Christian belief in the fixity of species was still dominant Therefore, as his brilliantly styled and lucidly written *Natural History* progressed, Buffon found it increasingly difficult to maintain his position and yet remain within the good graces of the quick-tempered church By clever maneuvers, however, he did both and thus insured the continuance of his belief in the mutability of species. This belief that organisms change because of demanding environmental changes was taken up and incorporated into the doctrines of Erasmus Darwin and Jean de Lamarck, the latter originally a believer in the special creation of species Buffon's principle was interpreted by both of these men as giving support to the hypothesis of inheritance of acquired characteristics

In France, Lamarckian doctrines were violently opposed by Cuvier and his theory of *catastrophism*, a theory explaining fossil evidence by supposing a series of world catastrophies, each followed by special creation Although the hypotheses of Erasmus Darwin and Lamarck created attention, theologian dominance in England and Cuvier's influence in France prevented their general acceptance In his *Zoonomia* Erasmus Darwin made it clear that he accepted a theory of evolution old in time and resulting from natural causes He believed in an adaptive power in the organism to meet the new conditions of a changing environment, a power that is dependent upon the efforts of the organism itself Like Lamarck, Darwin believed that the results of these efforts to meet the new environment were transmitted to offspring through the medium of inheritance

In 1798 Thomas Robert Malthus' theory of population and principle of competition and survival were published in his *Essay on Population* The publicity it attained helped popularize concepts basic to evolutionary theory It was likewise true that the impetus of Hegel's philosophy had shifted the weight of eighteenth century

thought from reasonableness and utility to origin and history Thus the ground was well prepared for the widespread acceptance of Charles Darwin's *Origin of Species* In fact, substantially all the arguments advanced by Charles Darwin were variously extant in the minds and writings of men like Erasmus Darwin, Lamarck, Chambers, and Lyell.

While it is apparent that history indicates a strong tendency to link evolution with progress, it should be evident from the foregoing that the concept of progress is a preconceived idea dependent upon factors other than the discoveries of natural science No necessary connection exists between evolution and the idea of progress, even assuming the latter could be satisfactorily defined To argue that change means progress is to place an evaluation upon that which is in itself but a record of observed alterations of natural phenomena There is no necessity for identifying adaptation and progress, and if it is done, it should be remembered that what is involved is an evaluative judgment rather than a statement of fact

## 2 *Darwinian Evolution*

Charles Darwin, the grandson of Erasmus Darwin, was born in Shrewsbury in western England in 1809 Having completed two years of medical study at Edinburgh, he left to take up theology at Cambridge Here he was taught the theory of special creation At this time most of his work on natural science took place as extracurricular activity and more and more Darwin became drawn to this field Therefore, shortly after receiving his A B degree, he accepted an offer of a position as naturalist on the cartographical cruise of the *Beagle* Perhaps one of the greatest factors influencing Darwin toward the concept of his theory and toward shaping later views was a book which a friend had given him to read on the trip It was Lyell's *Principles of Geology* Such a picture of the eons of geological time came as a stimulating thought against the background of his training in sudden, special creation

During this trip, Darwin visited the Galapagos Islands and others harboring more or less endemic flora and fauna After five years of extensive collecting, intensive observation, and an almost constant seasickness, Darwin returned to spend the rest of his time arranging his collection and slowly developing the theory that carries his name Briefly, the theory incorporates four main

factors or principles (*a*) variation, (*b*) heredity, (*c*) the struggle for existence, (*d*) and natural selection These together he believed supply a natural explanation of the origin of species

As a result of chance, certain differences among the individual offspring of the same parents may manifest themselves These variations are preserved and transmitted by principles of heredity. But variation and heredity alone mean nothing in the scale of evolution unless they occur in conjunction with the principles of competitive struggle and resultant natural selection In the struggle for existence those organisms whose chance variations are least fitted for adaptation to prevailing conditions are destroyed and those individuals whose chance differences make them more able to meet the demands of the competitive struggle survive and reproduce in turn the variations that helped them survive

To illustrate, let us assume that storks in the dim reaches before man's history were birds with short, stubby legs If it chanced that one stork was born with legs somewhat longer than those of his fellows, that stork was enabled to strike boldly into deeper water and escape the intense competition for food taking place among his less fortunate brethren nearer the shore Thus the particular variation of longer legs would afford a better opportunity for survival during the struggle for existence This stork would in due course become the proud father of little storks whose legs, like those of their father, were longer Perhaps the second hatching, or the grandsons, would produce some individuals whose legs were even longer than those of the others If so, these would be even better fitted to secure food, survive, and pass on this characteristic of lengthy limbs to progeny Thus by natural selection the original, short-legged storks may be conceived to have gradually died out under the pressure of competition during which time the long-legged ones lived to take pride in their life-saving ungainliness

This statement is brief and in itself is not an explanation of the principles involved and a more careful scrutiny of them must be undertaken if they are to be clarified It is to be remembered meanwhile that the theory, in so far as it was developed by Darwin, is far from inclusive and has been much altered by later developments In considering the factors of Darwinism, one naturally asks How do these variations arise? Darwin did not pretend to be able to answer such a question Variations were brute facts the

cause of which is unknown Such variations, however, are basic to Darwin's evolution, and his idea was that capacity for variation is found within the germ plasm itself and that variation is governed by the laws of chance

The question of the inheritance of these variations brings up again the Lamarckian doctrine of acquired characteristics Prior to Darwin, the chief factors recognized in evolution as progressive were the Lamarckian theory of transmission of those characteristics gained by the individual effort of the organism and Buffon's theory of the transmission of characteristics impressed upon the organism by its environment Modifications of bodily structure or habit were believed to be impressed on the organism in the course of its individual life through (*a*) mutilations, (*b*) modifications brought about directly by the environment (Buffon and Saint-Hilaire), and (*c*) kinetogenesis or modification brought about indirectly through use and disuse of parts (Lamarck)

With Darwin, the theory of transmission of acquired characteristics was not entirely discarded In *Animals and Plants under Domestication* he suggested the possibility of a modification of Lamarck The theory of pangenesis was Darwin's explanation of heredity In this theory the cells of the body were supposed to throw off minute particles called *gemmules*, which migrated to the germ cells These particles were the guardians of heredity and collected until the germ cells contained representative gemmules from all parts of the body from which they originated Therefore, though the somatic or tissue cells are not in a direct line of Lamarck transmission, Darwin suggested they may influence the germ plasm in such a way as to create a tendency on the part of the germ cells to give rise to variations similar to the acquired modifications of the body cells. This theory of pangenesis was refuted and proved incorrect by Galton in 1875

The transmission of minor, minute variations occupied much of Darwin's attention Actually, he was aware of *single variations* or *sports*—those variations which we now call *mutations*—but the influence of Lyell together with the assumptions of the idea of progress led him to conclude that the minor, continuous fluctuations were much the more important. Turning his back upon discontinuous variations or mutations was possibly his major error The view that organisms can be affected by environmental conditions is generally accepted today However, the hypothesis

that these variations are inherited is at variance with the general conclusions of present-day science.

Attention has been directed to the chief factors recognized as progressive in evolution prior to Darwin. With Darwin the chief factor in progress became *natural selection* The element of Lamarckism which Darwin incorporated in his theory, however, formed one part of his own theory of natural selection Natural selection is a process by which, in nature, the sick, weak, or otherwise unfit are excluded from taking part in the propagation of their kind and are "selected" for oblivion

In artificial selection the breeder of plants or animals selects those characteristics which he desires and breeds them into the offspring. Just so does nature "select" for survival those organisms whose variations are useful and can be best adapted to a given environment. On the Madeira Islands there is a species of wingless beetles which Darwin used to illustrate the functioning of the principle of natural selection There are many more wingless beetles there than those with wings Darwin, however, was not concerned with the problem of how the wings were lost, though he admits the possibility of disuse as a minor contributing factor to the greater proportion of the wingless What he did point out is the fact that a strong wind blows over the islands and any beetle caught by it while essaying flight is blown over the ocean to a watery grave. Those beetles with defective wings, or without them at all, since they are unable to take to the air, have a better chance to survive A natural condition operates here as the selecting agent in the establishment of a wingless race of beetles

Darwin's natural selection presupposes variation, heredity, and struggle for existence This struggle for existence was based upon the doctrine of Malthus and Darwin laid great stress upon it Shortly after the publication of his *Origin of Species*, Herbert Spencer suggested that the term *survival of the fittest* be applied to the result of this weeding-out process and sometimes the term is now used interchangeably with natural selection It has been aptly pointed out by some critics that the members of a species that survive are not necessarily the fittest That is, in human evolution it is not always the intellectually or morally fittest or "highest" who survive Confusion arises from the ambiguity of the word *fit* Fitness in the Darwinian theory merely means that there exists an ability by means of which an organism escapes elimina-

tion in the struggle for existence The fact that he survives is proof only of his fitness to survive in the sense of his capacity to do so Fitness to survive as capacity must not be confused with fitness in the sense of moral propriety From the standpoint of ethical evaluation it is possible to argue that the fittest to survive the exigencies of the natural order are the least fit to occupy a place in a society of moral beings It is contended that those who, like Nietzsche or Thrasymachus of long ago, argue that physical fitness and moral fitness are identical fall victims of a glaring fallacy of ambiguity It has been suggested by some exponents of moral philosophy that evolutionary theory stands opposed to the development of enlightened moral action Those who make this claim, however, are guilty of assuming that the evolutionist is impelled by the logic of this theory to carry the categories of a biological theory over into the sphere of moral evaluation Few of those who have been leaders in propounding the evolutionary theory have taken this contention seriously Certainly neither Darwin nor Spencer believed that evolutionary theory stands opposed to morality.

Darwinism provided the foundations for a new approach to social theory, and, under the term *socioeconomic forces*, factors of the evolution theory have entered the field of sociology as agents influencing the so-called intrinsic forces of social change It suggested that the development of human societies might be explained wholly in terms of natural causes It affords a new point of departure in this domain by advancing the hypothesis that the origin, structure, and expansion of societies might be accounted for as products of the physical and psychological forces of evolutionary process. The dominant concept that entered sociology is the central concept of Darwinism, natural selection It suggested that group selection occurs continuously with individual selection In its normal context, personal rivalry in individual selection is both a psychological and a biological phenomenon, involving cooperation as well as competition In complex societies individual economic rivalry is personal rivalry directed toward economic ends It is determined by the capacity, temperament, and social feeling of the individual, and during the operation of these, in cooperation and competition, certain concepts of social and ethical features arise Personal rivalry comes to function under factors of social tradition and environmental circumstances, and it becomes clear

that the life of the individual cannot be understood merely in terms of biological struggle for existence

In group selection the competition tends to be between groups per se. As a result of competition economic types are created, while the applicability of economic laws must wait upon the outcome of group struggle and survival through struggle Economic rivalry, the competition between groups, is in some of its aspects also a biological struggle for existence, for it results in the extinction of some groups and the continuance of others. This struggle for existence is not biological in the sense of physical reproduction and heredity, however, since its results are conserved and handed down socially. Industrial corporate agencies have economic utility as a controlling end, yet, paradoxically, these industrial group rivalries give rise to rivalry between class organizations that are interested themselves in opposing types of economic utility designed to protect them It is this type of group rivalry that has largely supplanted personal rivalry in industry In the period immediately following Darwin's exposition of evolution, Herbert Spencer was one of the first to apply the categories of that biological theory to the sphere of sociology, thus paving the way for more widespread application of the concept of development

Although there were several conditions within the fields of science and philosophy which were conducive to the ready acceptance of Darwinism as a general theory, there were at the same time forces which saw in it an attack upon favorite concepts in the province of religion Strictly speaking, the theory was based upon purely natural grounds which left no place for assumptions of a teleological or religious character It taught that world and man had evolved from circumstances intrinsic to the natural order and entirely omitted the concept of creation from its account This seemed to the devout an open attack upon basic tenets of Christianity The attitude taken by many representatives of religious tradition was one which inferred from this either that the theory of evolution is wrong or that the Christian philosophy of history is wrong Since to such thinkers the latter was inconceivable, they launched a vigorous and heated protest against the theory.

Part of the cause of offense taken by the more fundamental upholders of the religious tradition is traceable to the work by Darwin, *The Descent of Man* To conceive man as a descendant of lowly forms of life by no means in the image of the creator seemed

obviously to demean man and at the same time to deny openly the story of creation as outlined in Genesis To many any view that would make God superfluous or deny the manifest destiny of all true believers was one than which there could be none worse The theory of evolution affirmed that the presence of man on the earth is a mere accident of nature attributable to the fact that he has, in the course of the ages, developed chance variations favorable to his survival in a natural order which in itself has neither rhyme nor reason It allows for no planned arrangement and provision for man's occupying a superior place by virtue of his having a divinely given soul It supplants teleology with mechanism and denies reality to anything that is not included in the order of nature It rejects revealed knowledge on the ground of its nonempirical origin, that it does not necessarily square with the results of scientific investigation In general it sets up a view of the world that gives no guaranty of those values dearest to the heart of the Christian In these one finds the chief causes of opposition to the Darwinian theory in the latter half of the nineteenth century The issue between religion and evolution has become much less intense with the twentieth century, and there has been an increasing number of churchmen who find little difficulty in reconciling the claims of both The reverberations have not wholly departed yet, and no longer ago than 1926 the issue was raised in the famous Dayton Monkey Trial in Tennessee [1] There are those within the field of the biological sciences who are not reconciled to the notion that the origin of species is entirely to be accounted for in terms of chance variation and natural selection To these thinkers variations appear to move in rather definite and fixed lines or trends They argue that the evidence of ancient forms of life fails to indicate any very obvious degree of random variations.

Since Darwin's time, evidence has been accumulated which shows that variations are more definite than used to be supposed The paleontologists, who work out a long series of fossils, bring forward cases of what looks like a steady progress in a definite direction. There is a striking absence of what one might call arrows shot at a venture [2]

Before leaving Darwin it is well to take note of the fact that much work has been done on the Darwinian idea of evolution

[1] Anderson, Paul, Sad Death of a Hero, *The American Mercury*, March, 1936

[2] Thomson, J A , *The Outline of Science*, Vol II, p 371 By permission of G P Putnam's Sons, publishers

since the *Origin of Species*. Many criticisms have been offered and weaknesses have been pointed out Most of the attempts that have been made to correct the theory have centered around the following issues· (*a*) Darwin took over and emphasized the early assumption· *natura non facit saltum*—nature makes no leaps It moves ahead slowly but definitely To this stand Huxley and many others have objected Huxley pointed out that much of life displays considerable stability instead of change, and that many of the changes that have taken place appear to indicate *natura facit saltum*—nature does take leaps (*b*) Darwin's natural selection may account for the continuance of certain variations, but it must select from those that already exist It cannot explain the origin of variations (*c*) His theory is limited to an explanation of the continuance of useful variations It in no way explains why the nonuseful or even harmful variations often continue to survive (*d*) Further, the theory must presume the occurrence of sufficiently numerous similar variations, otherwise minute and individual variations of the species would in all probability be eliminated or blotted out by interbreeding, regardless of their usefulness

The theory of evolution advocated today is Darwinism much modified by critical research, research in which there is to be found evidences of a struggle to escape the powerful influences of earlier assumptions concerning progress and patient change through time. What was done with Darwin's assumptions and theory immediately following this publication of the *Origin of Species* is seen in the effort of Herbert Spencer to transform them into a world-encompassing hypothesis of development.

### 3 *Cosmic Evolution Herbert Spencer*

The general evolutionary position expressed by Darwin, as we have seen, had been in process of preparation for many decades In the period immediately preceding publication of the *Origin of Species*, Herbert Spencer had been working upon the problem from what may be called the hypothetical approach He had arrived at the concept of cosmic development before publication of Darwin's work, and it was left therefore to Darwin to bolster up a point of view which had already been reached by him Spencer had arrived at the conclusion that new species originate naturally upon the ground of his fundamental postulate that any other than

natural origin is inconceivable This, it is clear, does not bear the support of empirical evidence that characterized the Darwinian view Darwin himself speaks of Spencer as his predecessor The significant difference between Spencer and Darwin is that the former saw in evolution the possibility of expanding the concept of development into a cosmic generalization whereas Darwin had conceived it to pertain strictly to the sphere of biology For Spencer evolution appeared to supply the means for uniting all the sciences into a single body He thus started out to write what he called his *synthetic philosophy.*

Spencer belongs substantially to the empirical tradition of Locke and Mill He likewise has much in common with the general position of positivism, particularly with the type sponsored by Comte, who claimed that the historical development of man culminates in society There are also elements to be found in common with Leibnitz and Kant Though he could not hold with the latter on the theory that all knowledge originates a priori, he nonetheless retained the thesis that, so far as the individual is concerned, at least some knowledge is a priori However, in so far as the experience of the race is concerned all knowledge is a posteriori This position marks him fundamentally as an empiricist, but one who sought a reconciliation between the two opposed views by giving a place to both a priori and a posteriori elements in knowledge Spencer likewise returned to the concept of an underlying substance such as that embraced by Locke and denied finally by Berkeley and Hume This underlying substance, which he felt necessary, he conceived to remain always unknown to man That it does exist he felt is indicated by the circumstances of experience It is an ingredient that is necessary yet remains forever hidden It may be remarked that Spencer believed that it is upon the ground of this belief in the reality of an unknown substance that both science and religion come to a common meeting ground, both of them affirming it

In so far as all knowledge is concerned, it is, in the last analysis, of phenomena only, and is thus confined entirely to the sphere of the sciences It is this kind of knowledge Spencer proposed to organize and to synthesize under the cosmic evolutionary principle. Much of the reasoning by means of which he arrived at these epistemological and metaphysical conclusions is based upon what he chose to call the *universal postulate* or ultimate criterion of

truth which may be stated in this way, that that is true the opposite of which is inconceivable He believed that this criterion helped correct the older empiricism which he interpreted to be without a sound criterion of knowledge, though it is evident that this acceptance of the rationalistic criterion of Descartes is itself vulnerable to all the criticism which may be brought against all claims for ultimacy of self-evident principles

As it has been stated, Spencer's avowed intent was to synthesize all knowledge under the universal principle of cosmic evolution This principle he formulated in this fashion

> Evolution is an integration of matter and concomitant dissipation of motion, during which the matter passes from an indefinite incoherent homogeneity to a definite coherent homogeneity and during which the retained motion undergoes a parallel transformation [1]

In the beginning of development chaos existed, a chaos of homogeneous material which in due course came, through the operation of forces acting upon it, into a state of organization The organization itself was conceived to contain within it elements of particular minor organizations themselves each undergoing its particular development At this stage heterogeneity reappears Through the process the tendency of development is always in the direction of greater order Particular organizations and differentiations come into relationships in the process one with another and thus become mutually influential Each thing or organism in the universe in this manner develops its own history reciprocally related to other things and other organisms in the growing order of nature Natural selection operates to consolidate those organizations which meet the demands of their surroundings The inadequate and incompetent are weeded out in the process The new comes into being through the hoarding and transmission of characteristics acquired in the process of change Ultimately the evolutionary process must achieve a state of equilibrium when all things are adapted to all other things But, so long as forces persist, changes must follow and such an equilibrium is thus ever subject to continued disturbances The forces making for harmony are opposed by forces which may ultimately disrupt it This reasoning led Spencer to conclude that the condition of order and equilibrium will give way finally to a period of dissolution resulting in a return to chaos The process

[1] Spencer, H, *First Principles*, Part II, Chap VII By permission of D Appleton-Century Company, Inc, publishers

will then repeat itself possibly indefinitely So far as the integrative aspect of cosmic change is concerned, its culmination is reached upon the human level Eons of racial experience at last bring into being a social order in which man finds his complete development in harmonious adjustment to the world about him

According to Spencer, society develops through history in somewhat the same fashion that an organism does in a briefer time So far as the individual organism is concerned, the parts of it go to make the whole and the parts are dependent upon the organization of the whole Society is also made of parts, but in this instance the organization itself depends entirely upon the parts and is intended wholly as a means for their welfare The goal of any society should be that of achieving for the individual the greatest amount of freedom possible This ideal is impossible of achievement in societies dominated by the military order In this state of affairs the individual is more or less completely subordinated to the will of the state, which has as its chief concern either its preservation from external forces which endanger it or its program of imperialistic expansion

The freedom which each individual deserves is possible only when the military society is replaced by the industrial In this society human energy is expended in the promotion of common interests, for it is seen that by this means the individual attains his own ends State coercion is replaced by voluntary action which aims at human betterment The state as an organization is in this fashion modified by its component parts, and the situation in this, the industrial state, is exactly the reverse of the condition which exists in the military order Ultimately the activities of individuals will aim not so much at production of goods for the purpose of sustaining their existence as at the actual enjoyment of the process of living This will find society completely evolved after centuries of development By sympathy and benevolence all men will be found working harmoniously together for the good of all There will be no conflict and external force will have ceased to operate as a restrictive agency in the lives of free men

All this is possible through alteration of human nature, which develops from a condition of basic egoism to that of altruism Social evolution will ultimately establish that kind of social order in which adaptation of each individual to his environment will be complete In this state man comes into the sphere of complete

happiness Thus the evolutionary process culminates in the good life, in turn the good life may be defined as complete adaptation. During this long process of achieving complete adaptation, all forces are to be conceived as relative only, rather than absolute. All concepts of right and wrong or good and bad must likewise, therefore, be relative to the people and the conditions of the societies which are thus in process of transition. During the long period of evolution from the military to the industrial society, from egoism to altruism, there gradually emerge conscience, fellow feeling, and social consciousness These are the precipitates of experience which comprise the basic ingredients of human nature They are the products of racial heritage acquired in the long history of social development and progress These ingredients are acquired through experience and transmitted to future generations through heredity and make up together what Spencer called racial experience, which is, in so far as the individual member of society is concerned, the a priori element of his experience.

Spencer was a firm believer in the individual and his freedom He was opposed to all artificial restrictions placed upon them by organized society As an economic theorist he was an advocate of laissez faire He had an optimistic faith in the power of nature to evolve the most desirable kind of life, provided not too much interference was met with in the process It would seem to be his thought that underlying the whole process of nature the force which generates the evolutionary process is in itself sufficiently intelligent to proceed in the direction of the best and fittest in the way of things that ultimately evolve He saw in the social practice of preserving the unfit by public agencies the possibility of grave danger Benevolence should be largely private in operation and nature must be allowed to take its course for the most part, so that in the end the struggle for existence may effect the survival of those best fitted to survive If too extensive a program of care for the incompetent is indulged, Spencer felt the processes of nature would be too much upset He was not, as it has already been mentioned, for this reason opposed to morality as it was commonly practiced nor did he conceive that morality was opposed to his fundamental hypothesis of cosmic evolution He did not believe that morality was opposed to the evolutionary process as contradictory to it. Along with Darwin he argued that morality is a natural product of social evolution and as such, of

course, cannot be accused of being either artificial or unnecessary This position applies, however, to the broad aspects of moral theory, and, since any given society is still in its relative rather than absolute condition of evolution, there is always danger that certain practices will be detrimental to the best interests of mankind in the long run

The highest good of man lies in achieving a state of complete equilibrium in the natural and social environment This condition is equivalent, according to Spencer, to the experience of pleasure Failure to adjust one's self to the environment makes for pain and for evil This statement of the hedonistic idea Spencer believed had the advantage of older hedonism by virtue of its possessing a scientific foundation He gave to hedonism a biological background by stating that the highest good is to live the most complete life, which in turn meant to live as a creature best adapted to his environment This procedure is somewhat characteristic of the position of general evolutionary moral theory The two concepts, good and adaptation, are linked together It is at this point that the theory is frequently attacked by its opponents

Besides the criticism mentioned in connection with the Darwinian position on the topic of the ambiguity of the term, *fit*, it has been likewise pointed out that there is an overemphasis placed upon the significance of *adaptation* According to some, to argue that to be good means to be well adapted involves the necessity of accepting the reality of a static environment. It is likewise pointed out that, if it is true that reality is dynamic, if it is true that the evolutionary process actually goes on, the ideal of adaptation is never possible of complete realization For those, too, who are interested in presenting an ethical theory which emphasizes the possibility of immediate achievement of a highest good, the evolution morality of Spencer contained little that was intriguing It is further pointed out that, while it may be that the life of the lower animals is lived most completely when they become fully adapted to the environment, this does not necessarily hold true for human beings The sponsors of this criticism are therefore apt to accuse the evolutionists of falling prey to the fallacy of false analogy. What may be the highest good for the lowest animals certainly need not be the best or highest good for man It is clear that he is advanced beyond the stage of animal existence so far as his mental and moral life is concerned It is therefore reasonable

to presume that the goal of his life must be found on levels higher than mere biological adaptation

It may be stated in general that the result of the work of Darwin and Spencer has been to make speculation more than ever conscious of the value of measuring all ideas, especially moral and social ideas, against the criteria of natural science, in so far as this is possible That the conclusions of these evolutionary thinkers are in any way final is obviously widely open to doubt, but at least their effort was consistent in this, that they endeavored to organize a moral theory based wholly upon naturalistic assumptions The whole position is metaphysically antiteleological It conceives man as part of a neutral world process and as such fastens upon him the necessity for finding in the world of infinite possibilities the means for achieving the values which make his life most complete Since Darwin and the early writings of Spencer, others have entered the arena of evolutionary speculation, some of them with a desire to correct the older Darwinian theory so far as the biological science is concerned Others have been interested in evolution more from a philosophical approach Of the former we may mention Hugo de Vries, Gregor Mendel, and Lloyd Morgan, of the latter we may mention Friedrich Nietzsche and Henri Bergson It will be the object of the following section to investigate briefly the role evolution was conceived to play in the development of Nietzsche's superman

### 4 *Superman Evolution Friedrich Nietzsche*

The early stages of Nietzsche's thought were influenced by Schopenhauer's conclusion that reality is *the will to live* For the latter, life, at least at the human level, consists of unceasing strife for goods and objectives which are unobtainable For this reason a pessimistic attitude toward life is the natural consequence Nietzsche gradually outgrew this pessimism and ultimately believed that a sounder analysis of life would alter the concept of *the will to live* to the *will to power—der Wille zur Macht* The strife that results from seeking greater and greater power must not be considered an evil but rather the source of supreme good Optimism rather than pessimism characterizes this revised estimate of life It is true that but few are able to realize abundance of power adequately, but those who can should be regarded most highly as the determiners of all knowledge and virtue

In striving for power the seekers of it should recognize that nature is wholly indifferent to all human objectives It is not to be believed that natural processes are either for or against one who seeks a greater possession of power. Only through self-advancement, ruthless egoism, abhorrence of the weak and the inferior, can power accrue to the seeker in a neutral world that changes according to natural law and is oblivious to human desires Teleology has no place in nature, and there is no benevolent power that one should look to for aid beyond whatever abilities one has and is able to exploit To attempt an organization of knowledge conceived to be lasting and final is likewise futile Man can achieve knowledge but it is always relative, never absolute It is purely relative to the aims and objectives of those who seek through nature to consummate their objectives And of all those who strive for a place in the world, the most worthy of respect and emulation are the ones who struggle to obtain a higher level of achievement through the acquisition of power

Evidence of power seeking is witnessed in the struggle for self-preservation in face of all obstacles But the impulse to self-preservation must be recognized as a means to the end, the super powerful man In nature, all things strive constantly to maintain and increase their superiority This would seem to be the most fundamental law of living things. All life is a struggle during which the strong overcome the weak Rather than believe struggle and self-perpetuation to be evils one should acclaim them as the sole means for achieving a higher state of being In this, Nietzsche felt that he had discovered the fundamental direction pointed by the processes of evolution. It is not from the standpoint of conscious purpose that nature takes its course, but rather it is a matter of fact that nature *does* move toward the production of higher and higher forms of life, the means being struggle resulting in the elimination of the weak and inferior while the strong survive Thus did Nietzsche place an evaluation upon what he conceived to be the results in fact of the evolutionary process

Man is the superior species among all animals, but there is no ground for believing that man in his present state is the goal of nature. There are striking differences among individuals of the species, some superior, some inferior If the superior man is to be developed, the strong must discontinue tolerating the existence of the inferior and the weak. The route to the superman is one of

struggle, war, pain, and suffering, from which the most powerful emerge as survivors. The weak must perish, life is like that. Evolution is a weeding-out process, an elimination of the unfit and the preservation of the fit The result is a natural aristocracy of the strong. Biologically, this more or less summarizes the course of life Nietzsche hastened to add that this is how it should be and thereby he indicated the institutions and ideas against which he launched his attack. He aligned himself against everything that seemed to be opposed to the will to power, all things which appear good to the average man· traditional morality, religion, humanitarianism, equalitarianism

Any moral code, he argued, is merely a set of devices the object of which is to serve as means for achieving ends. There is no absolute morality. Therefore it is necessary in the light of Nietzsche's newly defined objective to transvaluate all human values, to reverse their usual order Traditional morality is foremost among human institutions that must be scrutinized critically History reveals two competing types of moral codes, one which may be called the high, the other the low The former is the moral code of the ruling class, the dominant group, while the latter is the moral code of the ruled, of the class that is subject to control by the upper It has happened that in the history of Europe the moral code of the weak and depressed has become practically universal and is accepted by almost all as the *right* code For this we have to thank the Jews, whose slave morality emerged as a reaction against the master morality of those who dominated them They have fixed upon European civilization the conviction that all who are lowly, weak, and incompetent are the godlike while the strong, the virile, the healthy are bad All this must be changed and once more the morality of the master be reinstated. All traditional morality must be looked upon as evil, as a slave morality It is one of pity, commiseration, self-denial, and, to the mind of Nietzsche, the "most sinister development in the history of European civilization"

The morality of the debased and helpless is opposed to the development of the power-seeking man because it keeps alive and fosters inferior and incompetent men instead of sanctioning their elimination It urges peace and contentment instead of war, egoism, hatred, and power It places a premium upon mediocrity and equality. Its influence may be traced to the cunning and

the numbers of those who foster it together with the propensity of the higher class to adopt superstitious fears of the supernatural, fear of the god of pity which induces the strong to be weak and the weak to prosper at their expense It fosters the feeling of sinfulness and attaches it to those very impulses which further the cause of the superman—all of the strong dominating power-seeking human activities This perversion of superman values has been going on for over two thousand years To alter it, to reevaluate human values and human institutions, presents a formidable task, but one the completion of which is essential to the future welfare of the whole human race The new morality will stress hate, anger, revenge, egoism, bravery, strength, arrogance, cruelty, unscrupulousness as virtues, for by means of these the superman will emerge from the struggle

Bad may be defined as all that comes of weakness together with the experience of fellow suffering, of pity that attends the observation of weakness Good is "all that heightens in man the feeling of power, the desire for power itself" Happiness comes only upon realizing that our power increases Joy follows upon awareness that humanity is being bettered by the urge of power —power that overrides the weak and inferior Each must lend his hand to the task of improving the race of men in order to make way for the ultimate emergence of the superman To achieve this end we must live strongly, dangerously

Since the slave morality is so closely united with religion it inevitably follows that Nietzsche's attack would be leveled against that form of it most familiar to Europe—Christianity He criticized Christianity because he believed it to be a debilitating influence upon the will to power He held that "everything strong, brave, domineering, and powerful" had been eliminated from it Thus it fosters feebleness, weakness, humility, sympathy, and elevates these to the highest good The God of Christianity is one for the poor and the humble, the weak, rather than the powerful The strong do not admire pity It has never been a pagan virtue and its origin must be laid to the originators of Christianity For Nietzsche, "God is dead of his pity for man hath God died."

Nietzsche's campaign is resumed, much in the same spirit, against all political theory and practice that favor concepts of equality He is an opponent therefore of all forms of socialism and democracy All ideals of liberty, equality, justice, humani-

tarianism oppose the development of the superman The only political law that has just claim to human allegiance is that of the strong, the only government that of the powerful despot The current European state is the "coldest of monsters" Its objective is to obtain political and economic power instead of creating the superman Its leadership is most frequently determined by birth or by election, and, though its pretense is to represent the interests of the people, this is generally untrue and in such instances as it may be true it promotes the welfare of the average and inferior man Nationalism is not the means to superman development, and for this reason the political aspirations of all European powers are narrow-minded and beside the point Instead of encouraging the intense nationalism typical of the nineteenth century, it should be the objective of the nations of Europe to consolidate European cosmopolitanism should supersede narrow nationalism with the objective of preserving the solidest virtues of diverse peoples Strife among petty nations should cease Nationalism is not a natural institution but is one that has been forced upon people by ambitious families or interested groups It is necessary to substitute for nationalism a supernationalism Only by selecting out the best talents of many races of people will it be possible to preserve those qualities most suitable for the development of the superman

Germany must not be looked to as the proper social model. This Nietzsche made clear following the Franco-German War of 1870 He maintained it was not for the good that Germany won, for her objectives were nationalistic and her vision myopic There were far too much politics and too many petty objectives involved in the fruits of victory

> Deutschland, Deutschland, uber alles The silliest watchward that has ever been given out And why Germany, I pray you, if she does not wish, does not represent something higher in value than that any other power, up to now, represents? By itself, this is nothing less than one big country, one big stupidity, more in the world

Nietzsche opposed German anti-Semitism as vigorously as he opposed German nationalism He believed that this unfortunate attitude on the part of the German people was based upon bigotry and a shortsighted estimate of the values intrinsic to national groups He had, however, no love for the Jews but believed that credit must be given where it is due Although he blamed the Jews

for originating the slave morality that has come to be fixed upon Europe, he considered them a very old, strong, and pure human stock. He believed that they had produced two of the greatest men that the world has ever known and the most widely read book that ever has been produced The men he thus honored were Jesus and Spinoza, and the book, the Bible. The reason for German persecution of the Jews must be laid to the fact that Germans cannot forgive the Jews for being both intelligent and wealthy It is apropos in this day of strife and prevalence of anti-Semitism in Germany that we should note the attitude expressed by one of Germany's cultural giants

If it is not to be wholesale national hatred among people, what procedure is best to create the superman? Nietzsche's answer is racial crossbreeding to combine the desirable talents of all national groups He much admired the German staunchness, the strength and energy of Russians, Jewish wit, intelligence, and cleverness Such qualities as these must combine with others to constitute the future superman. All agencies which would seek to suppress them or make their preservation impossible must be discouraged and ultimately eliminated Important as heredity is and useful as an effective eugenics program may be in weeding out the inferior, it must constantly be held in mind that education and training are in all probability more significant and important However, it must be education of the right sort, education that will teach the true values of life and not prostitute itself to the work of perpetuating the morality of the masses For this reason education along with morality, religion, and politics must undergo revision and alteration to meet new conditions and altered objectives

But what beyond the superman? Is it a super superman and does this go on *ad infinitum*? No Ultimately, nature travels in a circular path The end meets the beginning and the process begins again to repeat itself step by step through the tedious epochs of human history until another Germany, another Nietzsche, another ascent to the superman Eternal recurrence is the cosmic law. It requires a stout heart to face the prospect of eternal recurrence, to know that all will be repeated over and over again None but the brave, the strong, the powerful can be reconciled to it.

### 5 *Later Evolutionary Theory*

The general principles of the biological theory of evolution have, with the twentieth century, become pretty much common-

place properties of the life sciences No reputable scientist of the present day rejects the broad outlines of the theory, though there is considerable diversity of opinion upon the nature of ultimate conclusions to be drawn from it Likewise there has been much debate particularly upon the problem of the cause of variations among individuals of species and upon the problem of the manner of transmission of characteristics from parent to offspring. These issues have served to shed much light upon the data of psychology as well as upon that of biology itself That they concern the structure and organization of the world we live in makes such problems of philosophical concern as well

During the latter half of the nineteenth century controversy waxed warmly over the question of the inheritance of acquired characteristics To many of the early evolutionists, including Erasmus Darwin, Lamarck, and Spencer, the process of evolutionary change appeared to support and even imply the reality of transference of acquired characteristics Against this theory Weissmann raised a voice of disapproval Spencer took up the challenge in support of the older view Experimentation resulting as an outgrowth of the controversy has indicated that the theory of inheritance of acquired characteristics has little to support it in fact Probably the outstanding result of modern studies of heredity has been the work of Gregor Mendel, whose experiments indicated that the characteristics of parents are not blended in their offspring but remain distinct and appear in succeeding generations only when "dominant" He was able to state a ratio of heredity which states the numerical relationship of the appearance of characteristics of parents in their offspring. This discovery dates back to the beginning of the last quarter of the nineteenth century but remained unnoticed until Hugo de Vries, Correns, and Tschermak simultaneously rediscovered Mendel in 1900 Since then genetics has been the most rapidly developed department of biological science

A more widely debated issue pertaining to the details of evolutionary theory concerned itself with the explanation of the occurrence of variations. Neither Darwin nor Spencer claimed to account for them and they were accepted as brute fact However, this did not long remain the status of the problem. The *sports* that had been noticed earlier more and more came to occupy attention and, finally, through the work of De Vries particularly, and others, the suddenly appearing differences among particulars of species

came to be known as *mutations*, and the theory was advanced that nature moves from past to future not in steady progression but by sudden leaps Though this concept marked an advance in comprehension, it is evident that the explanation of *why* the mutations occur at all remains as much a mystery as ever. Still, it has never been of much concern to the scientist that he has not been able to explain the why of events For the most part he considers it neither possible nor necessary to do so Therefore if the mutation theory is correct, *how* variations occur has come to be known, and that is perhaps sufficient It would appear that at least a part of the way evolution occurs may be accounted for by the mutation theory

One of the most perplexing aspects of the concept of evolution has centered upon the rather paradoxical claim that late forms of organic life have evolved *from* or *out of* earlier forms, during which process the later forms have come to be different from the older If it be supposed that effects are completely determined by their causes, it would appear that all that emerges as the new must perforce have been contained within the old This condition is impossible of demonstration as it has been long since proved by Hume If that which is new in the evolutionary process was not in the old, then from whence has it come? One of those who has been interested in attempting an answer to this problem is Lloyd Morgan, whose theory goes by the name *emergent evolution* The substance of this view is this, that as the evolutionary process has gone on during the ages various stages have been reached when that which actually did not have prior existence "emerged" as something wholly new in the world When conditions in nature were "favorable," these new forms or variations made their appearance In this way the organic world emerged from the inorganic, sensation from the insensible, consciousness from the unconscious In nature there are many levels, each succeeding one being built upon preceding ones but possessing at the same time certain distinguishing emergent characteristics peculiarly its own Nature is, according to this theory, a graded series, beginning with the most simple orders of existence and extending oppositely to the most complex ones Low down in the scale are the physical and chemical orders while high in it are the biological and psychological The relationship of this theory to the mutation theory is obvious enough.

Another thinker who has interested himself in the problems of evolution is the man perhaps most eminent in early twentieth century thought, Henri Bergson Though the philosophy of this man embraces a remarkable fund of learning and involves a particular type of solution of technical philosophical problems, our immediate concern is not with such problems but with two firm convictions of his which relate directly to evolutionary theory In the first place, the Bergsonian concept of the world is much of the order of the ancient, Heraclitus The genuinely real is through and through dynamic All things are in process of constant change and the present is no mere duplication or repetition of the past There are new things constantly coming into the world picture as reality unfolds It is this aspect of experience that Bergson believes cannot be accounted for by traditional mechanistic theories of evolution This is the second of the two convictions just mentioned Adaptation, struggle, survival, all fail to give an adequate account of variations within species and the mutations which suddenly appear among their members For example, if mere adaptation to the environment made for success in the evolutionary struggle, it is difficult to understand why the pulse of life has continued to flow so strongly that it has produced creatures by no means so well adapted to their surroundings as many of those much lower down in the scale of existence This is typical of the sort of evidence Bergson offers against the older mechanistic theory of evolution.

His answer is that there is at the heart of things a surge of living force that presses ever forward, a "reality (that) appears as a ceaseless upspringing of something new, which has no sooner arisen to make the present than it has already fallen back into the past "[1] Nor is the occurrence of the "something new" a matter of pure accident or chance.

> We cannot help believing that these differences are the development of an impulsion which passes from germ to germ across the individuals, that they are therefore not pure accidents, and that they might well appear at the same time, in the same form, in all the representatives of the same species, or at least in a certain number of them [2]

The "impulsion" is the Bergsonian *élan vital*, the power behind

[1] Bergson, Henri, *Creative Evolution*, translated by Arthur Mitchell, p 47 By permission of Henry Holt & Company, publishers

[2] *Ibid*, p 85

the drama of evolution Were it not for this vital force and surge the process would cease Herein lies the explanation of the occurrence of all that is new in the world. The whole universe is the expression of the *élan vital*

As the smallest grain of dust is bound up with our entire solar system, drawn along with it in that undivided movement of descent which is materiality itself, so all organized beings, from the humblest to the highest, from the first origins of life to the time in which we are, and in all places as in all times, do but evidence a single impulsion, the inverse of the movement of matter, and in itself indivisible All the living hold together, and all yield to the same tremendous push The animal takes its stand on the plant, man bestrides animality, and the whole of humanity, in space and in time, is one immense army galloping beside and before and behind each of us in an overwhelming charge able to beat down every resistance and clear the most formidable obstacles, perhaps even death [1]

## DISCUSSION TOPICS

1 What do you understand to be the meaning of the expression *hypothetical evolution*?

2 Review briefly the evolutionary concepts of the early Greeks and indicate why their accounts illustrate the hypothesis of evolution

3 Describe the influence of Aristotelian natural science in the period before Christianity and during the medieval period

4 Discuss the status of the hypothesis of evolution during the period covering the one hundred years prior to Charles Darwin

5 What do you comprehend to be the general meaning of the concept of *progress*? Why is it associated with the notion of evolution?

6 Evaluate the concept of progress and state the argument which holds that it is not a necessary conclusion that evolution involves the actuality of progress

7 In what respect did Charles Darwin, Spencer, and Nietzsche adopt the general point of view that evolution and progress go together?

8 How can it be argued that Darwin changed the hypothesis of evolution into a theory? What do you conceive to be the function of a general theory in the fields of science?

9 State the fundamental ingredients comprising Darwin's theory and give an illustration of the manner it was conceived to operate in the natural order

10 What were the chief causes of opposition to Darwinism in the period immediately following the publication of *Origin of Species*?

11 Discuss the manner in which Spencer proposed to use the concept of evolution as a cosmic hypothesis

12 Describe and criticize Spencer's application of evolution to the sphere of morality Show his affiliation with hedonism

13 What did Nietzsche mean by his proposal to "transvaluate" all values? What institutions did he believe were the support of erroneous concepts of morality?

[1] *Ibid*, pp 270–271

14 Show how both Nietzsche and Spencer may be criticized for using the phrase *fitness to survive* ambiguously

15 After what manner did Nietzsche propose that the evolution of the superman should take place?

16 What is the meaning of *emergent evolution* as outlined by Lloyd Morgan?

17 What was the nature of the chief objections raised by Bergson against traditional evolutionary theory? What proposal did he make to correct that which seemed to him the chief weakness of that theory?

## PARALLEL READINGS

DURANT, WILL *The Story of Philosophy*, Chap IX

FULLER, B A G *History of Philosophy*, Vol II, Chap IX, Part 3, Vol II, Chap XI, Part 2

HOFFDING, HARALD *A History of Modern Philosophy*, Vol II, Book IX, Part C, Chaps I, II

PERRY, R B *Philosophy of the Recent Past*, Secs 6, 7, 22, 23

ROGERS, A K *A Student's History of Philosophy*, 3d ed, Sec 41

TAGGART, FREDERICK, J *Theory of History*

THILLY, FRANK *History of Philosophy*, Sec 69

WEBER, A, and R B PERRY *History of Philosophy*, Secs 70, 81, 82

# Chapter XXVI

# NATURAL RIGHTS AND SOCIAL CHANGE

## 1 *Ancient Concepts of Law and Right*

It will be remembered that the ancient philosophers of the cosmological period had regarded nature as the eternal unchanging essence of things and that with increasing interest in political affairs the first critical move took the form of a rational skepticism of existing laws The Sophists contrasted nature with institution By using the former as a criterion, the latter was condemned as artificial, transitory, and contradictory The conflicting transitory laws of men were compared with the supposedly permanent, harmonious laws of nature to the disparagement of the former This notion of nature as the eternally fixed became an assumption of Western thought

By proclaiming the subjectivity, conventionality, and transiency of *human* law, the Sophists emphasized, at the very birth of the concept of natural law, the subjectivity, conventionality, and transiency of man's conceptions of *natural* law and right

The assertion that universality and permanence are descriptive only of nature and that the sphere of man-made laws is characterized by conflict and changeableness did not go for long unchallenged. The issue was first raised by Socrates Though he believed in the universality of certain moral principles, could they but be defined, he postulated no eternal rights of man The disciples of the wisest man alive could not, however, rest with this burden of uncertainty The Cynics, in teaching that universal knowledge was an impossibility, advised the wise man to free himself from the unnatural trammels of human society and live according to the simple dictates of nature With Diogenes this was carried to an extreme, but in his words and life one finds a revolt against the superficiality and luxury of civilization, strongly reminiscent of the views of Rousseau.

In Plato is found the logical outcome of the teachings of Socrates Men are naturally unequal in capacities and abilities, a view also held by Aristotle To the Greek, in the main, there were two classes of men Greeks and non-Greeks, freemen and barbarians or slaves Aristotle is representative of those who made this distinction on the basis of natural endowment He disagreed with those who asserted that slaves become such through conquest and capture, in this way assuming the status of slavery as an accident of existence. Men, he believed, are naturally unequal and for this reason are unequal in the possession of rights The slave is made of different stuff than the freeman. For Aristotle nature became the standard of custom

Assuming the ideality, universality, and existence of the eternally unchanged, Aristotle looked for some more scientific, unchanging criterion of right than that of the written law and custom of the Greeks The basis of his dualism of rights was the same as that of the Sophists, but with him the line was not drawn so distinctly To his way of thinking, nature and convention may sometimes coincide Another point of difference between the Sophists and Aristotle was the latter's dictum that man is by nature a social animal, this in contradistinction to the extreme individualism of the Sophists

According to Aristotle law is partly conventional and partly natural, partaking of both universal and particular elements There exists, he believed, a bond between them and this unity is the natural element. In the ideal society the natural and the conventional would coincide Natural right then is that right sanctioned by the institutions of the ideal state But a problem presented itself What is one to do about conventional law as it stands? Here Aristotle showed the influence of the Sophists again When the plaintiff sees that he has little chance of success under the positive law, it is wise for him to urge his judges to take cognizance of a higher, universal law or right, one more fundamental than the conventional and thus capable of rendering the conventional void However, if the positive law happens to be in one's favor, Aristotle suggested it would be wise to take the precaution of warning the judges not to try to be wiser than the law Though universal principles of law and right are valuable as a basis for conventional law, he believed that in practical matters the validity of *particular* judgments of right and wrong to be more

certain The uncertain validity of assumed universal principles is a condition making justifiable their correction, on grounds of equity, by an experienced administrator

The notion of a universal right, founded in nature, which governments should recognize was contributed by the Stoics Though nature was a part of previous Greek ethical and political speculation, it played only an incidental part. In Stoic philosophy, nature was given the central position While the antithesis between the conventional and the natural was also drawn by the Stoics, they did not make an absolute distinction They, like Aristotle, inherited the problem of how to recognize natural right apart from conventional or institutional right In the main, their answer was that it is possible for man to do this by reasoning out what would remain if human institutions were abolished This would reveal which of the laws were the outgrowths of human institutions Thus the individual could perceive the eternal truths of nature that were left and proceed to live in conformity with them or, as they expressed it, according to nature

The Stoic argument that men should conform to nature gained increasing force because of the double usage of the term *nature* It meant both the totality of all that exists and, in so far as this was identified with God, it meant likewise an object of worship Thus in conforming to nature the individual was paying obedience to God and divine law as well as subordinating himself to world purpose and the rule of providence [1]

In place of participation in the practical affairs of politics the Stoics advocated aloofness As an integral part of the universe man should pay allegiance to no particular state but should be a world citizen, a cosmopolitan Because of their belief in the equal value of all men, the Stoics were led to set aside the classical distinction between Greek and barbarian Slavery was condemned as an artificial, unnatural institution. All inequalities of privilege were proclaimed as purely artificial Presumably through the exercise of reason directed toward the discovery of the "natural" impulses of man, the Stoics interestingly enough reached the conclusion that the keeping of a contract is a natural impulse But the reason for the powerful influence of the Stoics is to be found in their argument for a brotherhood of all mankind regardless of class, race, or nationality This affirmation of an underlying unity

[1] Windelband, W , *History of Philosophy*, p 172

of the human race, together with Stoic assertion of the intrinsic worth of individual personality, the subjugation of man to the will of the deity, the raising of man above practical affairs, the love of humanity, enabled Stoic teaching to exercise a lasting influence upon Western thought

The influence of Stoic doctrine upon Roman thought is most conspicuous in the development of the Roman philosophy of law. This is first indicated in the writings of Cicero, who, in his attempts to win Romans back to the ideals of the rapidly disintegrating Republic, most eloquently applied Stoic doctrine to the Roman situation The unchanging universal principles of law and right, he believed, are innate in all men equally owing to their unity with the world But evil habits tend to obscure these principles and impulses For this reason the innate awareness of the right appears most clearly in the opinions of innocent young and wise old men Cicero asserted the priority of natural law over natural right, making the latter subordinate to and dependent upon the former [1] Though both the civil law of a community, *jus civile*, and the law common to all mankind, *jus gentium*, coincide to a great extent with natural law, the varying individual historical elements involved in their origin and development result in considerable diversity of content. This wide diversity, however, is not to be taken as indicative of any real disparity of fundamental principles of law and right, for these are eternal and universal.

The cosmopolitanism of the Stoics which originated in a period of political disintegration was changed in emphasis by Cicero and became the official philosophy of the Roman world empire Roman positive law was regarded by Cicero as most closely approximating the *jus naturale* Thus the historical mission of the Roman world empire was regarded as one with the dictates of world purpose and divine law Though the ideas of Cicero had practically no effect on current politics, they did become absorbed into Roman legal thought and so influenced the codes of justice for many generations.

The idea of natural right assumed a greater importance than natural law to the Roman jurists or praetors, though in early Roman law the idea of duty was more evident than the idea of rights But in due course the character and content of natural rights were determined in detail This was a reversal of the classical Greek version of rights as abstract and transcendent The office

[1] Dunning, William A , *A History of Political Theories*, Vol. I, p 124.

of praetor was created in the fourth century B.C., during the subdivision of administrative functions It was the work of the praetoi to exercise civil judicial powers. Through interpretations of the law necessitated by its application and the edicts which formed precedents, Roman legal philosophy and practice were gradually broadened in scope

One of the greatest of the praetors was Ulpian. His chief contribution was the distinction he made between natural law and *jus gentium* He retained the general concept of universal and eternal natural law, as in the classical Greek tradition, but added another characteristic, that of primitiveness. Natural law applies to all living things, to *all* animals. The *jus gentium*, however, applies only to the sphere of man Thus, while slavery was condemned on grounds of natural law and right, as being contrary to nature, as perpetuating an artificial inequality, it was justified on the grounds of the law of mankind In due course this argument involved an identification of *jus naturale* and *jus gentium* though *jus naturale* remained the more comprehensive body of law Finally, *jus gentium* came to mean *jus naturale* so that an appeal to the latter meant merely an appeal to the former

The notion of the *jus gentium* served to increase the powers of the praetors on questions of right and wrong and the use of precedent, for, in contrast to *jus civile*, it was not fixed. The inevitable outcome of this condition was that *jus gentium*, as a universal system of law, sanctioned by *jus naturale*, gradually supplanted the *jus civile*, and the principles of justice or right came to be determined by the reason and common sense of the praetor Later, during the Empire, the praetors were given the power to answer all legal appeals from anywhere in the Empire, their responses having the force of law. Out of the mass of legal detail the jurists carefully built a system of scientific jurisprudence embodied in the *Institutes* of Justinian. Thus Roman law became applicable to the government of a world state

Though Stoic doctrines had little *direct* political significance they did form the basis of Roman jurisprudence and added weight to the notion of natural rights. The conditions of the Roman slave class were little affected by the Stoic concept of the eternal and immutable equal natural rights of all men Though reforms were introduced to stop the growing number of revolts, they were superficial, and the little help offered was counteracted by the

introduction of the *colonate*, a new type of slavery, similar to serfdom. The poor had also sporadically revolted, but like the slaves their condition was one of utter hopelessness, misery, and frustration The morale of the upper classes was little sounder With the slow crumbling of the slave economy and the Empire they became jaded, oversophisticated, and defeated

With the medieval period the doctrine of natural law (or rights or justice) came to exert a force in political as well as legal theory The natural and reasonable were identified with the divine, and natural law and rights were interpreted as expressions of the divine will Natural law was regarded as a body of eternal and immutable principles, emanating from the will of the deity, which could be rationally comprehended by man The *jus genitum* and *jus civile* were also recognized, but as human positive law. The most accurate embodiment of natural law was to be found in church law composed of papal decrees or canonical codes, the most accurate source was revelation

## 2. *Modern Background of Natural Rights*

*a Rise of the Bourgeoisie* With the disintegration of the medieval order, the philosophies of natural right became increasingly integrated with the rising philosophies of economic and religious individualism This movement, culminating in the revolutions of the seventeenth and eighteenth centuries, can best be understood as coincident with and as an effect of the growth of the bourgeoisie From the fall of the Roman Empire to about the eleventh century the bourgeoisie were practically nonexistent. Life was predominantly agrarian and exchange was direct One could well describe this feudal era as a "Hobbian" state of nature where life was "nasty, brutish, and short" But the analogy would have to end there, for feudalism was not conducive to any form of atomic individualism The feudal system was, in part, an evolved product of the declining economy of the Roman Empire

The small landholders and the middle class practically disappeared during the later period of the Empire Many of them were forced to labor on the large estates because of their indebtedness and many voluntarily went there The colonate also underwent a change during this period Formerly free tenant farmers, the coloni, during the state's attempt at social stratification, were transformed into semiservile laborers, remarkably similar to the

serfs of the Middle Ages Most significant, however, were the institutions of the *patrocinium* and the *precarium* The patrocinium was essentially a personal relationship between impoverished freeman and large landholders In return for the necessities of life the freeman pledged certain services The precarium had to do with land The small landholder passed the title to his land over to a large landholder in return for the latter's aid in defense against barbarians or brigands These two institutions combined were a cornerstone of feudal society and were known as the *commendatio* and *beneficium*.

During the medieval period legislation in the modern sense was practically unknown Law was not regarded so much as the creation of human will as it was the codification of custom or the correction of administrative abuses The church had broad administrative powers and insisted upon trying Catholics before its judiciary. It is, however, in the church's doctrine of the general welfare that there is to be found the kernel of much that was distinctive and, in form, valuable in its views The right to private property was firmly asserted by Aquinas The general right, he argued, is rooted in the natural law, while particular property rights are rooted in positive human law But the right of ownership entails the duty of social usage in conformity to the general welfare Private property is a prerequisite of the individual and social good. In this Aquinas was closely followed by the later theologians, the right to private property being the keystone of their economic system [1]

It is a matter of record that respecting general welfare, private property, and other doctrines the teachings of the church were not uniform and were greatly influenced by secular affairs and interests The attitude toward commerce is indicative of this From a condemnation of all commerce the church attitude changed by stages until it came to consider commerce an innocuous act in itself, though one which might become sinful by the intrusion of "bad" motives [2] In its concessions the church was yielding ground to a rising class which was in time completely to overturn the feudal economic and ideological order, the bourgeoisie

The habitat of the struggling medieval bourgeois was the town, the historical antithesis of the manor Trade was not completely

[1] O'Brien, George, *An Essay on Medieval Economic Teaching*, p 66
[2] *Ibid*, p 152

estopped in the early medieval period, and, beginning with the eleventh century, the town as the center of commerce and industry began to rise in prominence The increase in population in this period and the purchase of freedom by serfs, allowed by the lord because of his growing economic difficulties, were factors in its rise The loyalty of serf to lord was carried over to the towns as loyalty of each to members of one's own group This sentiment, fundamental to nationalism and patriotism, intensified group solidarity

As early as the eleventh century the traders of the growing towns had banded together in guilds. These guilds, powerful until the fourteenth century, monopolized all trade transactions and did much to give the town a city-state characteristic During and after the fourteenth century, however, the power of the merchant guilds steadily declined, owing to the desire for goods handled only by foreign merchants, the growing importance of middlemen, the nationalist movement, and the then powerful craft guilds The latter, which had for many centuries existed beside the merchant guilds, had originated during the twelfth century It was not uncommon for a man to be a member both of the local merchant guild and of the craft guild in his double capacity of seller and artisan It is in the later activities of the craftsmen that the crude beginnings of capitalism are to be found

The trade of craftsman had its origin in the nonagricultural and nonmilitary activities of certain men on the feudal manor In accordance with the system of *status* and inheritance descendants of these men carried on the same activities, becoming increasingly proficient and specialized Some, buying their freedom, became itinerant craftsmen With the growth of towns many of these itinerant craftsmen settled there, carrying on their trade in small individual workshops There the artisan would wait for customers, he never produced in anticipation of demand Life was hard for these men, and with an increase in their kind they banded together as did the merchants Their business was carried on in a personal manner, similar to the face-to-face relationships of the manor *But as with the traders a new relation replaced an old in the relationships of townsmen, contract replaced status, the rights of men were made manifest on innumerable scraps of paper* In due course, these rights became increasingly "natural" and "inalienable," and in five centuries a later bourgeoisie with these rights of men

as their battle cry, bolstered by the prestige of assumptions as old as the Greeks and as new as the sciences, overthrew the monarchial order and officially established the kingdom of economic individualism

*b. The Problem of Sovereignty* With the rise in power of the nationalist monarchs the times became increasingly troubled and conflicts between church and state and within the church itself became more common In the fourteenth century, Marsiglio of Padua, rector of the University of Paris, made a drastic break with tradition in his defense of Louis of Bavaria in the latter's quarrel with John XXIII, Pope at Avignon Marsiglio, who started out with the idea of criticizing the church, ended with a denunciation of the entire system His was the first voice declaring the sovereignty of the people Whether in matters of human or divine law, the only qualified guardians were, in the first instance, the people of the state, and, in the second instance, the people in the church Marsiglio despised the church hierarchy because of its assumption of sovereignty, its aristocracy of organization, and its superficial usurpation of the powers of God The state should be supreme in its sphere, unmolested by the Pope

William of Occam and Marsiglio were contemporaries, both associated with the University of Paris and of mutual influence Occam, still a Scholastic, nevertheless exemplifies in his writings a trend toward nationalism With Marsiglio, he differentiated between spheres of the state and church However, perhaps because he possessed a more profound turn of mind than Marsiglio, he asserted that the spheres of state and church are in part coterminous and that neither can claim infallibility This latter constituted a denial of Marsiglio's sovereignty of the people In his political writings, Occam raised a great many more questions than he answered, but with Marsiglio he furnished much material for debate in church circles Also the ideas of Aquinas on law were changed by his followers, and a dualism was created between divine will and rational natural law or right Finally, with the doctrines of Wycliff and Huss in the later Middle Ages, the intellectual domination of Catholicism was largely broken. The church was criticized from all sides because of its interference with state affairs, for its possession of large estates and sums of money, because of the power of the Pope, for its backwardness, for the immorality and corruption of its clergy, and for the latter's exemption from the jurisdiction of the state courts

Out of the dynastic, colonial, civil, and religious wars of the sixteenth and seventeenth centuries an individualist-nationalist profit-making economy appeared in the nationalized kingdoms, freed from church domination. The sovereignty of the nation-state was accepted, the power of the Catholic church was crippled, and the theoretical Holy Roman Empire was completely destroyed. But in the economy established there were conflicting elements Economic individualism and nationalism at a time of economic expansion were policies which could not exist together. Furthermore, many carry-overs of the feudal system still existed though serfdom and the vassal system had disappeared in western Europe It was through the conflict of the new bourgeoisie against the new secular monarchs for complete economic individualism that the theories of natural right acquired their revolutionary significance

*c Crystallization of Natural Rights Doctrine* Richard Hooker (1553–1600) during his life expounded in a schematic form most of the doctrines later made popular by the thinkers of the Enlightenment, natural law, the social compact, popular sovereignty, and the separation of powers [1] His works, primarily theological, were directed toward a defense of the Anglican church Particularly relevant to the theories of natural right was his view of the social contract The theory of the social contract had already been expounded in various forms before by Greek thinkers, Seneca, the Catholics, and others contemporary with Hooker The *state of nature* and a *social contract* formed a ground for the existence of natural rights Though both concepts were historical absurdities, they exerted tremendous influence since they were used both to attack and to defend absolutism Hooker used the concept to defend absolutism Men in their natural, prepolitical state were in a condition of lawlessness, but, being essentially of social proclivities, they banded together and by mutual consent entered into a political state, delegating their individual sovereignties to one sovereign. The relationship created by the contract was regarded as eternally binding, and thus the subjects were to remain always subjects, the sovereign, always sovereign

In the works of the Frenchman, Jean Bodin (1530–1596), is found an absolutist secular note in harmony with the times Bodin, who was a crown lawyer and intensely nationalistic, was a

[1] Gettell, Raymond G , *History of Political Thought*, p 197

*politique*, but, unlike the other members of that group, he was not a pamphleteer but a system maker, one of the first sociologists As a *politique* he was interested in creating a united France Together with others who lived during this time of war and religious dissension, he sought the source of unity not in divine law but in positive law Principal to his absolutist bias was his concept of sovereignty The sovereign must be absolute in power Though he is limited by divine law, by the fundamental laws of the state, and by having no jurisdiction over family and property relations, the sovereign is responsible only to God If he violates a limitation, he becomes a tyrant, answerable to God but still sovereign This notion gained popularity in France and England and formed the basis for later theories of absolutism and divine right, theories counter to those of natural right

It was during the civil and international wars that a need for international law was first felt The bourgeoisie were also in favor of peace, for the wars were weakening the national economies The basis of modern international law lies in the Roman *jus gentium*, which, though it meant the law common to all mankind, could be and was falsely translated as the law of nations The most realistic theory following this trend of thought was advanced by Albericus Gentilis (1552–1608), an Italian protestant refugee and Regius Professor of Civil Law at Oxford In harmony with the secular movement, he regarded natural law as that law existent in a nonpolitical "state of nature" His principal work, *Three Books Concerning the Law of War*, is indicative of the times He was more concerned with the rules of war than of peace, maintaining a quasi-skeptical attitude toward the possibility of the latter His most positive theory was that there should be formed an international union of states, a majority of whose members would make decisions

It was Holland, however, that contributed one who is of much importance in international and natural law, the Dutch jurist, Hugo Grotius (Huigh de Groot, 1583–1645) Grotius lived, as did the others discussed, during the era of civil and international wars The Eighty-years War was in progress at his birth, and both it and the Thirty-years War at his death The theories of Grotius are found in his *Laws of War and Peace*, published in 1625 Though the work is replete with references to the Old Testament, his contributions were secular in intent and influence The state of

nature he conceived to have been a prepolitical, though not a presocial, condition in which men but not states existed Though men lived together in their natural state, conceived by Grotius as similar to the Garden of Eden, they were not yet territorially or politically united, but, owing to their essentially social nature, men were led to form the state This was entered into by the first contract, which became the basis of all other contracts entered into within the state. Thus by free consent men gave up their natural rights and absolute license for the order and unity of states Concomitant with the contract went the spirit of good faith and free consent which entered into its making To this day, according to Grotius, it is this spirit as much as the contract which is the necessary premise of all relations into which men enter, its violation leads to war

The natural law which is the fundamental, moral, ideal, and existent law is rooted in the social and rational nature of man It is eternal and immutable, God himself cannot alter it, for in so doing he would be contradicting his own nature It may be noted that even though the trend of thought was secular, men could not escape the church ideology overnight In Grotius' dictum that God could not change the natural law and right, the revolutionary idea that natural law and right could exist regardless of God's consent was intermixed with the ancient notion of man created in the image of God All men are subject to natural law by necessity of their nature. Though particular institutions may come into being without the stimulus of natural law, the latter nonetheless furnishes a guide to man's reactions toward these institutions, once created

What has just been stated about Grotius' interpretation of natural law may well be taken as his interpretation of natural right since the two were used interchangeably This is true not only of him but of most thinkers in ancient, medieval, and early modern times Natural law or right applies, by necessity, only to man, not to the animals Grotius argued that human conceptions of the natural right depend upon reason and not upon divine revelation Thus he subtly cut away church authority and insisted upon a separation of ecclesiastical and state spheres of power, a demand not unreasonable in the light of the motives behind the prevelant strife He postulated that, as a rule, anything contributing to the social good is a natural right This premise aided him in specifying

the natural rights of man and in applying them in the sphere of international law

According to Grotius, positive law originates as reactive measures against violence, peace being the natural or normal condition of man Thus while natural law is theoretically independent of man's will, international law is dependent upon it. In effect, however, Grotius identified the *jus gentium* with the *jus naturale* In his description of the various natural rights, it is revealed how the current needs of the merchants influenced his philosophy The right of passage for merchandise under all conditions, the right for one nation to claim territory unoccupied by another; the right to sanction slavery; the right to private property, the right of passage for armies of nations at war through territory of neighboring states were all described by him Thus Grotius' work with its plea for peace, its rational and bourgeois bias, its realism and comprehensiveness, its assertion of the social good as the basis of natural right, and its application of natural rights to international law made a powerful impression on contemporary minds

The rights people more and more clamored for acquired the prestige of the word *natural*, which by the mid-seventeenth century had the connotation of the normal, socially agreeable, necessary, original, universal, immutable, eternal, divine in origin, reasonable, and so forth Natural law or right was conceived to enjoy a status in the relationships of men similar to that of physical law in the relationships of things in nature Both were believed to be orders eternal, immutable, and independent of human will, but rationally discoverable Habits of thought had become fixed and were transmitted from generation to generation individualism, rights of property, thrift, diligence, and such Added to this was the feeling of human freedom and belief in the rational and good nature of man. Above the positive law and right, a natural law and right was appealed to as something truly fixed and superior The enthusiasm of the bourgeoisie was so high that the peasant and worker rushed into battle for the natural rights of man All the illogical and psychologically and historically absurd beliefs in a state of nature, social contract, natural rights, were reinforced by the rich connotative elements mentioned above, by habits of thought, by the feeling of "liberty or death," by the acceptance of the eternal as the real At last the doctrine of the *rights of man*

overshadowed all political and ethical thought of a progressive nature during the later seventeenth and entire eighteenth centuries. The doctrine appeared to sanction all the revolutionary activities of the bourgeoisie against the old economically, politically, and ideologically suppressive forms of the monarchial state. The battle lines were drawn on the bases of *divine right* versus *natural right*

*d Social Change in Britain* The revolution struck first in England during the reign of the Stuarts James I, in order to extricate himself from financial difficulties and increase his income, levied higher tariffs on new imports, taxed merchants heavily, and in other ways suppressed trade His reign, like that of his successor, Charles I, was a personal one Charles was even more extravagant than his father and continued the suppressive financial practices The Parliament of 1628 served him with the *Petition of Right*, which he was forced to grant owing to his need for funds to equip his fleets The document declared illegal the levying of forced loans and other taxes without consent of Parliament and forbade the quartering of soldiers and arbitrary imprisonment, also, it asserted the supremacy of common law over that of martial law But Charles resorted to other methods of increasing his income, and, while his various arbitrary financial measures were moderately successful for him personally, they made revolution more probable In 1629 he disbanded Parliament and proceeded to rule alone until 1640 Strife ensued Charles became involved in a religious war with the Scotch His attempts to obtain financial aid from Parliament met only with fresh demands for greater social freedom Civil war followed (1642–1646) with Charles and Parliament aligned against each other. Charles was supported by the north and west portions of England, still feudal in character and composed mostly of poor peasants, wealthy nobles, and the high clergy The south and east sections, composed mostly of the newly industrialized centers inhabited principally by the middle class and the industrial proletariat, upheld the parliamentary cause. The war was won by these groups, led by Cromwell's army. Charles was executed in 1649 on the charge of treason

From 1649 to 1658 Cromwell ruled what was called a commonwealth but in reality his rule was a military dictatorship, at least from 1653 to 1658 During this period the actions and legislation of the Protectorate were generally favorable to the merchant class At Cromwell's death, his son Richard took over the Protectorate

but abdicated in less than a year The new Parliament placed Charles II on the throne The reappearance of the Stuart line was greeted with relief by the majority of the people, who were tired of the tyrannical and fanatical measures of the Puritans But Charles II was as unscrupulous as his father, though much more clever and tactful During his reign the Anglican church was again made supreme, the *Habeas Corpus Act* was passed, and the Whig and Tory parties formed In 1685 he was succeeded by James II, who ruled for three years During those three years he incurred the enmity of practically all his subjects. When it was learned that a son had been born to the royal couple, the thought of even waiting until the king's death proved distasteful, and Whigs and Tories joined in placing William and Mary on the throne in 1688 In 1689 The *Bill of Rights* was passed, supplemented by the *Toleration Act* of 1689 granting toleration to some dissenters Thus the English "revolted" The Glorious Revolution, accomplished by a union of bourgeois and aristocratic elements, introduced limited monarchy and "the rights of man" into the positive law of England, making possible further expansion of trade, imperialism, and the industrial revolution

In tracing the evolution of natural rights doctrine it is seen how natural rights were gradually divorced from the divine will and implanted in the natural order of things or in rational man This system of rights means simply that an individual has certain rights inalienable, eternal, and independent of the social order There are natural laws of human rights just as there are objective natural laws of phenomena In the Levelers, a group of extreme English independents, this was clearly manifest for the first time Their system of rights exemplified a characteristic of Aquinas's theory of natural law that positive law and right *should conform* to natural law and right, the natural is the good

The social movement of the Levelers originated during the enclosures at the beginning of the seventeenth century and got the name through their activities of destroying the fences and trying to obtain a leveling or reapportionment of land In the later stages of the revolutionary period their class character changed to petty bourgeoisie The Separatist element was the more radical of the two main groups within the Levelers Their demands, a combination of political, economic, and religious elements, as expressed in the *People's Agreement* were a plenipotentiary parlia-

ment, a redistribution of constituencies, separation of ecclesiastical and state spheres, abolishment of compulsory loans and compulsory military service—and the monarchy The more moderate element, the Independents or extreme Puritans, made up most of the army They had entered under the assumption that they were fighting for religious freedom as well as against political tyranny They were excellent pamphleteers, many of them, and were a profound general influence The similarity of many of their notions to those of Locke and the Americans will be readily apparent Their demands as set forth in the *Basic Proposals of the Army* were for a redistribution of parliamentary constituencies, the introduction of property qualifications in parliament, and a limited monarchy The document, suppressed by Cromwell, also listed the natural rights

They wanted political liberty as a prerequisite to religious liberty and individualism Religious tolerance and liberty of conscience are mentioned often by them In their concept of natural rights there is again a mixture of ancient and modern elements All men by nature are free and equal, for they all are brothers, descendants from Adam and Eve Man has certain innate and inalienable rights which it is the duty of the state to protect These are the natural rights to life, liberty, political equality, property, freedom of conscience, freedom from tyranny, etc. The state is founded upon consent, and both the monarch and parliament are servants of the people

These various elements are found in some form or another in most of the natural right theories throughout the seventeenth and eighteenth centuries The demand for redistribution of constituencies was one which could not but emanate from the newly risen towns It was a demand that was to be taken up even more vigorously in the nineteenth century Their concept of the natural freedom and equality of men was a forerunner of the notion of atomic individualism The interests of men within the state added up to the interest of the community Hence for each man to pursue his interests meant an addition to the well-being of the community

Another source of weight during this long period, a man who contributed much to the meaning of natural right, was Thomas Hobbes He represented a clever attempt to justify the rule of the Stuarts and absolutism, or omnipotence of the state in general, on the basis of the several prevalent popular prejudices, even including natural rights and law In considering the transition

from a state of nature to society, Hobbes clearly differentiated natural right from natural law. Natural right was the liberty possessed by every man of doing what seemed best for the preservation of his existence, natural law was that rule, found out by reason, forbidding any act or omission that is unfavorable to self-preservation Thus while natural right leads to anarchy, natural law leads to order The state of nature in time proved inimicable to the ego and so, not because of any social impulse, men were led to form a society Natural law led to the contract In the contract, upon which all contracts depend, the people gave up their wills to one of their group chosen as sovereign Thus the state came into being

It remained for John Locke, acting in the role of a moderate who was interested in justifying the bloodless revolution, to epitomize the spirit of 1688 He supported not the large aristocratic landholders but the new middle class, the small landholders, farmers, merchants, and manufacturers His law of nature justified the activities of the latter as against those of the former

Locke's state of nature is an interesting contrast to that of Hobbes In it men were at peace and acted largely according to reason, and mutual good will prevailed It was not a presocial nor a lawless state, but, as with Grotius, a prepolitical state whose component individuals lived by natural law Though self-preservation is man's fundamental motive, there was little occasion for it to operate in the original state of nature Men are born free and equal, possessing the inalienable natural rights to life, liberty, and property The possession of property was justified because of the personal nexus between worker and product That which a man has created by his own labor is rightfully his The world was given to man with the privilege of using it and, that industry and trade should not perish, God gave man the capacity for uneasiness in the presence of hunger and thirst Contentment would be fatal to the race, for then there would be no effort to gain subsistence

At some time and for some reason, the state of nature was complicated by the introduction of money As property increased and became unequally distributed, industry became more active and disputes occasionally occurred Though foreign to the original state of nature, the presence of war became more probable since with disputes the instinct of self-preservation asserted itself Necessity for authority to settle points of controversy, for a body

of defined rules, for an agency to execute such rules became more apparent. Disorder, confusion, and strife came to disrupt the lives of originally peaceable men To escape this condition of undesirable anarchy men created the state.

By a contract men agreed to give up as many of their natural rights as was deemed necessary for the creation of a social organization Each individual agreed to abide by majority rule and to permit majority rule to decide all legislation. If at any time such rule be disregarded by those acting as state functionaries, revolution is justified The chief end of the state is the preservation of the right of property The fundamental organization of Locke's state is already known, and it is evident that he was interested in assigning to it the primary task of guarding the rights of its individual members "Liberalism" had gained a definite foothold

A group of thinkers struggling for recognition often tend to change their views once recognition is won So it was with the "liberals" The first evidence of this is noted in the social philosophy of David Hume Hume discarded the concept of the social contract, the consent theory of government, and the use of the word *natural* as an ethical criterion The word, he pointed out, was too ambiguous to be used as a standard of judgment In his criticism of the social contract, Hume used the historical method, thus foreshadowing Burke He held that the golden age was the fiction of poets and the state of nature a fiction of philosophers The doctrine of a social contract is contrary to history and to logic As regards history, the contract was above the intelligence of primitive men, besides, no example of it can be found Further, even if one could be found, the consent of the original parties would not bind their descendants Conquest has been the usual foundation of states, while obedience follows upon habit and custom rather than upon consent Man is born into the state.

*e. Continental Developments.* The "selfish" system of Hobbes with its absolute sovereignty and the social system of Grotius with its ethical sovereignty represented a challenging contrast. It was Samuel Pufendorf (1632–1694), the first political thinker of the German Enlightenment, who attempted to weld their systems into one Though men were ruled by self-preservation in their natural state, conceived by Pufendorf as an actual historical condition, they were not in a state of continual warfare Though life was characterized by ignorance, irrationality, poverty, and

selfishness, there was yet a social instinct which led men into society in order to escape their wretched condition The human instinct toward self-preservation could be fulfilled rationally only by satisfying his social need

The political state was entered into by two contracts The first, accomplished by a majority vote of the contracting parties, established the particular form of state, the second, entered into by the sovereign and his subjects, guaranteed obedience on one hand and rule for the social good on the other The sovereign is both absolute and limited He is absolute in relation to human law and authority; he is limited by the law of nature and God, by custom and ancient usage, and by the purpose for which the sovereignty was established [1] It is probable that the most desirable form of government is an elective and limited monarchy With but a few minor exceptions Pufendorf's theories were accepted with slight changes by German political philosophers until Kant His immediate followers were the rationalists, Wolff and Thomasius

Christian Thomasius (1655–1728) in his writings distinguished between natural and acquired rights Natural rights are innate, while acquired rights are sanctioned by positive law The rights to freedom, common ownership of natural resources, life, free thought, are natural, the rights to property and exercise of authority are acquired Christian Wolff (1679–1754) had much more influence than Thomasius, especially in France His political philosophy of rights is similar to that of Locke except with respect to the duties of the state By nature men are equal in rights and duties In forming the state originally, men voluntarily surrendered as many of their natural rights as was considered necessary to secure the social good Wolff assigned to the state almost a totalitarian character and his theory was essentially that of benevolent paternalism

Vattell (1714–1767), a Swiss jurist, was a follower of Wolff His work, second to Grotius in international law, had wide influence, especially in America To him natural rights were a part of man's very nature, inalienable and immutable He uses the fable of a golden age, probably accepted as fact, in order to given additional force to his argument His writings also reflect an atomic individualism, the common will of the nation is but the total of all the unit wills of the component individuals

[1] Gettell, *op. cit.* p 234

The political theory of Spinoza was influenced primarily by Hobbes and Macchiavelli, and, though his metaphysics and that of Hobbes are diametrically opposed, their political systems are in the main parallel Though Spinoza agreed with Hobbes that man is basically motivated by self-interest, his fundamental motive being self-preservation, the self-interest Spinoza speaks of is conceived to be rather different from that of Hobbes It is an enlightened and rational self-interest based on the simple urges of the body So it is that while man in a state of nature is in continual warfare with all other men, he creates the state not merely to avoid self-annihilation, fear, or danger, but as a positive instrument of good, security, peace, and order By the contract men surrender only as many of their natural rights as is necessary to insure an orderly political life Thus the sovereign is not completely absolute, his will is made up of the sum of the wills of the community Spinoza did not discuss at any length the contract by which men were presumed to have entered the body politic.

Spinoza is especially notable as a champion of the cause of toleration The state, in the interests of order, may control the outward form of behavior but not the conscience of its members If it attempts the latter, then revolution is inevitable The positive function of the state is to insure recognition of the natural rights of its members Not only are tolerance and freedom of conscience valuable to the self-development of the individual, but their recognition is essential to the perpetuation of the state

Baron de Montesquieu (1689–1775) possessed little faith in the existence of immutable rights residing in the complex of human relationships In his writings there is no system of idealized rights which "should" form the archetypes of positive law He believed that law is relative to time and place, no system of laws can be universally applied The very title of his work on law indicates his temper. *Spirit of Laws, or the Relation Which Laws Should Bear to the Constitution of Each Country, Its Customs, Climate, Religion, Commerce, etc* But the following generation took only what pleased them from Montesquieu

Among the influential men of that generation was a group of individuals known collectively as the *physiocrats* These men, Quesnay, Gournay, Rivière, Dupont, and others, may be regarded as the founders of modern economics The physiocrats represented revolt against the monarchial regulation of internal and interna-

tional trade in the interests of the state However, it was not the merchants and manufacturers for whom the physiocrats spoke, but the landholders, regarded as the only productive class They believed that just as natural phenomena exhibit changes according to laws discoverable by man, so do economic phenomena follow set laws available to those interested to discover them.

The physiocratic state of nature was conceived as one devoid of any agricultural pursuits In it men enjoyed the natural rights of property and liberty They had the right to labor and the right to the products of labor, which included the right of exchange Though men in the state of nature were not "noble savages," they did, however, respect each other's rights to a greater extent than some men in civilization With the introduction of agriculture men entered civilization, via the social contract, in order better to safeguard their natural rights and to derive greater benefit and pleasure from their exercise Natural rights inhere in the natural order and form the basis of it.

A natural right, in its abstract meaning, was defined by the physiocrats as the right of an individual to do that which is advantageous for him The natural rights or laws of the natural order could be deduced by rational men. Their violation by men leads to mutual ruin and destruction The spirit of hedonistic individualism is well illustrated in the writings of the physiocrats By their time it was rather a stereotyped maxim that unrestrained man can discover activities that harmonize simultaneously with his self-interest and with that of the social good, social interest is a sum of units of self-interest.

Voltaire exemplified the dominant French trend, as Locke exemplified the British Though he admired the philosophy of the physiocrats, he was the merchant's philosopher He was no believer in the equality of men other than respective of their "equal right to liberty, to the possession of their goods, and to the protection of the laws " His equality was not the economic equality demanded by the masses who participated in the revolution He ridiculed the theory that all men have equal talents He despised the poorer classes and was apprehensive of them Perhaps he sensed the accumulated fury of the masses which might be unleashed by a revolution and thus destroy the order and property he loved so well. The reforms he desired, he thought should be carried out by monarchs, not the people

But Voltaire's ninety volumes had their effect on the masses too Not only were the streets of Paris lined at his return in 1777, but four years later, in 1781, when his body was brought to Paris for burial, the funeral procession numbered a hundred thousand escorts while six hundred thousand spectators flanked the streets On the funeral car was written "He gave the human mind a great impetus, he prepared us for freedom"[1] Voltaire would have profoundly appreciated this, since in 1727, on witnessing the funeral procession of Newton, he had written from England, perhaps with bitterness, that he was amazed to see "a professor of mathematics buried like a king"[2]

In the generation preceding the Revolution the most influential writer without doubt was Rousseau His attack on tradition and plea for popular sovereignty were greedily absorbed by the chafing French population It appeared to the masses that their own hopes and ideals were mirrored in the words of Rousseau Revolutionist orators would read portions of his writings to large cheering crowds His influence was even more powerful after his death

The French philosophers had their say Unlike the "American philosophers" they were practically all of them dead by the time of the Revolution The burdened Third Estate began its political action, accompanied by a flood of pamphlets stating their grievances Then, and it is this that makes the French Revolution so distinctive, the Third Estate split The embryonic Fourth Estate, or workers, petty bourgeoisie, and peasants came forth with their demands, not for a recognition of their equal political rights before the law, but for equal rights to property. The Revolution got under way with a vengeance

*f. Developments in America* The American Revolution was the culmination of a century and a half of economic and political strife between the mother country and her colonies Like the English and unlike the French Revolution, it was primarily a movement restricted to a small percentage of the population, it was one in which the poorer classes had little voice It was primarily a revolt of the new mercantile class of the colonies against the mercantilist policy of England This policy, though it had been in effect prior to 1763, was not rigorously enforced Previously the colonists had been smuggling and in other ways freely vio-

[1] Durant, Will, *The Story of Philosophy*, p 275
[2] Becker, Carl, *Modern History*, p 189

*lating the various laws restricting colonial trade and industry* But with the close of the French and Indian War of 1763 the period of British neglect ended Attempts to enforce the British mercantilist policy met with resistance and gave birth to the American philosophy of freedom and right

The first American thinker to use the doctrine of natural rights was John Wise (1652–1725) Wise, a churchman, was thoroughly familiar with Pufendorf's work and drew heavily from it His *Churches' Quarrel Espoused* and *Vindications of the Government of the New England Churches* were written against Presbyterian (Anglican) centralization and in defense of decentralized democratic control in church government He interestingly elaborated Pufendorf's double contract into a triple contract Man in his natural state was free, equal, and subject to no person but God and to no law except natural law discoverable by reason Though man had social proclivities the instinct of self-preservation was undesirably dominant In order that they might "be capable to concert the measures of their safety, by a public vote" men agreed to form the civil society They next agreed to the particular type of government, and, thirdly, they contracted with their ruler, promising obedience in return for the sovereign's guaranty to promote the common peace and welfare Sovereignty originally resided in the people and government existed to protect men from injuries possibly inflicted upon them by other men In the revolutionary period Wise's works were reprinted and exerted some influence because of their democratic teachings

A more influential man during the period prior to the Revolution was Thomas Paine He was a strong supporter of French radicalism, and his *Rights of Man*, written after the American Revolution, was a polemic against Burke's views on the French movement for liberation He believed in the equal natural and political rights of women, Negroes, and the poorer pauperized classes. The purpose of government is to guarantee the freedom and security of the individual Man's natural rights are those which appertain to him by virtue of his existence

> Civil rights are those which appertain to man in right of his being a member of society Every civil right has for its foundation some natural right preexisting in the individual, but for the enjoyment of which his individual power is not, in all cases, sufficiently competent Of this kind are all those which relate to security and protection These civil rights should not be so applied as to invade the

natural rights retained in the individual, and in which the power to execute it is as perfect as the right itself [1]

A further significant theory relative to natural rights doctrine was developed by Paine This was his doctrine of the reaffirmation of natural rights, similar in many respects to that of Jefferson.

> The vanity and presumption of governing beyond the grave is the most ridiculous and insolent of all tyrannies Every age and generation must be free to act for itself in all cases as the ages and generations which preceded it It is the living, and not the dead, that are to be accommodated [2]

This, of course, was fertile ground for the seeds of revolution Despite his broad interpretation of "freedom and security," there is in Paine a repetition of the doctrine of the struggling bourgeoisie that government is best which governs least, government is a necessary evil Democracy in an industrial economy is incompatible with such a viewpoint, and it *was* such a viewpoint that dominated intellectual life even into the middle of the nineteenth century and that is by no means dormant today Paine was asserting the right of his generation to remake the world to suit their interests His influence was enormous Washington had much cause to appreciate Paine

The policies of Jefferson were democratic and decentralistic in opposition to those of Hamilton and his followers Jefferson had excellently codified American natural rights doctrine in the Declaration of Independence In his justification of rebellion the doctrine of reaffirmation of rights plays an important part However, revolution need not be violent Majority rule and political equality make peaceful change possible Constitutional conventions may replace force in the change of the social contract Here again it may be pointed out that a theory struggling for survival changes once in power In Jefferson's famous statement on the Constitution, he writes,

> I am certainly not an advocate for frequent and untried changes in laws and Constitutions I think moderate imperfections had better be borne with, because, when once known, we accommodate ourselves to them, and find practical means of correcting their ill effects

It is also profitable to compare Jefferson's anti-Federalist stand

[1] Paine, Thomas, *Rights of Man*, p 306 By permission of E P Dutton & Company, Inc , publishers

[2] *Ibid*, p 278.

when the Federalists were in power with his practically Federalist policy once he was in power

The movement of the day, in other words, though idealistic and abstract in its theory had a practical groundwork The mercantile class was revolting against royal restrictions on expansion of trade and industry, but, in their use of natural rights philosophy to lend moral sanction to revolt and acquisition of positive civil liberties, the dangerous possibility that the masses would claim the same rights was always kept in mind and, when the mercantile class gained power, the cloak of universality was conveniently forgotten

The desire for separation from England grew stronger during the latter part of 1775 Paine, in his *Common Sense*, had written,

> I challenge the warmest advocate for reconciliation to show a single advantage that this government can reap by being connected with Great Britain Every thing that is right or reasonable pleads for separation The blood of the slain, the weeping voice of nature cries, "'Tis time to part"

In 1776 the Declaration of Independence was drawn up on the request of Congress, principally by Jefferson In this document the tenets of eighteenth century natural law philosophy find their most brilliant and compact exposition There was, of course, no unity regarding separation Nor was there unity of interests among the colonies But the mercantile interests concerted their efforts once and for all to cast off the weight of British mercantilism

The actual revolution was clearly demonstrative of the nature of the participating elements It was a revolution instigated, carried through, controlled, and finished by and for the bourgeoisie It is this that makes the American Revolution so distinctive from the French In the army, severe measures were formed to suppress the possible excitation and interested participation of the poorer classes Furthermore, the majority of the population were far too busy reaping profits from their exploitation of natural resources to pay attention to the revolt This policy of esotericism was carried over, even after the formal winning of the Revolution, into the formation of the Constitution

The Constitution was framed not in the spirit of impassioned revolt but in a spirit of calm deliberation for a common purpose. It was written not in 1776 but in 1787 The delegates were carefully chosen and were, for the greatest part, of the conservative property-holding class They were also educated men, about one-

half of them having gone through college. From the north came merchants, bankers, shipowners, landlords, and lawyers; from the south, slave owners, planters, and lawyers. The radicals of the Revolution, such men as Jefferson, Paine, Samuel Adams, and Patrick Henry, were absent Paine and Jefferson were in France, and the others made known their antipathy to the aim of the Convention

The proceedings of the convention were held in privacy Through various compromises the finished Constitution was finally adopted, thirty-nine of the fifty-nine delegates signing The slave trade compromise, a compromise in name only, was a prelude to the conflict of 1861, the social philosophies of which centered again about the problem of the "natural rights of man" As it is known, ratification was by a very small percentage of the population and was secured by what may be construed as questionable methods It was a conservative constitution as the majority of its framers wished it.

> The most unique thing about the Constitution of the United States was the fact that it was the first important one designed to protect property against inroads from the lower classes [1]

The protection was sanctioned by the growing supremacy of the Supreme Court which drew justification from the "natural rights of man"

*g Results of the Revolutions* The three revolutions here discussed all made important "deposits" These were the various declarations, constitutions, and bills that briefly set forth the social philosophy gracing and justifying the social movements they epitomized. Though abstract and illogical, the appeal to rights exerted tremendous influence The rights claimed were those felt necessary for the existence of the bourgeoisie In their exuberance the philosophers claimed universality for the natural rights, but once the new philosophy was in power the class that espoused it proceeded to use it to suppress attempts at their dethronement

The chief document arising out of the Whig Revolution was the Bill of Rights of 1689 This incorporated most of the principles of the *Magna Charta* of 1215, the *Petition of Right* forced from Charles I in 1628, the *Habeas Corpus Act*, and various others.

[1] Barnes, Harry Elmer, *The History of Western Civilization*, Vol II, p 108 By permission of Harcourt Brace & Company, publishers

To the *Bill of Rights* was added the *Toleration Act* of 1689, which extended civil and religious liberties to all but Catholics and Unitarians The *Mutiny Act* of the same year gave Parliament power over army appropriations, while the *Act of Settlement* of 1701 gave Parliament power to "dispose of the crown and to determine the line of succession "[1]

American codification of natural rights appeared in the *Declaration of Independence*, the eleven state constitutions, and in a milder fashion in the so-called *American Bill of Rights*, which is the first ten amendments to the Constitution The American proclamation of rights is expressed in the familiar words of the *Declaration*

*We hold these truths to be self-evident*, that *all men are created equal*, that *they are endowed* by their Creator *with certain unalienable Rights*, that among these are *Life*, *Liberty* and the *pursuit of Happiness* [2] That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness

The Virginia Declaration of Rights asserted

That *all men are by nature equally free* and independent, and have certain *inherent rights*, of which, when they enter into a state of society, they cannot, by any compact, deprive or divest their posterity, namely, the enjoyment of *life* and *liberty*, with the *means of acquiring and possessing property*, and *pursuing and obtaining happiness and safety* [2]

There is much controversy as to the theoretical origin of the philosophy of the French *Declaration of Rights* There is little doubt that the theory of the American Declaration of Independence originated primarily in Locke, but it has been something of a problem whether the French *Declaration* originated chiefly from the theory of Rousseau or from that of the Americans. It would appear that neither view possesses the whole truth and that influence was felt in France from both Most certainly the hand of Rousseau is apparent in the French document:

The representatives of the French people organized in National Assembly, considering that ignorance, forgetfulness or contempt of the rights of man, are

[1] Barnes, Harry Elmer, *An Intellectual and Cultural History of the Western World*, p 776
[2] Italics mine

the sole causes of the public miseries and of the corruption of governments, *have resolved to set forth in a solemn declaration the natural, inalienable, and sacred rights of man*, in order that this declaration, being ever present to all the members of the social body, may unceasingly remind them of their rights and their duties, in order that the acts of the legislative power and those of the executive power may be each moment compared with the aim of every political institution and thereby may be more respected, and in order that the demands of citizens, grounded henceforth upon simple and incontestable principles, may always take the direction of maintaining the constitution and welfare of all

In consequence, the National Assembly recognizes and declares, in the presence and under the auspices of the Supreme Being, the following rights of man and citizen

1 Men are born and remain *free and equal* in rights Social distinction can be based only upon public utility

2 The aim of every political association is the preservation of the natural and imprescriptible rights of man These rights are *liberty, property, security,* and *resistance to oppression* [1]

3 The source of all sovereignty is essentially in the nation, no body, no individual can exercise authority that does not proceed from it in plain terms

4 Liberty consists in the power to do anything that does not injure others, accordingly, the exercise of the natural rights of each man has no limits except those that secure to the other members of society the enjoyment of these same rights These limits can be determined only by law

5 The law has the right to forbid only such actions as are injurious to society Nothing can be forbidden that is not interdicted by the law, and no one can be constrained to do that which it does not order

6 Law is the expression of the general will All citizens have the right to take part personally, or by their representatives, in its formation It must be the same for all, whether it protects or punishes All citizens being equal in its eyes, are equally eligible to all public dignities, places, and employments, according to their capacities, and without other distinction than that of their virtues and their talents

This is but a part of the total enumeration of rights that appears in the document It is sufficient, however, to indicate that the French proposed to stand or fall upon the validity of the doctrine of sacred and inalienable natural rights of all men

### 3 *Reaction against Natural Rights and Extreme Individualism*

*a. Edmund Burke* The words of the constitutions and bills quoted afford a refreshing contrast to the stultifying dogmas of previous absolutism, but the periods ushered in by these documents are far from inspiring The doctrines of natural right were used by the bourgeoisie to gain control of, or at least to influence,

[1] All italics mine

the affairs of state This objective accomplished, the panegyrics of universal rights showed themselves for what they were, the ideological weapons of a class intent on gaining and keeping power This is not to say that some of the documents were not of democratic value, though the use they actually served can scarcely be called democratic in intent The bourgeoisie were not interested in democracy when the revolutions were over

This duality showed itself first in France, during the Revolution But throughout all the countries where there had been revolt there were discrepancies between the principles of inalienable natural rights and the actual civil and criminal law established

> For the great majority of comfortable middle-class people the gap between the bills and declarations of rights and actual law was of no more importance than the gap between the Sermon on the Mount and the routine of private Christians [1]

The comparison between the *Declaration of the Rights of Man* of 1789 and the *Constitution* of 1791 to which the former was prefixed shows this situation clearly enough

The prophet of the reaction against natural rights philosophy was the Englishman, Edmund Burke (1729–1797). His criticism was prompted by his alarm over the events of the French Revolution and the aims of the revolutionists He used every means at his command to vilify the latter, and called the 1789 *Declaration* "paltry and blurred sheets of paper about the rights of man" The 1793 *Constitution* he named "a Digest of Anarchy" He believed that government is an organic, continuous growth and that it is therefore unnatural for man to discard the past completely in order to establish the new Men are born into a government without their consent and owe respect to their institutions and constitution A constitution, once established, cannot be overthrown The Whig revolution of 1688 he justified because it was not the overthrow of a constitution but the restoration of the original constitution and the perpetuation of the same government:

> It was justified *only* upon the *necessity* of the case, as the *only* means left for the recovery of that *ancient* Constitution formed by the *original contract* of the British state, as well as for the future preservation of the *same* government

Burke, likewise, criticized the corollaries of natural right philosophy, political equality, popular sovereignty, and the right of

[1] Brinton, Crane, Natural Rights, *Encyclopedia of the Social Sciences*, Vol II.

revolution. Duties, he held, are as important as rights in government The majority have as little right as a minority to change the state Man has an obligation by virtue of his birth into the state to obey its institutions and authority The state exists not to guarantee the rights of man, but to provide for his wants

Despite his criticism of natural right theory, Burke reiterated many of its doctrines, though there is an evident tendency to substitute civil rights for natural rights and civil rights are not held equally by all The function of the state should be confined mostly to maintaining order and preventing evil The government can do nothing to aid the poor and in fact it should not. The poor he considered an inferior lot. They had no property to speak of and should not be entitled to representation in parliament Their superiors, the propertied classes, should rightfully dominate state affairs Contempt for the expropriated classes permeated much of English politics during the remainder of the eighteenth and the nineteenth centuries [1]

In America reaction was exemplified by the Federalist movement It has already been indicated that the natural rights theory was discarded in favor of a document insuring social stability and the growth of commerce Professor Becker writes that the anti-natural rights doctrine

> became the accepted creed of all those who wished to be classed neither with the reactionaries nor the revolutionists, those liberal-conservatives and conservative-liberals who realized that they lived in a changing world but ardently prayed that it might not change too rapidly [2]

To prevent the world from changing too rapidly nothing is more effective than to look with admiration on the past

In Europe the middle class was changing in character. The old bourgeoisie were increasingly replacing the aristocratic top of society Thus, while the conditions of life which had given rise to the revolutionary bourgeoisie with its philosophies of natural rights and social contract were swiftly being metamorphosed, natural rights theory became crystallized into dogma. Natural right, formerly a weapon against obsolete suppressive state forms, now became a weapon of the risen bourgeoisie against the workers The dogma became an answer to the cry for social

[1] Laski, Harold, *The Rise of Liberalism*, pp 225–238

[2] Becker, Carl, *The Declaration of Independence*, p 266, quoted in Haines, Charles Grove, *Revival of Natural Law Concepts*, p 66

legislation. The sacred rights of property were declared prior to the state, they could not be touched without destroying the bourgeoisie state Equality before the law became an empty barrel which the politicians loudly thumped to forestall unionization of workers and social control Thus natural right dogma outlived its function in social amelioration and became an item in the intellectual stock of the *status quo*

*b Laissez Faire* But the new order had its prophets and eulogists The best known of these was Adam Smith The similarities of his theory with those of the physiocrats are noticeable, but the dissimilarities are more striking In their plea for laissez faire, the physiocrats were writing for the large landholding class, Smith's plea for laissez faire was in the interest of the merchant class The physiocrats had nothing but contempt for the laboring classes, whereas Smith showed a growing respect for the dignity of labor But the most important of their differences concentrated upon the character of the *natural order*. To the physiocrats, the natural order was an ideal to be developed and introduced into the national economy by a paternalistic monarch or an enlightened despot To Adam Smith the natural order was not one to be evolved, it was an ideal that existed in fact Though its workings are sometimes checked by such interference as stupid legislation, it nevertheless exists as a fundamental thread underlying society

Man naturally tends to look after himself first, although this fundamental motive is not equally strong in all men nor is it the sole motive Others, such as sympathy, propriety, freedom, and the desire to work, also figure in promoting trade and industry and in making man a social creature Despite the motive of self-interest in human affairs, a benevolent hand of providence visibly shapes events Thus industrial and agricultural progress is automatic and works best without our tampering or even striving for it It is enough to look after one's own interests The "invisible hand" leads the economy to an equilibrium wherein a greater amount of wealth is produced than before Free competition is simultaneously best for society and for the individual

*c Absolutism* Early nineteenth-century German political philosophy took the form of a romanticist reaction against the empiricism and atomic individualism of the eighteenth century This reaction, beginning with Kant, grew in intensity until in the system of Hegel it received final expression in the concept of the

general will identified with the Prussian state. When the industrial revolution came, its dynamic effects were superimposed upon a philosophy which had prepared the groundwork for the union of industrialism and political absolutism.

Though Kant, and after him Fichte, did not accept the historic reality of a social contract, the notion was used as a basis for the evaluation of laws However, in spite of the denial of an actual contract, Kant described a state of nature in order to lend force to his use of the original contract as a criterion of right By nature man is free and equal, and originally he lived in a state of innocence guided solely by his natural impulses. Man was not conscious of moral law, and law was merely provisorily valid.

> The *beginning of the work of civilization*, however, was possible only through a break with the state of Nature, since it was in connection with its transgression that the moral law came to consciousness This (theoretically incomprehensible) "Fall" was the beginning of history Natural impulse, previously ethically indifferent, now became evil, and was to be opposed [1]

The situation rapidly approached a state of war of all against all. The compact theory is not an empirical explanation of the origin of the state, but a guide for its task The validity of law is to be tested by its probable standing if the state *had* been entered into by the contract. It is the duty of man to obey moral law apart from its effect upon his happiness, apart from all consideration of consequences. The law exists to insure not the happiness of all, which is impossible, but the freedom of all

Kant and Fichte wrote during two disturbing periods of European history, the former during the French Revolution, the latter during the Napoleonic campaigns The abstract ideals of the revolutionists influenced Kant, while the concrete presence of Napoleon's armies helped shape Fichte's thought The need for unity was forcibly impressed upon them and, in addition to the political need, there was the economic The industrial revolution was already under way in England, and Germany could be no competitor. Furthermore, if Germany adopted a policy of free trade, she would be swamped with English goods and the infant industries would perish So it is that the elements of fervent nationalism and protectionism seized upon the German mind In this atmosphere the individualist doctrines of natural right could not survive.

[1] Windelband, W., *op cit*, p 559

Fichte's political writings are distinctive for his organic concept of right In this he marks a transition from Kant to Hegel In his later writings, influenced by the disaster wrought by Napoleon, Fichte assigned a more positive function to the state than he or Kant had previously done He completely repudiated individualist natural right theory on the ground that in practice it would lead to anarchy Such a philosophy conceives the state as composed of private human atoms, a society lacking unity and adequate organization Society, however, is not atomic but organic since it is composed of interdependent personalities Rights are not prior to society but dependent upon it and can be realized only through social intercourse Primitive or provisory rights become compulsory only through the authority of positive right within the state These rights are the "claim of the individual to the freedom of his body as the organ for the performance of duty, of his property as being the external sphere of operation to this end, and finally of his self-preservation as personality "[1] The political state is natural, and its laws are nothing but the codification of the "true" natural rights As with Kant the social contract is used not as a historical actuality but as a criterion of right However, and it is this which distinguished Fichte from Kant, if any of the rights remain unrealized, the individual may disregard the contract completely Thus if a man cannot by his labor acquire sustenance, he is under no obligation to respect the property of others But the remainder of men, seemingly not because of expediency but in order to maintain right and contract, must give him of theirs It is incumbent upon the state to support those who have proved their willingness but fruitlessness with regard to work Fichte also writes of a right to revolt in the event that the policies of the sovereign become tyrannical and the checks placed upon him prove ineffective

The political philosophy anticipated by Kant and developed by Fichte was completed by Hegel Perfect freedom of the individual was declared dependent upon acceptance of the state, and the general will was abstracted, idealized, and identified with the state as a dialectically evolving spirit The Idea was conceived as real and objectively developing in a dialectical process of inner compulsion There are no natural rights in the sense that the state is obligated to recognize them, nor in the sense that they are inalien-

[1] *Ibid*, pp 595-596

able A right is merely a condition postulated for the proper execution of one's duties The rights already exist and are natural only in the sense that they are concretely present The concept of individualist natural rights and the social compact were ideas diametrically opposed to Hegel's philosophy of right. According to him, the state does not exist on the basis of its recognizing certain inalienable rights The individual exists in order to fulfill certain duties through the medium of rights already existent That is, men are not born *with* rights but born *for* them Of such rights Hegel was particularly concerned with two, property and life

The principal novelties of the German philosophies of right are their emphasis on duty and subordination of the individual to the will of the state The danger of the second of these is readily apparent The effect of this philosophy of the state upon progress is well given by Professor Hobhouse, who writes that idealism, "instead of seeking to realize the ideal idealizes the real "[1] Hegel himself wrote, "the insight to which philosophy ought to lead us is that the real world is as it ought to be "[2] John Dewey writes

> The most obvious conclusion would seem to be the impotency and the harmfulness of any and every ideal that is proclaimed wholesale and in the abstract, that is, as something in itself apart from the detailed concrete existences whose moving possibilities it embodies The true moral would seem to lie in enforcing the tragedy of that idealism which believes in a spiritual world which exists in and by itself, and the tragic need for the most realistic study of forces and consequences [3]

*d Liberalism* One of the most obvious characteristics of French political philosophy during the nineteenth century was that it came not from sheltered professors in the universities but mainly from people active in the political and economic struggle A considerable number and variety of social theories emerged, each interested to attack existing social practice or to offer proposals for reform or both Among these, the Utopian Socialists represented a humanitarian reaction to the emerging industrial economic order Most of the French Utopians were disillusioned intellectuals of the middle class The effect of the swift social changes following the Revolution had attracted their

[1] Hobhouse, Leonard T , *The Metaphysical Theory of the State*, p 112

[2] *Ibid* , p 17

[3] Dewey, John, *Reconstruction in Philosophy*, pp 229–230 By permission of Henry Holt & Company, publishers See also Harold Laski, *The State in Theory and Practice*

attention. They subjected the capitalistic order to a merciless criticism and took up the cause of the exploited masses, who were as yet politically and economically undeveloped The Utopians believed that desirable social changes could not come from a helpless proletariat but only from an enlightened and benevolent group of capitalists By "rational" propaganda it was hoped to appeal to the good will and reasonableness of the rich to change the existing social order for the benefit of all mankind

Among the more radical elements were the Anarchists Their appeal was for an unqualified application of natural rights theory All the accumulated individualist theories of natural rights were used to justify complete freedom of the individual The controlling bourgeoisie forestalled the Anarchists by repudiating the notion of the social contract and individual consent and by further substituting the civil rights of the bourgeois state for the natural rights of the struggling multitude The Anarchists had respect for none of this The natural rights of man, they held, were unlimited freedom and equality The most sacred of the rights of the bourgeoisie, private property, was rejected on the ground of its corruptive and exploitive implications.

The Anarchists, however, were swimming against the intellectual current of the nineteenth century on the Continent Political speculation was definitely turning away from both the unreal metaphysical abstractions of the natural right theorists and the reactionary theological dogmas of the Catholic church The liberal trend in France is best exemplified by the positivist, Auguste Comte, whose political philosophy was representative not only of the growing interest in social movements during the first half of the nineteenth century, but also of the growing respect paid to the potentialities of an industrial civilization It seemed clear that, while social instability accompanied the new economic order, at the same time that order was producing a quantity of goods greater than Europe had ever seen It was argued that once the principles of sociology were grasped the industrial age could be completely adapted to the needs of man The old abstractions and a priorisms the positivists regarded as the ideological elements of the intermediate stage in the evolution of society Natural right and social contract theory, both products of the intermediate stage, were repudiated in favor of a historical approach. The state of nature as a golden age was declared a myth.

*e Civil Rights* British political theory was more pregnant with the political aspirations of the new industrialized bourgeoisie and the problems occasioned by the rise of the proletariat The existence of a sorely exploited proletariat, completely divorced from the instruments of production, a petty bourgeois, a fully developed bourgeois class, and an aristocratic element caused a series of various coalitions with varied political expression. The Anarchist school of thought was represented by William Godwin (1756–1836) and Thomas Hodgskin (1787–1869). Godwin belonged to the revolutionary era. His work combined elements of eighteenth century natural law theory with the Utopias of Plato and More and the then current individualistic and utilitarian doctrines of England [1] Godwin would abolish all coercive units of society larger than the parish He believed that the natural intelligence of man makes feasible a natural state wherein the moral censure of companions can function as the sole coercive agent More in harmony with his time was Hodgskin, who was greatly influenced by Adam Smith Whereas Godwin had postulated the inequality of property as one of the great evils of society, Hodgskin spoke of a natural right to the whole produce of one's labor Society operates in accord with eternal and immutable "laws," one of which is an ultimate and underlying harmony of human interests. There is therefore no need for legislation except that of repealing all existing laws Hodgskin, together with his follower William Thompson, was an important influence in the development of the labor theory of value which figures so dominantly in the work of Marx

Utopian socialism was represented best by Robert Owen (1771–1858), who was an exponent of cooperation in industry, trade unionism, and factory legislation. He was also a strong believer in environmentalism and education The conditions of his day may be grasped when one learns that in his colony, New Lanark, he was able to increase the age of working children to ten years and decrease their hours of work first to fourteen and later to twelve His New Lanark scheme was particularly utopian in that he tried to introduce cooperation at a time of rapid industrial expansion under impetus of larger profits

We may distinguish four stages in the development of English bourgeois ideology, each of which figured to some extent in the succeeding stage and each of which is indicative of the movement

[1] Gettell, *op cit*, p 309

and strength of the middle class (*a*) natural right theory, (*b*) bourgeois reactionary theory (as distinguished from the reactionary thought of aristocratic elements), (*c*) economic individualism, and (*d*) utilitarianism The first served the bourgeoisie in their struggle against monarchical restriction by sanctifying an appeal to rights not recognized in positive law, the second denied the extreme conclusions of natural right theory which might have been used by a militant proletariat or city mob, while it accepted its political "deposits" in so far as they were of benefit to the bourgeoisie, the third served to justify and sanctify the enterprises of factory owners, and the fourth served the bourgeoisie as a wedge in gaining political control

Elements of utilitarianism may be traced back to the Greeks if we wish, but as a system of concrete political significance it is essentially modern—and English Similar to positivism, utilitarianism was concerned with concrete immediate realities as opposed to the vague metaphysical generalities of natural right philosophy The good of institutions is not to be measured by the number of natural rights they recognize but by their utility, by the amount of general happiness they effect As did Comte, Bentham maintained that rights inhere in the positive law alone To speak of rights contrary or anterior to the law is "nonsense" He pointed out, as did Hume, to whom he gives credit, that the term *natural* is a figurative expression, vague and devoid of definite meaning If used literally it may arouse forces that are a menace to society and its employment in the interpretation of politics can create nothing but confusion However, though natural rights are entirely mythical, there are yet moral or civil rights These are not "natural," "inalienable," nor "inviolable" They are inseparable from duties and are not ends but the means to an end, the general happiness Our rights must be relative to the maintenance of the common welfare, our duties are determined in accordance with their utility for humanity

*f Theory of Political Democracy.* The entrance of the proletariat into the political scene, though aided by the work of the bourgeoisie, was really the result of their own agitation and, paradoxically, the agitation of the aristocratic landowners and the political machinations of the conservatives The universalism of natural right theory had given way in practice to the narrow

ideology of a ruling class forced to maintain its order by force. The various "immutable" natural rights became so only for the conservative and reactionary bourgeoisie The liberals may have disowned natural rights theory and various reactionary elements may have disowned it because of its anarchical implications which might have been seized upon by the rising proletariat, *but the central point of natural right theory remained, an unhindered profit economy anterior and superior to the state* Civil rights were tolerated only in so far as their exercise did not threaten the institution of production for individual profit Under "natural rights" and under the "benevolent hand of providence" the workers of England were deprived of productive facilities, regimented into factories, exploited worse than Roman slaves, dwarfed and maimed, ruined in health and morale, executed, imprisoned, and "transported"

Natural rights had been used to gain state power Once state power had been gained and the freedom to buy and sell firmly established, the revolutionary implications of natural right philosophy were effectively canceled by legislation and the notion became in practice a symbol for a nonexistent system of universal beneficence identified with the profit economy

Against this situation the proletariat had to struggle for suffrage. In so doing, implicitly or otherwise, there was involved a theory of political democracy Whether this political democracy, gained substantially after a century of struggle, is worth anything, whether at the very least it can escape annihilation by the industrialists and petty bourgeoisie in their determined endeavor to maintain the profit system, whether the mass of people can adjust the economy to eliminate poverty in the midst of plenty, or whether democracy is anything more than an abstraction remains to be seen Commenting upon the rise of the democratic tradition, Harry Elmer Barnes says.

> Democracy was formulated before the existence of scientific knowledge about man's political behavior and before there had been any significant experience with representative government and majority rule Democracy of the nineteenth century rested upon the following general conditions and basic assumptions (1) a simple, unchanging, agricultural society, (2) rudimentary political problems, (3) the local nature of political issues, (4) the *laissez-faire* theory of government, which contended that the best government was that which governed least, (5) the dogma of the real intellectual equality of men, (6) the equal fitness of all to vote and hold political office, (7) ardent popular interest in politics and the

right of suffrage, (8) the capacity and inclination of the people to scrutinize platforms before casting their ballots, and (9) a belief in the unique capacity of the masses for eradicating injustice and reforming society [1]

*g Influence of Jurisprudence.* The final work of blasting natural right philosophy was done by the various jurisprudential schools of the nineteenth century [2] The first of these to challenge sharply metaphysical natural right theory was the Analytical School, whose founder was John Austin (1790–1859) This school combined elements of positivistic and utilitarian thought as well as minor, though valuable, contributions of such philosophers as Bodin, Hobbes, and Spinoza Austin declared that the state developed slowly into its modern form and that it is based not on consent dating from a nonexistent social contract but on habit, sentiment, and the realization of utility The fundamental characteristic of the state was conceived to be a supreme and absolute sovereignty. Laws are obligatory rules or commands enforced and sanctioned by the sovereign power, which is the sole source of all "legal" rights and civil liberties All rules and commands other than those enforceable by the sovereign power are "merely" customs, habits, or moral practices. The fields of ethics and jurisprudence are to be carefully separated The latter has to do with an examination or analysis of existing positive law, the *philosophical* problems of justice and law are to be relegated to the former field. Thus there is no ground for the proclamation of rights, natural or otherwise, in the legal system, over and above those created and sanctioned by the sovereign power Furthermore, as regards political life, every legal right created carries with it a corresponding obligatory legal duty just as every political liberty created carries with it a corresponding obligatory restraint To stress the former elements to the exclusion of the latter, as to stress any right or liberty to the exclusion of duty and restraint, leads to anarchy

Whereas the aim of the Analytical School was an analysis of contemporary statute law viewed as a static commandatory entity, the Historical School used a genetic approach to law The chief member of this school was Friedrich Karl von Savigny (1779–1861)

[1] *An Intellectual and Cultural History of the Western World*, p 945 By permission of The Cordon Company, New York

[2] See Patterson, C P, *Recent Political Theory Developed in Jurisprudence*, in Mirriam and Barnes, *A History of Political Theories in Recent Times*, also *Interpretations of Legal History* by Roscoe Pound

Law, it was argued, is a development of ideas of right as evidenced in the national life of a people and is interdependent with that development. It is the function of the sovereign power to discover and legalize this law concretized in the habits, customs, and traditions of a people Though rights exist, these do not inhere in an absolutist metaphysical human nature, but in the changing collective consciousness of a nation, in folkways, mores, and positive, that is, legally enforceable, laws. Though technically there is no natural law or right, in effect the members of the school preserved one of the essentials of natural law doctrine, a dualism between positive law and spontaneous law, the latter being appealed to in organizing the former This school is significant for its admission of the necessity and inevitability of reform and change in the content of right when changes occur in the social order, for its making right coordinate with historical development, for its tendency away from universalism and absolutism in rights However, because the members of the school were indoctrinated with Hegel, they were inclined to justify the past and the *status quo* and to oppose, therefore, reform of the legal system The movement in this respect was similar to the views of that other exponent of the historical method, Burke, who put tradition on a pedestal to forestall social and legal change Nevertheless, the trend after the middle of the century included recognition of social flux and moved toward relativism rather than absolutism in social theory

Central to the various attacks on natural right philosophy by political and jurisprudential thinkers was the fundamental negative intellectual trend of the nineteenth century This is already noticeable in the historical school, in positivism, in utilitarianism, and in other systems of thought Various aspects of it are found in the Ricardian theory of rent, in the Malthusian theory of population, and, principally, in Darwinism It was the work of the nineteenth century to refute one group of natural rights assumptions those which may be called "natural preconceptions" or those traceable to a mixture of theological and metaphysical elements The refutation of another central group of preconceptions which may be designated as "psychological" falls more within the scope of the twentieth century.

*h Darwin, Marx, and Engels* The philosophical implications of Darwinism completely negated the preconceptions of natural right theory For the assumption of a natural harmony of interests,

Darwin substituted the notion of a continual natural struggle for existence The notion of a kind, personal, teleological nature was discarded for the view of a relentless, mechanical, purposeless nature The concept of man was changed, he was no longer to be looked upon as a semiperfect being living in a world specially designed for him, but as one animal among many at a stage of its development The previously assumed superiority and objectivity of a nature that is eternally immutable could no longer be held Nature must be viewed as a process of continual, purposeless, mechanical flux Any other view must be the child of wishful thinking It was the fact that the broad implications of Darwinism were carried over into political theory that revolutionized philosophies of natural right In a changing nature there can be no place for eternal "natural" rights or laws

The different philosophies discussed in this section that were antinatural right in bias came principally from men interested in maintaining the new economic and political order Exceptions in the instance of anarchism and utopian socialism, while attacking various phases of the capitalistic order, were manifestly of little practical value to a dissenting group About the middle of the nineteenth century, however, two socialist thinkers, Karl Heinrich Marx and Friedrich Engels began to attract attention as the founders of a new school of socialist thought known as Scientific Socialism Their social philosophy was antithetical to that of the defenders of the new regime It was a philosophy openly proclaimed as proletariat in bias and was absolutely inimicable to any individualist conception of natural rights as the doctrine was variously presented before and after the conquest of the market and the state Previous socialist thought, in so far as it represented a reformist movement, assumed the existence of at least three basic natural rights, those of work, existence, and the full product of one's labor For these as a program Marx substituted socialization of the means of production.[1]

Marx's work was primarily an excellent synthesis of certain existing material The notion of surplus value had been variously expounded by Turgot, Godwin, Hall, and Thompson, capitalist concentration by Pequer, Fourier, Blanc, and Sismondi, class struggle by Plato, Aristotle, Blanc, von Stein, Thierry, Guizot, Proudhon, and Weitling, growing misery of the proletariat by

[1] Mises, Ludwig von, *Socialism*, pp 58–63

Robertus, the theory of capitalist crisis by Owen, Sismondi, Fourier, and Rodbertus, the labor theory of value in slightly different form by Smith, Ricardo, Thompson, Hodgskin, and Rodbertus, the dialectic by Hegel in its idealist form Engels described three important scientific discoveries of the age that had influenced the notion of dialectical materialism the discovery of the cell as the unit of living matter, the transformation of energy, and Darwin's theory of evolution Marx was conscious of some of this borrowing from older theories In a letter to his friend Weydemeyer dated March 5, 1852, he wrote of his work on the class struggle

> No credit is due to me for discovering the existence of classes in modern society, nor yet the struggle between them Long before me bourgeois historians had described the historical development of this class struggle and bourgeois economists the economic anatomy of the classes What I did that was new was to prove (1) that the existence of classes is only bound up with particular historic phases in the development of production, (2) that the class struggle necessarily leads to the dictatorship of the proletariat, (3) that the dictatorship itself only constitutes the transition to the abolition of all classes and to a classless society

Marx has been one of the major influences in modern social philosophy from a practical standpoint What the ultimate product of his *Das Kapital* will be it is impossible to estimate, and it is beyond the scope of this discussion to enter into an examination of communist social philosophy, which passes currently under the name, *dialectical materialism*

### 4 *Modern Trends*

*a General* Not only has the doctrine of natural rights come down to the contemporary era changed by various individuals to fit varying solutions of particular social problems, but the doctrine itself, in the form propounded in the classical manner of Locke, has come under a certain amount of excellent analysis The modern trend has been enriched by changes in sociological and ethical concepts engendered particularly by the biological sciences Our knowledge of the complexities of the doctrine has not only increased, but likewise a larger store of practical knowledge has aided in the formulation of a "truer" shaping of it to modern needs The phenomena of social change which interested Saint-Simon, Comte, and others have become increasingly evident It could only have become so through the rise of conflicting classes Under such a stimulus, and through the consequent change of relevant ideas,

the notion of natural rights has been born anew Shorn of its mystic and absolutist elements it has become for the time being a belief giving rational justification for social change

*b Fascism and Communism* In Europe the situation is complicated with various social theories, particularly of fascism and communism Both are concerned with the problem of natural rights Both represent attempts to escape the dilemmas of capitalism by dictatorships, the latter often being declared to be but a temporary expedient Fascism denies the class conflict and enforces social solidarity while keeping the basic "contradictory" forces under strict control The economy of fascism is a war economy Its ideology is excellently exemplified by Jew-baiting and book-burning orgies as well as its war spirit and the return to Wotan or Caesar as the case may be Communism accepts the existence of the class struggle as predicted in the existence of certain economic factors central to capitalism and sets about the destruction of those elements Its economy is a decentralized one based on a mixture of the ideal and the expedient Its ideology is collectivism and equality of opportunity Society is the means for the realization of the welfare of all its members.

For Fascism, *society is the end, the individuals the means, and its whole life consists in using individuals for its social ends* Individual rights are recognized only in so far as they are implied in the rights of the State In this preeminence of duty we find the highest ethical value of Fascism Individuals come into being, grow, and die, followed by others unceasingly, social unity remains always identical to itself

For liberalism society has no purpose other than those of the members living at a given moment For Fascism society has historical and immanent ends of preservation, expansion, improvement, quite distinct from those of the individuals which at a given moment compose it, so distinct in fact that they may be in opposition Hence the necessity arises for the total immolation of individuals, in behalf of society, hence the true explanation of war, eternal law of mankind, interpreted by the liberal-democratic doctrines as a degenerate absurdity or as a maddened monstrosity Our concept of liberty is that the individual be allowed to develop his personality in behalf of the State, for these ephemeral and infinitesimal elements of the complex and permanent life of society determine by their normal growth the development of the State [1]

The German and Italian governments are both strongly opportunistic, based on expediency and counterrevolution, an attempt to forestall the destruction of capitalism The Germans are espe-

[1] Rocco, Alfredo, *The Political Doctrine of Fascism*, International Conciliation Pamphlets, No 223

cially enchanted by notions of race and national superiority, representing the fruit of a century of nationalist ideology

The view of the Russian Communist Party on the theory of rights is best exemplified through the works of Vladimir Ilich Ulianov, better known as Lenin His contributions to Marxism include material on such problems as the dictatorship of the proletariat, colonization, the peasantry, nationalities, hegemony of the proletariat, the tactics and principles involved in the building of socialism, the work of the Communist Party, imperialism, dialectics, etc. The most important philosophical and practical (the two are identical in Soviet Russia) contribution was that of the law of the uneven development of capitalism Marx and Engels had assumed that the growing international movement of their day would continue unabatedly The final overthrow of capitalism would be roughly world-wide in time Lenin, however, believed that capitalism developed unevenly in various countries Revolution would not come at once on an international scale, but in countries representing the weakest link in the imperialist chain and at a time of national crisis He believed it thus possible to build socialism in one country with the aid of pacts with capitalist nations

*c American Views* The dominant American social trend is epitomized by the work of John Dewey His views on social and philosophical reconstruction are germane to the changing concepts involved in the problem of right. He believes philosophy arose out of a motive to reconcile "the moral rules and ideals embodied in the traditional code with the matter of fact positivistic knowledge which gradually grows up."[1] Though, as Dewey points out, environment places little check on the imaginative activity, a certain minimum of correctness in ideas is enforced under the penalty of extinction. This matter-of-fact knowledge, which soon grows to such an extent as to come into conflict with traditional and imaginative beliefs and methods, arises from industrial, artistic, and handicraft activities. Since philosophy

> aimed at a rational justification of things that had been previously accepted because of their emotional congeniality and social prestige, it had to make much of the apparatus of reason and proof Because of the lack of intrinsic rationality in the matters with which it dealt, it leaned over backward, so to speak, in parade of logical form
>
> Instead of the disputes of rivals about the nature of reality, we have the scene of human clash of social purpose and aspirations Instead of impossible attempts

[1] Dewey, John, *Reconstruction in Philosophy*, pp 9–10

to transcend experience, we have the significant record of the effort of men to formulate the things of experience to which they are most deeply and passionately attached Instead of impersonal and purely speculative endeavors to contemplate as remote beholders the nature of absolute things-in-themselves, we have a living picture of the choice of thoughtful men about what they would have life to be, and to what ends they would have men shape their intelligent activities [1]

The same interpretation applies to the whole of man's intellectual activities Thus social issues have first of all to be equated with human problems and interests All values including the enjoyment of rights and the observation of duties lie embedded in the nature of human beings

Modern social theory is dependent upon recent researches in various fields of social and semisocial activities These cannot go unnoticed in a consideration of the modern attitude toward natural rights doctrine, for they have been instrumental in shaping it They have, on the negative side, been forces in the process of casting off older preconceptions to make way for fresh insight

Beyond the scope of detailed treatment, though basic to modern social philosophy, is the fundamental irreligious movement of our time The "discipline of life" enforced by industry is disintegrating the orthodox conceptions of the deity and the host of animistic, anthropomorphic concepts inherent in it This is being done not only indirectly, but also more directly by the presence of activities and interests of a secular nature The ideology guiding, or misguiding, as the case may be, the affairs of everyday life has become and is still becoming more materialistic, as it is equated with a host of matter-of-fact knowledge imposed by contact with the exigent problems of practical existence

The modern widespread acceptance of the data of the sciences has increasingly brought home to mankind the concept of universal change It has therefore become much more difficult to accept systems of thought in any field which employs unchanging concepts or rules of procedure Today universals tend to encompass a minimum of ideas and incline to be sufficiently abstract as to lose much of their possible usefulness. In the field of ethics the movement is away from the notion of inherent rights and toward the view that rights, if they have any real significance, are the product of social intercourse and function as the means to social amelioration Thus they have lost the character of absoluteness once widely

[1] *Ibid*, pp 20, 25, 26

believed to be basic to their nature Today most thinkers look upon systems of absolute rights as not only nonsensical but, more significantly still, as inimical to the welfare of people

A barrage of facts from the fields of psychology and logic have undermined the old and widely accepted belief in the rationality of man If rationality means anything today, it means a capacity to engage in a certain type of activity And in terms of capacity it appears that in actuality a large element of irrationality is quite as characteristic of man as rationality. Intuition, revelation, or rational methods of discovering the natural rights are now understood to make articulate not the will of God or of physical nature but the will of interest groups

Natural rights conceived as inhering in personality or as independent of societal life have been denuded of glamour by psychology and sociology Apart from social considerations, the foundation of innate rights has been pretty well disintegrated. Habit, "the enormous flywheel of society," gives us insight into the workings of beliefs Habitual thought tends to become right thought Methods of life create habitual interests which gather around them habitual, agreeable, approbational, or "certain" morals which become transcribed into rights. Thus habit perpetuates custom

Custom, however, is in great part group behavior in a condition of flux Society is divided into fields of interests, institutions, classes, or groups Out of group interests arise folkways and mores, fundamental codes of conduct around which the notion of social approbation and habit intermix to form the notion of right But the discipline of life giving rise to interests changes Interests not only tend to change within themselves but are also changed by men through a process of intergroup struggle No social interest or value remains static No absolute social ideals are possible in a world of change

Much has been done in the field of social psychology to explain the activity involved in the acquisition and use of language symbols Such symbols are "natural rights," "natural liberty," or "the American way" Rights and freedom were undoubtedly symbols not only to the American "robber barons" but likewise to the mass of the population They were what might be called natural symbols They arose out of the way of life of that time The danger of the symbolization today is that the objective background is

lacking, their use as symbols for nonexistent phenomena is forwarded by some contemporary interests with the object of forestalling social reconstruction These interests preach an eighteenth century individualism and system of natural liberty in an era of collectivism and monopoly. They hamper reconstruction by meeting every specific problem with metaphysical conventionalities. Owing to their tremendous influence exerted through newspaper chains, magazines, and the like, their ideology cannot but interpenetrate that of groups desiring social change Today the mixture is an incongruous one but one that will likely obtain clarification with time

It is out of an integrated background of these and other intellectual elements of social change that a new version of natural rights has been wrought Today the need is for social planning if the forces of production are to expand, for it is becoming increasingly evident not only that our method of distribution is inequitable but also that our method of production is in part archaic The fight for social security in the midst of economic instability, the growth of labor and consumer unions, the growth in membership of the radical parties, the left swing of the liberal parties, are all evidences of this On the other hand, the forces making for fascism, a superficially planned order multiplying the worst features of finance and industrial capitalism, are also fighting for supremacy We are reaching a series of conflicts that will make for fundamental social change Out of such a situation, in those lands where the conflict has not yet been forestalled or has already been fought out, the notion of natural rights arises on a higher level, to be sure, but one that retains its most fundamental character—that of the proclaimed superiority of certain group claims, rooted in group thinking, over that of the claims recognized by statute law.

We are living today in a semicollectivist economy, while our social philosophy leans heavily toward eighteenth century individualism The opportunities of that era, however, no longer exist A *conscious* collectivism, organizing economy on planned lines, alone can, in a highly mechanized age, give the individual a secure livelihood and a chance for development without violating values beneficial to the whole group That the reconstructing of our economy along such lines is fraught with strong passions and violent social and political upheavals is undeniable. The danger can be lessened, Dewey thinks, if we can realize the fundamental

factors involved, though the danger cannot be entirely averted unless our change is exceedingly slow. Even then the possibility remains

In common with the dominant movements of our time, the new concept of natural rights has taken on much of a coloring of economic content Essential to this economic coloring are the notions mentioned previously and another implied, namely, that of a "social minimum" This concept has been well expressed in the modern manner by the economist, Professor John Clark of Chicago University. He writes·

> [There] appear to be certain *natural needs* of humanity which are, for all practical purposes, permanent, but the system of legal rights needed to protect these human needs changes with changing methods of work and conditions of living But satisfaction is relative, and with each human need there is a certain minimum of which people cannot be deprived without society's suffering serious consequences *The exact boundary line of this minimum is impossible to draw* We may say, if we choose, that everyone has a "natural right" to this minimum, in a certain sense Using the term in this way, two fundamental propositions stand out One is that *natural rights in this sense must necessarily be inalienable, hence liberty cannot be a natural right to the extent of making it possible to alienate any of the others and to cut one's self off from meeting one's minimum natural needs* A second fact is that it requires very different schemes of duties and remedies to protect these minimum needs in different stages of social development, with the result that, *even if there are "natural rights" in this sense of needs for substantive benefits, which society cannot afford to see denied, this carries with it no natural system of legal obligations* These must still be treated as adaptable instruments for the attainment of social purposes There are no eternally natural procedures [1]

Charles Grove Haines in Chap XII of his *Revival of Natural Law Concepts* lists five "objectives in the revival of modern law thinking" (1) Natural law as a device to introduce ethical concepts into law, (2) natural law as an ideal or philosophical standard, (3) higher laws to guide judges as legislators, (4) higher law theories as a basis for limits on state sovereignty, and (5) limits on the power to amend constitutions in America based upon fundamental principles and rights

Natural right theory has been variously revived to lend justification to the programs of the individualist, the conservative, and the reactionary as well as the liberal It is undeniably true that leading thinkers in the fields of politics, economics,

[1] Clark, John Maurice, *Social Control of Business*, pp. 142–143 Italics mine By permission of The University of Chicago Press

sociology, and law have, during the present century, become increasingly aware of the social implications of natural law concepts As it has been indicated, this view is not new in the realm of theory, but it is more than ever apparently true of today If natural rights exist at all they are found in the social structure rather than in the biological or physical orders Rights are personal things that relate individuals and groups within a society Societies do not originate upon the basis of preexisting rights but evolve rights, and duties as well, during the years of their existence. They serve as the ideals upon which the future happiness of societies depend As ideals, rights have, and should have, a place of particular importance in any organization of people They are something to strive to maintain, but they are also something worth striving to improve In this light they lose their inflexibility and become evolving tools for the use of an enlightened people, who, while seeking to realize values today, are also conscious of the desirability of guaranteeing benefits to future generations

The need is indicated for planning ahead, for making provisions today for tomorrow's security Thus visions of the future often reveal the inadequacies of past and present ideals, sacred though these may be held to be and supported though they may be by results that have accrued up to the present Though the architecture of social structure has served well during the past, that fact alone is not sufficient argument against effecting such changes in the laws of society as may from time to time be demanded by its growth and development

In America it has always been the paramount objective of our theory of democracy to promote and secure the general welfare Using the term *natural* rather generally, it would be possible to argue that that is natural in our society which will effectively promote and secure the public welfare. This would imply that whatever is of public benefit is automatically the proper objective to seek What is right, therefore, is determined by the nature of a social ideal While seeking to realize a certain ideal it will inevitably be determined that those participating are to receive benefits to which they will possess certain rights and be subject to corresponding duties Now in the event that a social ideal undergoes alterations within an enlightened society, or if conditions make its realization impossible, then necessarily there must be corresponding changes in the concept of rights Even under the most favorable of

circumstances it is likewise inevitable that the means of realizing an approximation to the ideal will have to be altered from time to time For these reasons it is irrational to assume the attitude that human rights of any sort are eternal or natural in the sense of their being an aspect of a static order In a realm of social flux the past may serve as a guide but never as an absolute and binding force upon the present and the future

Whatever may be the future history of the concept of natural right, its present status in America among leading theorists is expressed in representative fashion by Roscoe Pound late of the Harvard Law School It is to be interpreted as "an idealized ethical custom and an ideal picture of the end of law, painted, it may be, with reference to the institutions and ethical customs of the time and place "[1] Thus expressed, natural right or natural law should serve as an ideal guide for the building of the law of the land under the intelligent administration of which the general welfare is to be secured Man has created all the rights there are and will create all of them there ever will be As a creature living with or without choice in societies, it is perhaps natural—at least it is inevitable—that he develop concepts of rights, but it is scarcely defensible that it is natural for him to devise any *particular* set of them

## DISCUSSION TOPICS

1 In what way did the Sophists contribute to a clarification of natural law theory?

2 Compare and contrast the views of Plato and Aristotle with those of the Stoics on the problem of immutable law

3 Distinguish the following terms as used during the period of Roman ascendancy, *jus civile*, *jus gentium*, *jus naturale* State briefly the use of these terms by the praetor, Ulpian

4 What is the meaning of the term *bourgeoisie*? What part did the bourgeoisie play in shaping natural rights theory during the medieval period of history?

5 With reference to the problem of sovereignty discussed, state the views of the following Marsiglio, Occam, Locke, Hobbes, Hegel

6 Make clear the general meaning of the contract theory of state Outline the respective versions of it offered by Hooker, Hobbes, Spinoza, Locke, Grotius, Pufendorf

7 Describe the views of the above men regarding the *state of nature* Why did this concept occupy such an important place in the development of natural rights theory?

[1] Pound, Roscoe C, *Law and Morals*, p 113

8 Discuss Grotius' theory of law and right According to seventeenth-century thought what connotations had the word *natural?*

9 Briefly outline the conditions existing in Great Britain during the latter half of the seventeenth century that contributed to the origin of the following *Petition of Right, Habeas Corpus Act, Bill of Rights, Toleration Act*

10 Outline Hume's objections to the current usage of the terms *social contract, consent theory of government, natural*

11 Give an outline of Spinoza's social philosophy

12 Who were the physiocrats? Of what importance were they in the development of economic theory?

13 Compare and contrast the work of Voltaire and Rousseau during the years prior to the French Revolution

14 How did the opinions of Thomas Paine and Edmund Burke differ concerning the theory behind the French Revolution? Of what importance was Paine during the struggle of the American colonies for independence?

15 Analyze the objectives of the framers of the American Constitution during the period from the close of the Revolution to the year 1789

16 Make a summary of the results of the French, English, and American revolutions with particular reference to the status of natural rights

17 Outline Burke's criticism of natural rights philosophy

18 Describe Adam Smith's interpretation of the natural order

19 Describe early nineteenth century German political philosophy particularly as offered by Kant, Fichte, and Hegel

20 Identify the following Utopian Socialists, Anarchists, William Godwin, Thomas Hodgskin, Robert Owen, Jeremy Bentham, John Austin, von Savigny.

21 Contrast the interpretation of nature offered by Adam Smith with that envisioned by the Darwinian theory of evolution

22 Give a brief outline of the principles underlying the social philosophy of Marx and Engels Do they have anything in common with Darwinism?

23 Contrast the social philosophies of fascism and communism What is the theoretical status of the individual in each of these societies?

24 What is the position occupied by John Dewey with reference to American social theory? What is his attitude toward absolute principles?

25 What is the gist of modern American opinion with regard to the origin, status, and function of natural rights? In general how does modern opinion differ from seventeenth century theory as represented, for example, by John Locke?

## PARALLEL READINGS

*Historical*

BARNES, HARRY ELMER *The History of Western Civilization*, Vol II, Chaps. IV–VII, XI, XXIV

BECKER, CARL. *Modern History*, Chaps III, VI–VIII, XVI–XVIII

*Encyclopedia of Social Sciences*, Vol I, Part I, of Introductory, Articles 6–9

WEISBORD, ALBERT *The Conquest of Power*, Vol I, Book I

*Natural Rights*

BRINTON, CRANE Natural Rights, *Encyclopedia of Social Sciences*, Vol XI

GURVITCH, CHARLES. Natural Law, *Encyclopedia of Social Sciences*, Vol XI

HAINES, CHARLES G. *Revival of Natural Law Concepts*, Chaps I–III, XI–XII, and pp 216–234
MUIRHEAD, J H Rights, *Encyclopedia of Religion and Ethics*, Vol IX
RITCHIE, DAVID G *Natural Rights*, Chaps I–II, IV–V
VEBLEN, THORSTEIN *The Theory of Business Enterprise*, Chaps. IV, VIII–X.
WINDELBAND, W *A History of Philosophy*, Secs 32, 37.

*Miscellaneous*

BECKER, CARL *Heavenly City of the Eighteenth Century Philosophers.*
DEWEY, JOHN *Reconstruction in Philosophy*
GOUGH, J W *The Social Contract.*
HOLMES, OLIVER W *The Dissenting Opinions of Mr. Justice Holmes.*
LASKI, HAROLD *The Rise of Liberalism*
MARTIN, KINGSLEY *French Liberal Thought in the Eighteenth Century.*
SMITH, T V *The American Philosophy of Equality*
SPAHR, MARGARET *Readings in Recent Political Philosophy*
WRIGHT, BENJAMIN F *American Interpretations of Natural Law.*

# Chapter XXVII

# SOME POSSIBLE IMPLICATIONS OF RECENT SCIENCE

## 1. *The Newtonian "Classical" Tradition*

Advances in the mechanical sciences begun by such men as Copernicus and Galileo reached their culmination in the seventeenth century's great English physicist, Newton. The results of his work are probably more important for science than for philosophy in so far as the latter is strictly constructed But it cannot be overlooked that any man who deeply influences the trends of science likewise automatically induces alterations of viewpoint in the general field of philosophy, for philosophy must follow science lest it get too far away from things as they are. Newton's influence upon philosophy takes two forms, the one just mentioned, the influence exerted indirectly through the development of physical science, and the other, an influence felt through the exposition of his own personal philosophy of life. There is in this respect something of a parallel between Newton and Einstein of the present day While Einstein is noted most for his contributions to the field of relativity physics, he has also influenced the lives of men by virtue of his personal outlook on life. A great man's influence seldom is confined merely to the sphere of his major interest

Newton was by nature a very careful worker and refused always to make known his ideas or his theories until he had gathered sufficient evidence to support them An excellent example of this habit is illustrated in the case of his invention of differential calculus Newton and Leibnitz together are ordinarily credited with having invented this higher form of mathematics, but it is known that Newton probably had thought of it and had worked upon it before Leibnitz, though his announcement of it and the publication of his views came after those of Leibnitz

Newton's greatest discoveries were made in the fields of light and of gravitation Of the two his theory of gravitation has been of

most significance By means of this concept Newton included all the universe within a realm of cosmic law and order His argument was based upon the hypothesis that physical laws which hold good upon the surface of the earth also hold good for the whole universe in so far as it is possible for us to know it The significance of this thesis that the world is a fixed and law-abiding arrangement of events brought to a conclusion the mechanical conception of nature founded by Galileo, Kepler, and Descartes At the hands of Newton this view came to be rather definitely confirmed and demonstrated According to the Newtonian scheme, the world is very much like a huge mechanism Though this was not a new idea, since it had appeared as early as the fifth century B C among the atomists of ancient Greece, it finally attained in the modern period a large measure of demonstration Newton supplied what appeared to be the correct answer to the question of what makes the cosmic machine go Without attempting to explain what gravitation is or what causes attraction to exist between bodies, Newton proposed simply that what makes the machine go is the attractive power exerted by all bodies upon other bodies

Just as significant for general philosophy as this support of the mechanical view of the world was the growth of a general attitude of optimism concerning the capacity of the human mind to solve even the most perplexing of problems If the mind could extend its reach into the uttermost portions of the universe and discover in the process the laws governing the intricate working of nature, then it would seem to follow that it might well be capable of dealing with any and all problems Thus, besides giving to science a very strong forward impulse, the results of Newton also contributed to the general spirit of optimism that has been characteristic of physical science from his day to our own If the secrets of nature are difficult to unravel or investigation appears to be stopped by natural circumstances, it has been supposed that this is but a temporary condition that will disappear with the invention of new techniques and the evolution of fresh insight The thought that scientific advance in any field would soon or even finally cease has never, until the very present, been seriously considered The "classical" tradition in physical science has been characteristically optimistic.

It is curious to note as one considers the personal philosophy of Newton that it bears certain earmarks that are entirely in opposition to the interpretation which the majority of thinkers placed

upon his results. There is evident a rather marked effort on the part of Newton, as far as his own thinking was concerned, to unify the basic conception of mathematical physics with fundamental concepts of religion. It is clear that at least two possible interpretations emerge from a scientific viewpoint that envisages the whole of nature as a closely knit system of events rigidly occurring according to law On the one hand, such a universe might well be interpreted according to traditional materialism. The machinelike character of nature indicates to the materialist that there is no purposiveness, no ends to be achieved, no divine creation in all the universe He is prone to say that order is the result of the operation of blind force, in this case attraction, and that there are no ends in nature except nature itself Nature cannot help exhibiting the form it does, by virtue of what nature fundamentally is On the other hand, the teleologist may use the same type of evidence to support a view which maintains that there are rhyme and reason and purpose in the scheme of nature Order to him means purposiveness, and purposiveness implies a purposer or one who planned nature and provided for its intricate functioning. Ultimately perhaps there is no way of arbitrating between so widely divergent viewpoints, each appealing to very much the same evidence for support

As far as Newton was personally concerned, though, nature could be studied scientifically as if it were a machine To him the order and regularity of the mechanism seemed to prove all the more conclusively the existence of a creator with the power to have provided for so symmetrical and smooth-working a pattern of nature Along with other physical scientists who preceded him, Newton believed that all things are organized according to the simplest plan Discovery of the mathematical laws of nature supported or proved the thesis that there is a god and that he created according to certain very definite mathematical principles It is unlikely, as far as Newton believed, that blind nature, unguided, could ever produce, for example, the beautiful and symmetrical motion of the planets around the sun Chance could never have arranged the relationship of bodies according to fixed measures dependent upon their masses, distances, velocities, and densities. The motion which prevents them from being drawn into the sun likewise must have been provided by some power superior to the god of chance Nor is it necessary to dwell entirely upon the

intricate arrangement of celestial bodies to indicate that God is responsible for the universe. Observe how cleverly the human body is arranged with its organs functioning harmoniously for the maintenance of life No blind surge of force could have produced so intricate an entity All things point to this, that the universe from the smallest to the largest part of it must have had its origin in the activity of an omnipotent creator

In spite of this general theistic viewpoint, there were enough things in nature yet unexplained to lead Newton to accept the conclusion that nature was not quite perfect, that it would not work entirely by itself, and that because of this lack of perfection some intervention on the part of God must take place in order to prevent the occurrence of catastrophies Upon this point Leibnitz vigorously opposed the Newtonian position To Leibnitz it seemed that Newton's concept of God was a poor thing If God is granted to be perfect, then his creation can be as perfect as he can make it, argued Leibnitz, and there would be no reason for interfering in the process of nature once these were produced by an act of creation To use his figure, Newton's God must be a poor watchmaker when He has to wind up or repair His creation from time to time A perfect creator could and would, according to Leibnitz, produce a perfect world

There were during Newton's time, on the other hand, those who sought to defend him and his notion of the necessity of God and the regulation of natural processes Clark, for example, argued a little naively that it is unhealthy to view nature in any way that would make God superfluous to it Somehow or other the interpretation of nature must never take the form of a hypothesis or an explanation that does not make it *necessary* that God be a part of the total picture It was not long, however, before the troublesome features of the Newtonian universe which had led to his conclusion that there must be a God to regulate it were removed by the onward trend of science To explain the possibility of the motions of the planets around the sun in their familiar orbits Newton had claimed that God had placed them so To supply a nonreligious explanation of this phenomenon, Kant, Herschel, Laplace, and others advanced the nebular hypothesis By this hypothesis could be shown the possibility that the original whirling of the nebula itself was sufficient to account for the attraction exerted by the

central body upon the planets and for the motion of the planets themselves If the planets are masses thrown off by the whirling of the central mass, then there is little left for God to do, since nature itself would provide for the behavior of the celestial bodies as we know them Certain other irregularities, such as the behavior of comets, which had troubled Newton, were soon disposed of by the French mathematicians, Laplace and La Grange, who proved that such irregularities themselves are law-abiding, that the occurrences of certain events are periodic and tend to equalize one another and so come within the general sphere of mechanics

Newton, however, had done the major work and only the details were left for his followers to supply The influence he exerted has dominated physical science for two centuries and remains today the central body of that field of investigation Only in the twentieth century have the theories of Einstein and those who have explored the atom done anything to offset the general foundations of Newtonian physics Newton himself stands as the example of a great scientist who at the same time was influenced very deeply by fundamental religious convictions He is a good example of a scientist whose deep religious feeling persisted and received nourishment from the discoveries made within the sphere of his science In this respect he is not particularly different from certain widely read astronomers and physicists of today, such as Sir Arthur Eddington, Sir James Jeans, and Robert Millikan, to mention but three of them

On the whole, however, physical science of the twentieth century has inclined away from the classical tradition This is due not to the fact that Newtonian physics has been proved false, but to the fact that recent investigations have shown that the older physics is inadequate to account for the phenomena revealed to experimental physics Only so long as concern is with gross objects of the universe such as sticks, stones, planets, and suns is classical physics mostly adequate It will not suffice to describe the behavior of atoms, electrons, or quanta, nor is it equal to the task of systematizing our knowledge in the sphere of astrophysics Here there is a break between the old and that which is called the new physics What the significance of this break is for man's general viewpoint is part of the problem of the present discussion Before entering into the analysis more in detail let us examine for a moment the general situation as it exists today

## 2 *Revolutions in Science and Thought*

While fundamental ideas about man and his world were deeply altered by the results of Newtonian physics in the eighteenth century and by the biological sciences during the nineteenth century, it appears that physics and astronomy will alter them as much if not more during the present century The greatest advances made by any of the sciences in recent decades have been those of the mathematical group, and these have taken two opposite directions While mathematical astronomy has been extending its knowledge of the vast reaches of interstellar space, physics has been busy with the construction of atoms and the behavior of their component parts In both fields of research results are equally remarkable and equally difficult for the average intelligent layman to understand Common knowledge of the results of these sciences has lagged far behind that of those actively engaged in the research Though this condition is not unusual, it is important that reminder of it be given Because of the nature of the conclusions drawn by the researchers in astronomy and physics, it will be a very long time before the common man has made a part of his thought habits the general concepts long since commonplace to those occupied with investigations in these fields It will take longer for the results of these sciences to influence general thought than it took the biological sciences to effect any marked change during the last century Indeed it is not exactly uncommon in our own time to find supposedly intelligent people who still reject on one ground or another such a time-tested theory as that of biological evolution

The great difficulty involved in gaining a comprehensive view of the conclusions of modern physical science is recognized by many of the ablest men in these fields, and it is to their credit that a number of them have undertaken the laborious task of explanation in language that the educated layman can comprehend There are numerous popular treatises available today whose authors either are actively engaged in research themselves, as in the instances of Eddington and Jeans, or, like Russell, have by their training an ability to master the technical results and an interest in translating them for the benefit of those without technical knowledge. As an ever-increasing number of the reading public become familiar with the new ideas, the effect cannot help being a marked alteration in the everyday philosophies of large numbers of people In this

way, a truer perspective of man and his world will gradually develop and a more profound appreciation of human problems will be its inevitable accompaniment It has been said that, in the totality of nature, man as an object lies halfway between the staggering immensities of objects in interstellar space and the almost infinitely minute particles which are the stuff of larger bodies. It will therefore be the object of the succeeding paragraphs to offer a brief description of those objects which lie at either extreme from man By this procedure it may be possible to indicate some of the achievements of recent science most likely to affect future speculation and at the same time to afford some additional orientation by indicating the physical position of man and his world in the larger organization of the universe Of the two fields, that of the very small and that of the very large, it is the latter that is better known by the average man since it has been studied longer and some of the findings concerning it have become familiar To this attention will be given first It should be held in mind meanwhile that two fundamental principles have been inherited by the very modern period as a product of the classical tradition One of these is the conviction that we live in a world that is governed by law rather than caprice, the other is that this ordered world can be understood by man through the proper use of scientific technique We should bear these in mind as we survey the field of mechanics to ascertain what their status is at the present time

### 3 *The Universe Grows Larger*

The profound alteration of cosmology induced by the acceptance of Copernican astronomy has already been mentioned [1] Upon the foundations of this viewpoint new discoveries have continued to occur up to the very present In general they have served to effect an ever broadening vision of the universe. The immediate effect of the Copernican revolution was to remove the world from its supposed central position and give to it a much less significant place in the solar system. Since then astronomy has succeeded in demonstrating that the entire solar system occupies but an inconspicuous place in the whole of things. The ancient concept of an outermost crystalline sphere studded with starry jewels together with the system of concentric spheres within it each occupied by a shining planet deity has both long since been disproved, dis-

[1] Chap XII

credited, and for the most part forgotten The stars have been pushed into the far reaches of all but measureless space and the solar system has increased by a third of its but recent dimensions by the discovery of new planets We live in a universe vastly greater than that conceived by Copernicus and his successors. Let us pass in review a few of the astronomer's findings in order to show this.

None but the most uninformed fails to know that our solar system is comprised of planets nine in number, together with their satellites varying from one, in the instance of the earth and Neptune, to nine each in the case of Saturn and Jupiter, which revolve each at a different rate around the central sun When accurate measures were made of the size of these bodies and their distances from the sun became known, the realization dawned that we live in a region of undreamed of dimensions. The sun, we were informed, is a body nearly 93,000,000 miles distant, having a diameter 110 times that of the earth, while its mass exceeds that of the earth by 332,000 times The mass of the earth is now believed to be about 6,000 billion tons The sun is a body whereon a man would weigh in excess of two tons since its gravity is twenty-eight times as great as of the earth Its tremendous energy is given off at a rate estimated at 70,000 horsepower per square yard. Around this powerfully attracting body revolve the nine planets At the outermost reaches, Pluto travels around it at a distance of nearly 4,000,000,000 miles in a period of 249 years Nearest the sun, Mercury, at a distance of 36,000,000 miles, makes the circuit of the sun in 88 days The largest of all the planets, Jupiter, is three times the size of all the other planets put together, yet is only $\frac{1}{1000}$ the mass of the sun. It would appear that our solar system is surprisingly large In terms of a smaller scale, supposing the sun were the size of an apple, the earth would have the size of a mustard seed, and the moon, one-fourth as large as the earth, would be 1 inch away Pluto would appear 1,760 feet distant The entire solar system on this scale could be placed in a field less than 1 mile square However, the solar system thus depicted would be entirely alone in an area larger than the whole of North America Our solar system is thus removed by vast distances in the heavens from its nearest neighbors.

The real magnitude of the universe really begins to impress us when the astronomer starts speaking about the objects that lie fa-

beyond the confines of our planetary system We are informed by him that our nearest neighbor is the star Proxima, which cannot be seen except with a telescope This star is so far from us that to discuss its distance in terms of miles becomes cumbersome. To make the figures less unwieldy the distance is figured for all objects in the outer spaces in terms of light years or the distance light travels in the duration of a year This unit equals 6 million million miles Proxima is 4¼ light years away, or about 25 million million miles It is 7,000 times farther from us than Pluto Only about five of the brighter stars are less than 30 light years away from us The brightest of these, Sirius, the Dog Star, is sixth in order of distance away and is twenty-six times more luminous than our sun Thus we begin to grasp the fact that though our sun appears to us as a very immense and intensely brilliant body, it is in reality far less bright than many other bodies in the sky In fact, were the sun removed from us at a distance equal to that of the first-magnitude star Aldebaran, it would be invisible to the naked eye Were it removed to a distance one-half of that which separates us from the constellation of Hercules, it would be invisible even to the 100-inch reflector on Mt Wilson in California Our sun is somewhere about halfway between the largest and smallest, the brightest and the dimmest of the stars

Gradually astronomers have thus increased the breadth of our vision and with each decade there has been added much to our cosmogeography We know a great deal more about the location of the solar system today than was ever dreamed of a few centuries ago And the more we learn the less are we able to grasp the tremendous magnitude of interstellar distances Our own solar system is a member of a gigantic galaxy, part of which we plainly see and designate the Milky Way This galaxy is made up of star clusters, nebulae, single and double stars, and the like numbering, it is estimated, about 30,000 million Its arrangement appears to be that of a huge spiral extending far across the heavens From one side to the other, the distance is variously estimated to be from 1 to 2 million light years Its center is the Sagittarius Star Cloud, from which our solar system is located some 40,000 to 50,000 light years distant The whole galaxy is moving at a tremendous speed through space The part of it to which we belong is moving within the galaxy in the direction of Hercules at a rate of about 12 miles per second Though all this may be amazing enough, we are at the

same time informed that there are anywhere from 1 to 2 million other so-called extragalactic nebulae in the present observable universe separated from one another by 1 to 2 million light years. These occur in isolation and in groups or clusters of as many as 300 At the present time the Mt Wilson telescope has penetrated the outer universe to a distance close to 500 million light years. For convenience it has become necessary to invent new units of distance Thus the term *parsac* denotes a distance equal to 3 26 light years or 19 2 trillion miles, while the term *metaparsac* designates the largest unit of distance—that which is traversed by light in a period of 3,260,000 years Whether or not there is any real meaning that attaches to such figures may be debated However, at least it is clear that the universe assumes heroic proportions

> The present maximum observable distance stands in the same ratio to the astronomical unit as that unit, 92,900,000 miles, bears to one-tenth of an inch On the other hand, physicists, studying atomic and electronic phenomena, deal definitively with distances scores of billions smaller than an inch [1]

From our minute place in the heavens we look outward upon a starry, moonless night at what seems to be countless thousands of stars As a matter of fact, we can see, unaided by telescopes, only 1,500 or 2,000 stars at any one time Most of the stars visible to the naked eye are more than 300 light years distant and many are fifty times brighter than the sun There are countless millions of them beyond the range of our vision It is into this region that the modern instruments of astronomy have taken us, and the conclusions reached concerning the distance, size, mass, composition, and velocity of distant bodies are staggering to the imagination The vast size of some of these objects is one striking revelation One of the largest stars yet measured is Antares, the principal star in the constellation of Scorpion Its bulk is approximately 70,000,000 times that of our sun Its diameter is 400,000 miles Were the earth placed upon its surface, it would assume the size of a pinhead. Thus, within the boundaries of our own galactic system, there are bodies almost inconceivably large

Nebulae are prominent and interesting parts of galactic systems. They vary in size, having diameters that average between 5,000 and 10,000 light years The nebula of Orion, the middle star of the

[1] Stewart, A S , An Astronomer Looks at the Modern Epoch, *Scientific Monthly*, May, 1937 All quotations in this chapter from *Science* and *Scientific Monthly* By permission of *The Science Press*

sword, is one of these with a diameter of ten light years One of the nearest and best known is in the constellation of Andromeda, 800,000 light years away, with a nucleus so large that it requires 16 million years for it to complete its rotation. The largest known nebula is called 230 Doradus, located in the Large Magellanic Cloud, one of the nearest galaxies, seen only from the southern hemisphere Its diameter is thought to exceed 100 light years A striking feature of these luminous nebulae is the fact that they are composed of gas and dust which is less dense than the best vacuum that can be produced in the laboratory They are visible only because of their tremendous thickness and the fact that they are illuminated by near-by suns. Were we to live in the midst of one we would not be aware of its presence Most of these inconceivably large and distant galaxies are moving away from us in various directions at incredible speeds

Measuring the velocities of distant galaxies is in itself one of the most interesting as well as one of the most astounding achievements of modern astronomy The velocity of the spiral nebula in Andromeda was the first to be measured, in 1912 It was done with the use of a spectroscope and camera attached to the eyepiece of the telescope After an exposure of from 2 to 60 hours a photographic plate of the spectrum of a galaxy is obtained It measures about ½ by ½ inches while the spectrum it contains is about $\frac{3}{25}$ inch The strongest lines of the spectrum, the *H* and *K*, produced by calcium, are measured in terms of their shift toward the red or the violet parts of the spectrum From these delicate measurements it is possible to obtain the velocity of the body and the information as to whether it is receding from us or is approaching If the shift is toward the red of the spectrum, the body is receding from us. By 1925 the velocities of forty-five galaxies had been measured, forty of which were found to be traveling away from us By 1936, 189 galactic nebulae had been measured, mostly by the Mt Wilson reflector Of these only thirteen are approaching, the others are receding at inconceivable speeds as indicated by the table shown on page 597 [1]

The distances and velocities indicated by this table are beyond conception This is clear if we translate the distances into miles and the velocities into miles per hour. Take the figure that indicates

[1] From Humason, M. L., Evidence for an Expanding Universe, *Scientific Monthly*, July, 1936.

the distance of Virgo from us In miles it is 42,000,000,000,000,000,000,000. Its velocity is 2,700,000 miles per hour. It is to be remembered that these figures are obtained from a study of a galaxy by no means the farthest from us In spite of the incredible velocities of galactic systems, the universe is so large that their positions remain substantially the same century after century. For this reason they have long been called the "fixed" stars The distance of these bodies from us is so great that they could have ceased to exist millions of years ago and they would still be visible to us For

| Cluster | Distance in Millions of Light Years | Velocities in Miles per Second |
|---|---|---|
| Virgo | 7 | 750 |
| Pegasus | 23½ | 2,400 |
| Pisces | 24 | 2,900 |
| Cancer | 29 | 3,000 |
| Perseus | 36 | 3,200 |
| Como Berenices | 45 | 4,700 |
| Ursa Major #1 | 84 | 9,500 |
| Leo | 105 | 12,000 |
| Gemini | 114 | 15,000 |
| Corona Borealis | 120 | 13,000 |
| Bootes | 230 | 24,000 |
| Ursa Major #2 | 240 | 26,000 |

instance, if Virgo should suddenly disappear from the night sky, it would be the case that it actually ceased to exist some 7 million years ago Actually we may be seeing stars that no longer exist and failing to see stars that have existed millions of years but whose light has not yet reached us.

Another interesting aspect of measuring the velocities of stars arises when one tries to ascertain the present position of them Today it is possible to know where Virgo was 7 million years ago *if* we had been located where we are at present with reference to it But 7 million years ago we were not at our present location by a good many millions of miles We will not know where Virgo is at the present moment with reference to us until about 7 more millions of years will have passed By that time we shall not be here at all Where, then, is Virgo or any other celestial body relative to ourselves? To clarify the difficulty of this by self-measurement let us have recourse to an analogy. Suppose that we have trapped a dozen live flies within a screen frame 4 by 4 feet in dimension.

All these flies are moving within the region of their confinement each at different speed from the others, though at a constant rate in so far as its own movement is concerned How is it possible to plot their positions exactly? Taking a point on the screen as a place of reference, we are aided a little since at a given instant we might obtain a fairly accurate picture But now let us remove the screen frame entirely and let the flies buzz in a region with no fixed boundaries. Now the problem becomes all the more complex. Any point of reference we choose is on the move. If we select a given fly as the focus of our reference we can only compute the positions of the other flies as they are relative to the one we have selected But since nothing stands still the positions indicated by our computations are constantly changing and our results are rather meaningless There is no way of ordering these conditions of existence except by recourse to mathematics based upon other than absolutes The world of our flies is a completely relative world And so it appears it is with the universe about us In the attempt to answer such questions as this and still more technical ones it has been necessary, in the twentieth century especially, to invent new methods and new mathematics In this task no one has been more prominent than Albert Einstein, who first advanced his special theory of relativity in 1905 and followed it with the general theory of relativity in 1915 Necessity for the new celestial mathematics was indicated by the failure of Newtonian physics to give an adequate description of interstellar events The inadequacy of classical physics to deal with the new data of astrophysics was definitely indicated as early as the results of the now famous Michaelson-Morley experiments of 1887 In the regions of vast distances and inconceivable speeds classical physics broke down and had to be replaced by new devices

Newton had suggested that an absolute point of reference might be found in the distant interstellar spaces This was never found and evidence has accumulated to throw the weight of opinion against finding one Another hypothesis, that the celestial bodies occupy a fixed ether which might be used as an absolute point of reference, was disproved by Michaelson and Morley, Lorentz, and others Then came the epoch-making pronouncement by Einstein in 1905 that the failure of the Michaelson-Morley experiment indicated that there exists in nature a law making impossible the determination of absolute motion by any con-

ceivable experimental device A more positive expression, given in the words of Einstein, averred that. "The phenomena of nature will be the same to two observers who move with any uniform velocity whatever relative to one another" The general relativity theory which appeared in 1915 amended the classical gravitational theory of Newton and made possible the explanation of several things the older theory could not handle, for instance, the aberrations of the orbit of Mercury. When Newtonian laws have conflicted with relativity principles, they have been forced to give way. Since 1915 developments have continued within the sphere of relativity physics that indicate the probability of bringing the phenomena of light and electromagnetism within its precincts Perhaps the biggest task before twentieth century physics is to establish the true relationship of relativity and quantum physics The experimental work of Compton and Millikan in the field of cosmic rays will doubtless be of assistance with respect to this problem

Research with the spectroscope and camera point to the fact that, with few exceptions, the galaxies of the universe are moving in all directions away from us. It has been indicated that the farther from us they are the greater is their velocity ordinarily. This would appear to indicate that the universe is steadily expanding in all directions How long can such enlarging continue? Are there any boundaries of the universe at all? Some light may be shed upon these problems when research with the giant 200-inch Mt. Palomar reflector in southern California extends the range of astronomical knowledge into regions far beyond the present 500 million light years limit. To be sure, the conclusion that the universe is expanding could be disproved if some other explanation than recession could be found to account for the red shift of the spectrum. As yet, however, no other reason for the shift has been substantiated

Thus with the more recent decades of the modern era, the boundaries of the universe have been shown to extend into regions beyond the capacity of man to grasp As the universe has expanded for us, the size and importance of our own place of habitation have shrunk proportionately. Our entire solar system, large though it appears to us, is but an infinitesimal speck among the bodies in interstellar space The realization of this may make us simultaneously humble and proud In the cosmic show our unimportance cannot be denied. We can no longer obtain satisfaction

from the belief that we are the all-important part in the universal arrangement of things akin to that of the average man up to and even beyond the period of the Copernican revolution That is a belief difficult to hold in the face of the picture offered by modern astronomy On the other hand, man may pride himself upon the huge success he has achieved in the task of unraveling the mysteries of his place in the scheme of nature; one may see that by virtue of his very insignificance, his achievements are the more remarkable. The fact that to many thinkers man's occurrence at all appears to have been quite accidental need not be a source of despair. If his belief in divine providence, in his special creation, in the supreme importance of man be shaken, he has only to point to his own remarkable achievements to be aware of unknown potentialities for unaided accomplishments For all that the world is a speck of dust, it is yet the home of man to do with it whatever his intellect and genius permit Man is able to make much or little of his talents according as he achieves a proper perspective For him the world is still the most important place in all the universe no matter where it may be located. The greater his knowledge of it, the freer should he be of restrictive beliefs and superstitions that blind him to his own native capacities. To see one's self in proper perspective with other things and events is at once the most difficult problem to solve and the most satisfying of all possible achievements No available knowledge can do more to supply a modern perspective on a grand scale than a general grasp of the results of recent mathematical astronomy The educated man may overlook the technical aspects of physical science, but he can scarcely be enlightened if he fails to have some general knowledge of its discoveries

### 4 *The Smallest Things Are Quanta*

The conclusions reached by the modern physicist interested in the structure of atoms are obtained by a complicated technique that relies wholly upon circumstantial evidence The entities he studies within the atoms constantly elude him. He has never yet caught up with them though he pursues them hotly enough He often finds the ashes of their last camp but they are clever fugitives and leave no clues that will guide pursuers to their next stopping place His knowledge is mostly confined to evidence indicating that the object of his search is now not where it was In the pas-

sage from here to there no time appears to elapse in the life of an electron. Its existence seems to be full of inconsistencies and it refuses to obey the time-used rules that other things in the universe observe. Changes within the atom take place—spectroscopic analysis proves that; but the changes themselves are otherwise unobservable. The physicist at best must organize his explanations of known changes according to the principle of what *must have* happened. Circumstances suggest to him that "if" certain conditions prevail within the atom, then the phenomena of atomic action as known can be accounted for But this is all indirect evidence, for electrons within the atom have never been caught in the act of doing anything No one has ever succeeded in obtaining the spectrum of a single atom Only when a number of them can be cornered will they give up any of the secrets that lie hidden in their inner lives Yet, in spite of this perverseness of the submolecular stuff of which the universe is made, the modern physicist is able to tell us some rather surprising things about the private lives of atoms And all his information has been obtained within the period of the twentieth century

It will help us to picture the world of atoms if we have, to begin with, some idea of the size of these units Let us start with a gramme (about one four-hundred-and-fifty-third of a pound) of hydrogen, which is not a very large quantity How many atoms will it contain? If the atoms were made up into bundles of a million million, and then we took a million million of these bundles, we should have about a gramme and a half of hydrogen That is to say, the weight of one atom of hydrogen is about a million-millionth of a million-millionth of a gramme and a half Other atoms weigh more than the atom of hydrogen, but not enormously more, an atom of oxygen weighs 16 times as much, an atom of lead rather more than 200 times as much *Per contra*, an electron weighs very much less than a hydrogen atom, it takes about 1,850 electrons to weigh as much as one hydrogen atom [1]

Since there is but one electron and one proton in an atom of hydrogen, it is obvious that its mass is almost wholly derived from the proton In spite of this, from the point of size, the proton is no larger than an electron More strikingly still we are told there is evidence that occasionally, at least, when proton and electron unite the size of the body resulting from the combination may be smaller than either electron or proton singly [2]

[1] Russell, Bertrand, *The ABC of Atoms*, p 3 By permission of E P Dutton & Company, Inc , publishers.

[2] Mills, John, *Within the Atom*, p 1.

If possible, the speed of electrons is even more astounding than their size Let us suppose again, with Bertrand Russell, that we are concerned with the behavior of an electron situated in the orbit nearest the nucleus of an atom. The distance separating it from the nucleus is roughly one-half a hundred-millionth of a centimeter. The geographical situation being thus clarified, let us investigate its behavior as it takes its way around the central nucleus

> It goes round in this tiny orbit with great rapidity, in fact its velocity is about one hundred-and-thirty-fourth of the velocity of light, which is 300,000 kilometers (about 180,000 miles) per second Thus the electron manages to cover about 2,200 kilometers (or about 1,400 miles) in every second To do this, it has to go round its tiny orbit about seven thousand million times in a millionth of a second, that is to say, in a millionth of a second it has to live through about seven thousand million of its "years "[1]

These and other startling new developments originated when attempts were made to apply Newtonian physics to the study of molecules and atoms. It had been assumed that the laws formulated by Newton and his predecessors applied to all the things in the universe from the largest to the most minute It was with considerable surprise that the physicists discovered that the familiar laws of Newton did not hold when the subject matter under investigation concerned itself with the tiniest particles into which matter can be divided It was an obvious failure of the familiar principle of extrapolation, and this has resulted in a widespread conviction among twentieth century physicists that Newtonian physics does not have the universality of application it has been thought to have

The existence of atoms as the smallest units of stuff was proved at about the time that it was discovered of what the atoms are composed. The hypothesis that the fundamental reality of the universe is atomic in nature is, as we have seen, a very old hypothesis in the history of philosophy Through all the centuries up to the twentieth, it remained one of the favorite philosophical hypotheses and has proved to be likewise a useful, though unproved, one for science With the twentieth century it has come to be well established that atoms do exist and that they are composed of or made up of positive and negative charges of electricity. The positive parts of atoms are called protons, whereas the negative parts are called electrons One of the pioneers in this field

[1] Russell, *op cit*, p 28

of investigation, Rutherford, discovered in 1911 that almost the entire mass of an atom, which includes the protons and the electrons, could be concentrated in a space that is vastly smaller than the size of an atom The size of an atom, it would appear, is determined by the orbit of the outermost electron that buzzes around it. The arrangement of protons and electrons within the atom holds rather closely with the analogy of our solar system, the sun corresponding to the proton, the planets to the electrons. Upon analysis of this picture of atomic structure, it is clear that most of the atom is composed of empty space, the distances between the electrons themselves and between the electrons and the nucleus being unoccupied. Of course, we are here concerned with distances so infinitesimal that the measurements in terms of fractions of centimeters is just as incomprehensible as an attempt to state the distance between the earth and Sagittarius in terms of miles We are told by authority that an electron has a diameter equal to 1/100,000 of its atomic orbit and that the atomic orbit is 1/100,000,000 of a centimeter. Such figures defy human comprehension

Further investigation of the structure of atoms was continued by Moseley and others Moseley discovered that the number of electrons outside the nucleus was equal to the number of electrons contained within the nucleus of the atom Pursuing this task he showed that the number of electrons outside the nucleus of an atom of any element was equal to the number which isted the element in the periodic system of Mendeleef. It is the case, therefore, that the structure of the atom absolutely determines its place within the periodic table of chemical elements. At about the same time that this development took place there occurred the outstanding achievements of the Danish physicist, Bohr, who in 1913 published a series of remarkable papers upon the constitution of atoms and molecules In these papers he laid down the fundamental principles of modern atomic theory. Though there have been additional studies made of the same problem and some alterations have been found necessary, it is still true that the fundamentals of the modern theory of atoms were proposed by Bohr.

The object of Bohr's investigation was the hydrogen atom. His immediate problem was to ascertain, if possible, whether the simple structure of the hydrogen atom could produce the complex spectrum of hydrogen There are a number of lines in

the spectrum of hydrogen which could not readily be accounted for as being produced by an atom constructed of a single proton with its single electron Bohr was able to show that he could plot the motions of the electron around the proton that were necessary to produce the spectrum but that in order to do so it was necessary to throw aside the laws of Newtonian physics and substitute others in their places Classical physics seemed to be inadequate to deal with the complicated processes of atomic action As experiment proved, though there was only one electron within the hydrogen atom it did not remain in constant relationship to the nucleus around which it moved At one time it would be near it, at another time it would be more distant, being at some times many multiples of its distance at other intervals Bohr discovered that for no apparent reason at all the electron sailing around the proton in which may be called the fourth orbit suddenly appeared in the third orbit At other times for no apparent reason the electron moving in orbit three might jump back to four or, if in four, might move out to five The movements of the electron obeyed no laws known to physics Its action was completely unpredictable No cause of its behavior could be discovered. At the time it moved from one orbit to another, a flash of light appeared, but there seemed to be no interval of time between the disappearance of the electron from one orbit to its reappearance in another one. The motions of electrons were revealed as discontinuous, intermittent, and unpredictable

The movement of electrons can be predicted only by recourse to statistical laws or probabilities This means simply that in the course of a given interval of time there will be a certain number of jumps one way or another within the electronic orbits Which electrons will do the jumping, however, and why remains unfathomed The explanation of the complex spectrum of hydrogen proved to be this that one of its lines is caused by the flash attending the movement of an electron from, say, orbit three to orbit two, another line on the spectrum is produced by the movement of an electron from orbit one to orbit two and so on through all the possible jumps electrons could make within the orbit system Since it has never been possible to obtain the spectrum of a single atom, say of hydrogen, it has always been the case that the spectrum is obtained from a mass of atoms of hydrogen In this mass there are literally millions of possible movements of electrons

within the countless atoms of the mass The spectrum, therefore, is a sort of cross section of all the possible movements At any one time there are literally thousands of each of the possible jumps being made simultaneously. The same situation, it would seem reasonable to presume, prevails with respect to all the atoms of which the other elements are composed

The results obtained by Bohr were followed up by others, including Heisenberg, who in 1926 presented a paper which had as its central theme the phenomena of the unpredictability of electronic motion His theory with respect to these motions has come to be known as Heisenberg's *principle of uncertainty*, and it is the official pronouncement of the death knell of Newtonian physics in so far as atoms are concerned

> According to this principle an atom does not emit or absorb radiation or exchange energy with other atoms or electrons except during a complete transition from one so-called stationary state to another The atomic processes are, therefore, essentially discontinuous in character [1]

It will be necessary to return to a consideration of this principle a little later

The theory which today seeks to describe the behavior of the fundamental units of stuff in the activity of giving and receiving energy is known as the *quantum* theory In the development of this theory from about 1901 the work of Planck, Bohr, and Heisenberg has been fundamental Its thesis is that the smallest things in the universe, those entities to which everything may be reduced, are of the nature of pulsations of energy called the quanta Reality, it would appear, is not something that is or has location but is that which does something The manner in which the atom gets this something done has been debated The wave theory of mechanics which was sponsored by Schrodinger in 1926 is today perhaps the most popular of those theories explaining the manner in which energy is given off or is exchanged The older theory, which is partly a revision of Bohr's work and partly a result of the work of Heisenberg inclined more to the particle theory of energy exchange In some respects each of these theories was adequate, but in other respects they were both unequal to the task It appears to be the case at the present time that both of them have their places within the more comprehensive quantum theory

[1] Nielson, J Rudd, Philosophical Implications of Modern Physics, *Scientific Monthly*, June, 1931

of physics. As Bridgman remarks in substance Today all things are quantum phenomena All things are through and through doubly atomic, being composed of positive and negative charges of electricity, and, furthermore, the manner in which one part of stuff acts upon another is likewise atomic. In this sphere there seems to be a total lack of order in the classical sense, and no law descriptive of the behavior of elements seems to be available There seem to be inherent difficulties attaching to the sphere of quantum phenomena making prediction impossible [1]

This brings us back to the heart of the Heisenberg principle. This principle calls attention to the fact that an electron may be measured with astounding accuracy. Its position at a given time may be known quite adequately, but this appears to be possible only if one is willing to sacrifice accuracy with respect to its velocity If we assume that an electron has both position and velocity, we can, pursuing either tack we desire, obtain very accurate measurements of position *or* velocity By the very nature of circumstances it appears impossible to obtain *both* The general situation arises that one's knowledge of the exact position of an electron varies inversely with his knowledge of its velocity But unless it is possible to obtain accurate measurements of both of these, there is no prospect whatever for obtaining descriptions or laws of the behavior of electrons The details of interaction of the particles of that of which all things are composed remains beyond the scope of measurement Only uncertainty holds in this particular realm

It is impossible to know exactly what will happen when there is a collision of an atom of radiation with an electron from some other source There seems to be at this point a break in the order of nature, and things appear to happen without our being able to assign a cause for their occurrence The causal principle which has long been the fundamental postulate of physical science here breaks down If we grant that all events that happen are determined by the past or by the present, and if we can show that it is impossible to know that past or the present accurately, then it is necessarily impossible to predict what will happen By the nature of things it appears impossible to know enough of the present with respect to the behavior of atoms to be able to predict what the behavior of their constituent parts will be in the next instant of time All this

[1] Bridgman, P W , The New Vision of Science, *Harper's Magazine*, March, 1929

may or may not be important in the long run There are, however, certain implications which would seem to indicate possibilities for a change of general viewpoint upon the part of the physicist and philosopher at least

For instance, the principle of causality just mentioned must be recognized as inadequate to account for occurrences in at least some of the realm of nature Causality is dependent upon complete knowledge of an isolated natural event for its ability to predict what will happen next Since, according to Heisenberg's principle, this is impossible in the sphere of atoms, it follows that prediction at this level is impossible Laws describing events happening there can achieve no greater accuracy than that of statistical averages With respect to the ultimate structure of the universe we live in, it may be true that the best knowledge we can obtain is of the variety which describes what happens when the unpredictable elements tend to cancel themselves out and in so doing strike a balance that can be described by the classical laws of physics within a margin of error that is for the most part negligible.

Jeans, Bridgman, Eddington, and others suggest that the physicist is here faced with an epistemological difficulty. As human beings, they point out, it may be that we are simply not equipped to obtain access to the phenomena in the world of atoms. Bridgman states the situation somewhat in this fashion Physics has been brought to the end of its search, for limits have been set to its investigation The optimistic attitude which has characterized the thinking both of the scientist and of the layman for the last few hundred years appears to be unfounded in fact Whatever actually does go on in the universe in the realm of the infinitesimal can be real for us only if we are able somehow to know it. This does not mean that its reality depends upon the knower It means only that the possibility of exploring the ultimate depth of the physical world depends upon the human capacity to get into the knowing relationship with that which is to be known This capacity now seems to be very definitely limited This conclusion, we should bear in mind, has grown out of the realization that in measuring electronic motion it is impossible to obtain simultaneously its position and its velocity According to Bridgman, no refinement of instruments will be of assistance, since this is not a technological difficulty at all The situation, we may be reminded, raises a serious

question of whether or not the universe in which we live is really intelligible Perhaps the heart of the universe is of the nature never to be understood by man

We have noted that the failure of Newtonian physics to describe the actions of submolecular phenomena resulted in the invention of quantum mechanics to take the place of mechanics resting upon the concept of causality If there is to be any revolution of thought as the product of modern physics it will be the result of the failure of the causal principle just mentioned to describe electronic action Most modern physicists readily accept the evidence against causality and because of this the very old problem of freedom and determinism takes on new life So long as it was assumed that nature was thoroughly causal in its behavior determinism obtained the right of way and the sponsors of free will were hard pressed to find objective support for the view which seemed to them essential if religion and morality were to have any cogency Though it is clear that Newton himself would not have approved, nonetheless the physics he systematized supported and nourished both mechanism and determinism In a world wherein all events occur because of the influence of events prior to them, there is no room for caprice, for freedom History determines altogether what the present shall be Thereby the major task of science is prescribed It is to discover all there is to be known about the present so that it can ascertain what is to be expected as the outgrowth of that present If the principle of causality is sound, there can be no ground for supposing that the future can be anything but what the present determines it shall be

Though there has been persistent rebellion against this thesis at least in so far as its application to human conduct is concerned, it is still true that modern social trends have been distinctly in the direction of interpreting the human animal and his behavior from the standpoint of mechanistic principles Anthropology, sociology, and psychology alike have more and more inclined to the acceptance of the principle that the human organism is in large measure the product of his various environments This has given rise to the numerous movements to change social and physical conditions of living in order to effect changes in the individual human being By and large it has led to definite steps in the direction of interpreting social infringements and misconduct as the results of unfortunate past experience. Upon the assumption that

the individual cannot escape the alterations of his personality induced by the conditions of living, reform movements on the whole have taken a much more enlightened and for the most part a more effective procedure in the modern period It has been the opinion of many that the social sciences have prospered along with the physical sciences during the time that determinism has been accepted as descriptive of all natural phenomena

However, when twentieth century physics uncovered the somewhat disturbing truth that quantum phenomena cannot be described in terms of the familiar principle of causality, many of the prophets of free will saw in the situation the proof of their favorite doctrine If the behavior of the irreducible elements of which everything is composed is unpredictable, if events at this level occur without apparent cause, then there is evidence in abundance for the existence of cosmic free will And significantly, too, this evidence has been unearthed by the very ones who have most ardently opposed the doctrine At last, according to one way of thinking there is evidence available at present to support a contention the truth of which has been felt *must* exist for the sake of making religion and morality real If nature in its minutest parts is free, then human action likewise may be presumed to enjoy some measure of freedom Man becomes free to develop himself in spite of his surroundings and achieve through his action a condition of being that advances toward a higher and better level of human existence

Such moral optimism scarcely seems to be supported by the facts If indeterminism characterizes the basic units of stuff, there is no more reason that changes will occur in the interests of moral uplift than that the changes will bring about retrogression Unless there is recourse to Leibnitzian preestablished harmony, the submolecular universe appears to behave perfectly capriciously In this sense there may be perfect freedom but there seems little occasion either for optimism or for pessimism And at all events when we take ourselves out of the realm of atomic structures and into that which wears the face of everyday experience, it is found that the familiar law of causality holds quite firmly To be sure, no complete knowledge is ever obtained of a situation belonging to the present no matter how carefully controlled the conditions of experimentation may be But despite this inescapable margin of error, prediction is both possible and actual In reality Newtonian

mechanism never did disprove the possibility of free will even in the time before quantum mechanics had to be invented Actually the new discoveries of physics leave the problem of freedom and determinism neither here nor there, though there will be those who firmly believe that determinism has made its last stand And we may add this thought, that though physics appears to have reached the end of its search for the most minute particles of stuff, it would be sheer dogmatism to assert that there are no sub-electronic or subquanta phenomena The history of physics should make anyone wary of such a pronouncement We may conclude by saying that at best quantum mechanics has reopened the problem of freedom and determinism It most certainly has not solved it The situation is ably summed up by Jeans. "We do not know, and as I do not see how we can ever find out, my own opinion is that the problem of free will will continue to provide material for fruitless discussion until the end of eternity"[1] This attitude of Jeans is typical of physicists in general The final answer to such a problem, if there is any at all, must wait upon the future.

Further dangers of leaping to unwarranted conclusions growing out of recent developments in physics are discussed by P W Bridgman In an article which appeared several years ago, he stated his position in this way.

> The thesis of this article is that the age of Newton is now coming to a close, and that recent scientific discoveries have in store even greater revolution in our entire outlook than the revolution effected by the discovery of universal gravitation by Newton The revolution that now confronts us arises from the recent discovery of new facts, the only interpretation of which is that our conviction that nature is understandable and subject of law arose from the narrowness of our horizons, and that if we sufficiently extend our range we shall find that nature is intrinsically and in its elements neither understandable nor subject to law
>
> The man in the street will [he believes] twist the statement that the scientist has come to the end of meaning into the statement that the scientist has penetrated as far as he can with the tools at his command, and that there is something beyond the ken of the scientist This imagined beyond, which the scientist has proved he cannot penetrate, will become the playground of the imagination of every mystic and dreamer The existence of such a domain will be made the substance of the soul, the spirits of the dead will populate it; God will lurk in its shadows, the principle of vital processes will have its seat here, and it will be the medium of telepathic communication One group will find in the failure of the physical law of cause and effect the solution of the age-long problem of the

[1] Jeans, Sir James, The New World Picture, *Science*, Sept 7, 1934.

freedom of the will, and, on the other hand, the atheist will find the justification of his contention that chance rules the universe [1]

Perhaps these are real dangers, but one may wonder if it is the layman so much more than the "scientist-philosopher" who is apt to be led into that labyrinth of amazing possibilities. It will be a long while before the "man in the street" tumbles to the possibilities for imaginative speculation that have been unearthed by modern physics By that time physics may itself have at its command the means for refuting at least his most extravagant mind wanderings Perhaps the very multiplicity of possible interpretations of the "something beyond" is in itself its own best antidote Perhaps, even as quanta succeed in canceling out their individual impulses to produce a magnitude that "obeys" ordinary physical laws, so too will individual interpretations by their very extravagance cancel themselves out by a *reductio ad absurdum* or by the application of logic whether of two or of three dimensions Perhaps there is less to fear in this matter of interpretation from the layman than there is to fear from the prophets of creeds philosophical, ethicoreligious, or scientific.

One may wonder what has been the general philosophical tendencies that have emerged with the new discoveries in physical science It would appear that the physics of our twentieth century is markedly positivistic in spirit For the most part it holds no hope for obtaining any information about the world except as it appears to man Upon this point Jeans states.

Theoretical physics is no longer concerned to study the Newtonian universe which it once believed to exist in its own right in space and time It merely sets before itself the task of reducing to law and order the impressions that the universe makes on our senses It is not concerned with what lies beyond the gateways of knowledge but with what enters through the gateways of knowledge It is concerned with appearances rather than reality so that its task resembles that of a cartographer or map maker rather than that of the geologist or mining engineer [2]

This observation on the part of a leading thinker within the tradition of the new science appears to be rather startling at first sight. Here is a scientist who makes no claim that his science concerns itself with reality He is perfectly content to accept the thesis

[1] Bridgman, P W, The New Vision of Science, *Harper's Magazine*, March, 1929 By permission of Harper & Brothers, publishers

[2] Jeans, *op cit*

that the subject matter of physics is made up of appearances only. Observations such as this one of Jeans permits it to be said that if there exists a philosophy of physics today it is either openly positivistic or shows unmistakable leanings in that direction Certainly there is every indication that physicists are openly antagonistic to materialism and to the recognition of the mind-body dualism.

This position, however, is not without its implications. If the emphasis is strong upon regarding nature as a complex of appearances to be catalogued and described in terms of the simplest yet most all-inclusive laws, there is contained in this ideal the possibility of accepting either solipsism or some form of idealism To be satisfied with appearances opens the question of what appearances shall be taken as fundamental since these admittedly must depend upon observers It is even possible to assert that what a quantum is is whatever a physicist conceives it to be [1] Nothing could be much nearer to solipsism But the physicist is the last to admit this position, though an acceptance of extreme positivism leads inevitably to it The idealistic alternative likewise courts the danger of subjectivism The world is still a construct of our own minds A sample of an effort to circumvent subjectivism is that of Planck, prominent in the formulation of the quantum theory.

> It is felt that physicists will be interested in Planck's speculation about an ideal mind which is sufficiently objective with respect to our world that it is able to predict all phenomena, thus transcending mere man, who, being himself a part of nature, is never able to achieve complete objectivity in his study of it [2]

And Planck is not the only modern physicist-genius to flirt with idealism while traveling the highroad of positivism The predicament is clear enough None but the naive can accept the position that the objectivity of science depends upon its remaining faithful to an "objective" reality

Scientific results are appearance data right enough, yet something more than subjectivity seems to attend experiment. The problem of what it is has led the physicist into the realm of philosophical speculation To avoid subjectivism some source of objectivity must be found Physics seems faced with the very ancient problem of keeping its cake and eating it, too It proceeds

[1] *Ibid*

[2] Lindsay, R B , Where Is Physics Going?', *Scientific Monthly*, March, 1934

naively on the assumption that it has an objective world as its subject matter yet has to admit that its search produces only appearances It may be as hostile to metaphysics as it pleases but the harder it strives to avoid it the closer is it drawn to it Its conviction is that objectivity is derived from faithful description of objective reality, yet the greater is its effort to substantiate this claim the more perplexing the problem becomes As a scientist the physicist proceeds upon the basis of what might almost be called naive realism while as a philosopher he may be basically a positivist

We have already indicated Planck's speculation as a philosopher It is instructive to note his opinion as to the proper stand to be taken by physics as it is actively engaged in the laboratory. He says

> The fundamental principles and indispensable postulates of every genuinely productive science are not based upon pure logic, but upon the metaphysical hypothesis that there exists an outer world which is entirely independent of ourselves [1]

This statement is characteristic and it is so far the only answer, if it is an answer, to the problem of achieving objectivity By assuming postulates that are unprovable, physics has been able to produce results, which, though they be accepted as mere appearances, nevertheless, have the semblance of objectivity Not logic but assumption is physics' guiding hand Once the physicist becomes enmeshed in his research he must possess the qualities of mathematician, technician, artist, and detective if he is to obtain results

It is the thesis of this writing that the logical philosophical position of the modern physicist is positivism In support of this contention these remarks may be brought to a close with a quotation from one of like opinion, Dr W V. Houston of the California Institute of Technology

> As I have said, positivism is a very strong position As far as I know, it is the only position completely tenable in the face of the experimental facts of relativity and quantum mechanics While positivism is a philosophy which a physicist can easily defend, I am inclined to believe that those most effectively active in physics today have the very naive view They tend to believe that there is a real world which can be discovered, and they propose to discover it [2]

[1] King, Ronald, Physics, Metaphysics and the Common Sense, *Scientific Monthly*, April, 1936

[2] Houston, W V , The Philosophy of Physics, *Science*, Apr 30, 1937

## DISCUSSION TOPICS

1 What do you understand to be the meaning of the designation *the classical tradition* in physics?

2 Make clear the meaning of *order* and *optimism* as these were discussed in connection with the *classical tradition*

3 What are the revolutions in science to which reference is made? What do you gather is their importance for philosophy?

4 In what manner did it become apparent that a new physics was needed to supplement the Newtonian?

5 What is offered as evidence to support the theory that our universe is expanding?

6 What evidence was uncovered to indicate that Newtonian physics could not account for submolecular phenomena?

7 What is Heisenberg's principle? What significance has it for the law of cause?

8 Why is it claimed that quantum physics has furnished evidence to substantiate the reality of free will? What do you think of such a claim?

9 Why has it been argued that the Newtonian scheme of the universe implies determinism? Do you believe that determinism makes a rational ethics or religion impossible?

10 What reasons were given to substantiate the thesis that modern physics is positivistic?

## PARALLEL READINGS

DeLeeuw, A L *Rambling through Science*, Chaps XX–XXV

Houston, W V The Philosophy of Physics, *Science*, Apr 30, 1937

Humason, M L Evidence for an Expanding Universe, *Scientific Monthly*, July, 1936

Jeans, Sir James The New World Picture of Modern Physics, *Science*, Sept 7, 1934

Lindsay, R B Where Is Physics Going?, *Scientific Monthly*, March, 1934

Millikan, R L What to Believe about Cosmic Rays, *Science*, Mar 1, 1935

Mills, John *Within the Atom*

Nielson, J Rudd Philosophical Implications of Modern Physics, *Scientific Monthly*, June, 1931

Northrop, F S C Newton and the Modern Age, *The Saturday Review of Literature*, Feb 2, 1935

Russell, Bertrand *The ABC of Atoms*

Stewart, J Q An Astronomer Looks at the Modern Epoch, *Scientific Monthly*, May, 1937

Tolman, Richard C The Present Status of Cosmology, *Scientific Monthly*, December, 1936, and January, 1937.

# REFERENCE TITLES

## *A* Whole Period


Cushman *A Beginner's History of Philosophy*
Erdmann *A History of Philosophy*
Fuller *A History of Philosophy*
Hunter *History of Philosophy*
Marvin *History of European Philosophy*
Rogers *A Student's History of Philosophy*
Thilly *History of Philosophy*
Turner *History of Philosophy.*
Uberweg *History of Philosophy*
Webb *History of Philosophy*
Weber and Perry *History of Philosophy*
Windelband *History of Philosophy*


## *B* Ancient Period


Adamson *Development of Greek Philosophy*
Bakewell *Source Book in Ancient Philosophy*
Barker *Political Thought of Plato and Aristotle*
Benn *The Greek Philosophers*
Burnet *Early Greek Philosophy*
Cherniss *Aristotle's Criticism of Presocratic Philosophy*
Cornford *From Religion to Philosophy*
Dickinson *The Greek View of Life*
Diogenes, Laertius *Lives of the Philosophers*
Fuller *History of Greek Philosophy.*
Gomperz *The Greek Thinkers*
Grote *Plato and the Other Companions of Socrates*
Hicks *Stoic and Epicurean*
Hyde *Five Great Philosophies of Life*
Lecky *History of European Morals*
Leucretius *On the Nature of Things*
Macoll *Greek Skeptics*
Osborn *Socrates and His Friends*
Robin *Greek Thought and the Origin of the Scientific Spirit*
Ross *Selections from Aristotle*
Smith *Philosophers Speak for Themselves*
Stace *Critical History of Greek Philosophy*
Stewart *Myths of Plato*
Wallace *Outlines of Aristotle's Philosophy*

WATSON *Hedonistic Theories*
WEIGALL *Personalities of Antiquity*
ZELLER *Socrates and the Socratic Schools*
ZELLER *Stoics, Epicureans, and Sceptics*

### C Medieval Period

ADAM *The Religious Teachers of Greece*
ADAMS *Civilization in the Middle Ages*
ALLBUTT *Science and Medieval Thought*
ATKINS *The Making of the Christian Mind*
BOODIN *Three Interpretations of the Universe*
BRUSSELL *Religious Thought and Heresy in the Middle Ages*
CASE *The Evolution of Early Christianity*
CHURCH *Beginning of the Middle Ages*
EDWARDS *The Philosophy of Religion*
*Encyclopedia of Religion and Ethics*
GIERKE *Political Theories of the Middle Ages*
GLOVER *Conflict of Religions in the Early Roman Empire*
HAGENBACH *History of Doctrine*
HALLIDAY *The Pagan Background of Early Christianity*
HARNACK *History of Dogma*
HARNACK *What Is Christianity?*
HATCH *Influence of Greek Ideas and Usages on the Christian Church*
JONES *Studies in Mystical Religion*
KAUTSKY *Foundations of Christianity*
LEADBEATER *The Christian Creed*
MACDONALD *Authority and Reason in the Middle Ages*
MCCABE *St Augustine and His Age*
MCGIFFERT *The God of the Early Christians*
MCGIFFERT *History of Christianity in Apostolic Age*
MCGIFFERT *History of Christian Thought*
MCKEAN *Selections from Medieval Philosophers*
MOORE *History of Religion*
PFLEIDERER *History of the Philosophy of Religion*
POOL *Medieval Thought*
RULE *Life and Times of St Anselm*
TAYLOR *The Classical Heritage of the Middle Ages*
TAYLOR *The Medieval Mind*
THORNDYKE *Science and Thought*
TOWNSEND *The Great Schoolmen of the Middle Ages*
VAUGHAN *St Thomas of Aquin*
WHITE *A History of the Warfare of Science with Theology*
WULF *Philosophy and Civilization in the Middle Ages*

### D Modern Period

ALBEE *History of English Utilitarianism*
BURCKHARDT *The Civilization of the Renaissance*
CALDWELL *Schopenhauer's System in Its Philosophical Significance*

CROCE *What Is Living and What Is Dead in Hegel's System*
DARWIN *Origin of Species*
DEWEY *Reconstruction in Philosophy*
DEWING *Introduction to the History of Modern Philosophy*
DRESSER. *A History of Modern Philosophy*
DUFF *Spinoza's Political and Ethical Philosophy*
FISCHER *Bacon and His Successors*
FISHER *Descartes and His School*
GRAHAM *English Political Philosophy from Hobbes to Maine*
GREEN *Introduction to Hume*
HALDANE *Descartes, His Life and Times*
HIBBEN *Philosophy of the Enlightenment*
HOFFDING *History of Modern Philosophy*
HOFFDING *Modern Philosophers*
HOFFDING *Rousseau and His Philosophy*
HUDSON *The Philosophy of Herbert Spencer*
JAMES *Some Problems of Philosophy*
JAMES *The Will to Believe*
JOAD *The Future of Life*
JOAD *Philosophical Aspects of Modern Science*
JOAD *Modern Philosophy*
LEWES *Biographical History of Philosophy*
MAHONEY *History of Modern Thought*
MERZ *A History of European Thought*
MILL *Comte and Positivism*
MORLEY *Diderot and the Encyclopedists*
PERRY *Present Philosophical Tendencies*
PERRY *Philosophy of the Recent Past*
PERRY *The Present Conflict of Ideals*
PRATT *What Is Pragmatism?*
RILEY *American Thought*
ROGERS *English and American Philosophy since 1800*
ROMANES *Darwin and After Darwin*
RUSSELL *A Critical Exposition of the Philosophy of Leibnitz*
SANTAYANA *Some Turns of Thought in Modern Philosophy* (5 essays)
SANTAYANA *Life of Reason Series*
SCHAUB *Philosophy Today*
SCHEEN *Old Errors and New Labels*
SETH *The Philosophical Radicals.*
SETH *From Kant to Hegel*
SIDGWICK *Lectures on the Philosophy of Kant*
SINGER *Modern Thinkers and Present Problems*
SNIDER *Modern European Philosophy*
SORLEY *Ethics of Naturalism*
STEIN *Philosophical Currents of the Present Day*
VAUGHAN *Studies in the History of Political Philosophy Before and After Rousseau*
WILLEY *The Seventeenth Century Background*
WRIGHT *What Nietzsche Taught*

# GLOSSARY OF PHILOSOPHICAL TERMS

(For further information about specific terms consult Baldwin's *Dictionary of Philosophy and Religion*)

*Absolute* That which is complete in itself, not limited by anything outside itself, that which is nonrelative

*Abstract* Separated from practice, or particular examples An abstract quality is one which is manifested in many things, as redness in a variety of red objects

*Ad infinitum* Without end, to infinity

*Aesthetics* Study of the nature of art, the philosophy of beauty

*Agnosticism* A word primarily descriptive of any theory which denies that it is possible for man to acquire knowledge about God, the class of philosophical or scientific theories which recognize an intrinsically unknowable

*Altruism* Regard for, and devotion to, the interests of others opposed to egoism or selfishness The objective of moral conduct is the good of others

*Analogy* Reference to similarities of things, form of reasoning making affirmations concerning an object by comparison with some other similar object

*Animism* A belief that the world of nature is inhabited by spirits, both good and bad

*Anthropomorphism* Practice of attributing human characteristics to the objects of religious worship

*Antimony* Any conflict of principles, each so comprehensive that no appeal to a third principle can decide between them They are thus left standing to each other as contradictories

*Antithesis* An opposition or contrast of ideas, a proposition opposed to a given thesis

*A posteriori* Pertaining to knowledge obtained from experience

*A priori* Pertaining to knowledge obtained without experience, innate, inborn

*Argumentum ad hominem* An argument directed at the character of a man instead of the merits of his argument

*Argumentum ad misericordium* An appeal to the emotions, especially that of pity

*Argumentum ad populum* An appeal to the prejudices or sentiments of a people rather than to the principles of impartial reason

*Aristocracy* Government in which the sovereign power is vested in a few individuals

*Asceticism* A belief that the true good of man is something outside of and opposed to his nature and ordinary interests of life

*Ascetism* The doctrine that the material world is evil or despicable and that salvation is to be most certainly obtained by mortification of the flesh

*Atheism* A view committed to the thesis that no deity exists

*Atom* The smallest indivisible unit of "stuff" which cannot be seen, but has real properties, size, hardness, density, and motion (pretwentieth-century concept)

*Atomism* The doctrine that the physical universe, the whole universe, both physical and mental, is composed of simple indivisible and minute particles or atoms

*Becoming* A term substantially synonymous with "change", any process by which a definite new state or form is reached

*Being* A designation for that which exists as permanent and unchanging

***Cardinal virtues*** The principal virtues upon which the other virtues depend The Greek cardinal virtues are temperance, wisdom, courage, and justice.

***Categorical*** absolute, unconditional, admitting no conditions or exceptions

***Category*** An ultimate concept or form of thought, one of the primary fundamental conceptions to which all knowledge can be reduced

***Collectivism*** A politicoeconomic doctrine supporting socialistic ideals but opposed to revolutionary activities

***Concept*** A general idea, designated for the most part by the common nouns of the language See *Universals*

***Concrete*** That which is the opposite of abstract, real, specific, and particular

***Consistency*** Harmony between things, acts, or statements, a condition of thinking that is free from contradictions

***Continuous*** That which cannot be divided into parts and is the opposite of discrete

***Contradiction, law of*** A proposition cannot be at the same time and in the same context both true and false

***Corporeal*** Having a material body, not mental or spiritual in constitution, tangible or physical

***Cosmic process*** A continuous cycle involving the entire structure of the universe

***Cosmogony*** Theories of the origination of the world or universe, usually mythical or imaginative in character

***Cosmological argument*** An argument to establish God's existence, claims that the character of nature implies a cause or reason of it

***Cosmology*** Investigation of the origin of the world, branch of metaphysics that treats character of universe as orderly system

***Cosmos*** The universe conceived as an orderly, complex, and harmonious system

***Criterion*** A test or standard of judgment

***Cynic*** A sneerer and a misanthropist, a philosophic view mainly opposed to hedonism

***Datum*** (plu , data) The actual, given, or admitted upon which reasoning and generalization is based

***Deduction*** A process of thought that advances from general principles to the particular cases

***Deism*** Religious viewpoint that acknowledges the existence of God but denies revelation

***Delphic sayings*** Savings which have double meanings (the sea is the purest and impurest of water pure for the fish, impure for man)

***Determinism*** The theory that every event is the necessary effect of previous conditions

***Deus ex machina*** Literally, a god from a machine, hence, any person or thing artificially introduced, as in a story, to solve a difficulty

***Dialectic*** The art of reasoning or disputing, method of thought

***Dictum*** An authoritative or positive utterance

***Differentia*** Elements of definition which serve to distinguish a given particular object from all other objects

***Dilemma*** An argument which presents an opponent with two or more alternatives (or "horns"), but is equally conclusive against him whichever alternative he chooses

***Divination*** The supposed art of foreseeing future events by supernatural or magic agency

***Doctrine*** The body of principles in any branch of knowledge, that which is taught

***Dogma*** A belief based upon authority and regarded as closed to criticism

***Dogmatism*** Positiveness in assertion about matters that admit of debate

***Dualism*** A hypothesis stating that the real is composed of two distinct substances usually designated "mind" and "matter"

***Eclecticism*** A practice of choosing whatever beliefs or opinions may be congenial to one's way of thinking without regard for coherence or contradiction

***Egoism*** The ethical theory that holds self-interest to be the end of moral action

*Empirical* Based solely on experience, the opposite of a priori, the approach made by experimental science

*Empiricism* The philosophical theory which attributes the origin of all our knowledge to experience

*Epicureanism* The theory of Epicurus His ethical doctrine that pleasure is the chief goal of life, especially the kind that is most certain and lasting

*Epi-phenomena* That which is secondary and dependent upon a prior and ultimate reality as its cause

*Epi-phenomenalism* Thesis that consciousness is a product of physiological processes, having no existence separate from them nor possessing capacity to interfere with them.

*Epistemology* Theory of the origin, nature, and elements of knowledge

*Equalitarianism* A doctrine claiming that all men are born free and equal

*Eristic* Aimed at winning an argument, not in finding the truth, a form of controversial argument

*Esoteric* and *exoteric* Terms used to characterize two presentations of doctrine, one intended for the initiated (esoteric), the other for those incapable of grasping the inner meaning

*Essence* That which makes a thing what it is its innermost reality as opposed to any and all accidental characteristics of it

*Ethics* A study of right and wrong elements of conduct

*Eudaemonism* Self-realization Not pleasure, but the character of an ideal personality is the highest good Also, well-being or happiness, not pleasure, is the highest good of man.

*Evolution* A theory maintaining that forms of life develop from other and simpler forms of life during long periods of time

*Ex nihilo nihil* Nothing comes from nothing

*External objects* Things and events presented to sense perception and considered as existing independently of the process by which they are perceived

*Extrapolation* Calculating from known facts others which are presumed to follow if the original facts are sound, extension of known principles into regions as yet unexplored

*Finite* Limited or bounded

*Flux* A continuous succession of changes

*Form* The assemblage of characteristics that make an existing thing to be what it is, configuration, shape, the aspect under which a thing appears as distinguished from the substance out of which it is composed

*Free will* That the will in measure at least is capable of acting independently of the force of prior events Uncaused activity thus is affirmed to be an actuality

*Fundamentalist* One who accepts the Bible as being literally true

*Genetic method* The explanation of things according to their origin or manner of coming into being

*Geocentric astronomy* Theory or belief that the earth is the center of the universe

*Gnosticism* A philosophic or religious belief that salvation is dependent upon the possession of the proper sort of knowledge

*Hedonism* A hypothesis that pleasure is the highest good of man

*Hegemony* Leadership as of a person or group to its confederates

*Heliocentric astronomy* The theory that the sun is the center of the solar system

*Homo mensura* Doctrine of experience stating that man is the measure of all things

*Hylozoism* The notion that the real is alive and, being alive, it is capable of self-movement

*Hypostatize* To treat an abstraction as a separate and distinct substance

*Hypothesis* A supposition assumed as a basis of reasoning, experiment, or investigation

"*Ideas*" Platonic essences, immaterial, transcendent, unchanging, eternal, outside of space and time, the ultimate real

*Individualism* A thesis that one's private good is the most significant

*Induction* Process of reasoning from a part to a whole, from particulars to generalizations.
*Infinite* Without limit or bounds
*Innate ideas* Native, derived from the constitution of the intellect, as opposed to ideas acquired from experience
*Intelligibility* A criterion stating that that which cannot be thought is unreal
*Intrinsic* That which belongs to a thing and comprises its essential nature, the nonaccidental characteristics or values of a thing
*Intuition* Immediate and direct apprehension independent of reasoning
*Ipso facto* By the fact itself
*Laws of convention* Regulations that are man-made
*Laws of nature* Regulations imposed upon man by the physical world
*Logic* The science of formulating and using correct forms of reasoning
*Logos* The principle of rational order conceived to be a part of nature In theology the second person of the Trinity, the Son as the divine reason of God
*Materialism* A hypothesis holding that the real is composed of matter
*Meliorism* The belief or doctrine that the world tends to become better and that man has the power of aiding its betterment
*Metaphysics* A philosophic endeavor that seeks to learn the nature of ultimate reality
*Metempsychosis* Migration of soul at death into new body of the same or another species, transmigration
*Misanthropist* A hater of mankind
*Misology* A hatred of theories, that is, arguments, discussions, or enlightenments
*Monad* A unit, individual, an atom, an individual elementary being, psychical or spiritual in nature
*Monism* Belief that the entire universe is composed of one abiding substance
*Monotheism* Religious belief in the reality of one God
*Mysticism* The doctrine that the ultimate nature of reality may be known in an immediate insight, differing from all ordinary sensations
*Natural rights* Rights founded on laws of nature as opposed to those of convention
*Neologism* Using new words or new meanings, adoption of new ideas or new religious doctrines
*Nominalism* The doctrine that abstract conceptions have no real existence, that reality is composed of particulars only, that concepts are thought products
*Normative* Having to do with standards of evaluation Normative sciences, logic, ethics, esthetics etc
*Noumenon* The object of pure thought, or of rational intuition, free from all elements of sense
*Nous* Reason, thought, considered not as subjective, but as having an objective, especially a teleological, significance
*Objectivity* The opposite of subjectivity, a condition of thought freed from personal bias or interest
*Omnipotent* All-powerful, capable of any achievement
*Omnipresent* Present everywhere at once
*Omniscient* All-wise, having the totality of knowledge
*Ontological argument* Argument to prove God's existence Affirms such existence from the definition of God as a perfect thing To be perfect implies existence, and hence God exists
*Ontology* The same as metaphysics, inquires into the reality of things.
*Panlogism* The theory that mind is omnipresent
*Pantheism* Belief that God and the universe are one and the same thing
*Paradox* An assertion or argument actually or apparently contrary to accepted opinion. a seemingly contradictory thesis.

***Parsimony*** Principle that the simplest explanation is the truest

***Peripatetic*** An adherent of the philosophy of Aristotle, so called because the founder of this philosophy taught, or his followers disputed questions, while walking in the Lyceum at Athens

***Pharisaic*** Addicted to external forms and ceremonies, formal, hypocritical, making a show of religion without the spirit of it

***Pluralism*** Belief that the real is composed of many, or at least more than two substances

***Polemics*** Pertaining to controversy, the art or practice of disputation or argument

***Polytheism*** Religious belief that there are many gods

***Precept*** An authoritative command, order, mandate

***Primary qualities*** Those without which the object cannot be conceived to exist, its shape, size, motion, etc

***Psychophysical parallelism*** Theory that physical and mental states arise simultaneously and as complements one of the other

***Reductio ad absurdum*** A logical device that reduces an argument to the absurd in order to discredit it

***Relative change*** Things changing place or proportion without alteration of their essential properties

***Relativism*** A thesis that there are no absolute truths, that each generalization is limited to a particular set of circumstances or conditions

***Scholasticism*** Medieval thought, in which philosophy was pursued under the domination of theology, having for its aim the exposition of Christian dogma, an attempt to identify philosophy with theology

***Secondary qualities*** Effects of the primary qualities, the location of which are not in the real, but in a perceiving organism, colors, odors, etc

***Sensualism*** Regarding gratification of the senses as the highest good

***Sine qua non*** An indispensable thing or condition, a necessity

***Skepticism*** The theory that positive and certain truth is not obtainable by the human intellect, or the theory that it is necessary to doubt before reaching truth

***Solipsism*** Knowledge is an individual achievement of each person He alone is the knower Nothing beyond the immediate experience of the individual may be legitimately affirmed

***Sophism*** An intentionally deceptive syllogism Making the worse appear the better reason

***Static*** The opposite of dynamic, immovable, lifeless

***Status quo*** The state in which anything is

***Subjectivism*** Opinions as held by people are true, all knowledge is the product of individual human minds

***Substance*** Any "stuff" or entity used in philosophical explanation as that which is primary and uncaused but which is itself the cause or essential nature of all things

***Summum bonum*** The highest good

***Syllogism*** A logical form used to test the validity of reasoning composed of two premises and a conclusion following necessarily from them

***Teleological argument*** To prove God's existence appeal is made herein to the orderly processes of nature as implying a superplanner

***Teleology*** Belief that nature exhibits evidence of definite purpose

***Theism*** Belief that there is one God who is above all others and not in nature

***Theocracy*** Government of a state by the immediate direction or administration of God

***Theogony*** Religious explanation of the origin of things

***Transcendental*** Excelling or surpassing experience, not subject to the limitations of the physical universe

***Transmigration*** See *Metempsychosis*

***Ultimate*** That which cannot be further analyzed, the irreducible

*Universalia ante res* Universals exist prior to particulars.

*Universalia in rebus* Universals exist in particulars

*Universalia post res* Universals exist after things in the minds of men

*Universals* A general term or concept whether conceived as a mere word or name (nominalism), as a truth or predicate (conceptualism), or as an actual character of reality having a metaphysical status independent of particular things (Platonic realism)

*Utilitarianism* Highest good is pleasure, the most pleasure for the greatest number of people

*Virtue* A quality applicable to types of conduct which comply with the moral code

*World soul* An intelligent, moving force, or a directing, organizing principle, having the same relation to the cosmos as the human soul is supposed to have to the body

# Index


A

Abélard, 188, 197, 208
Achilles and tortoise, 45
Alchemy, 210
Alcuin, 184
Alexander of Aphrodisias, 208
Alexander the Great, 85, 112
Ambrose, 178
Anaxagoras, 50, 55*ff*, 506
Anaximander, 24, 505
Anaximines, 25
Andronicus, 113
Animal spirits, 250
Anselm, 194, 244
Antisthenes, 84
Apellico, 113
Apologists, 169, 171
*Apology*, 77
Apostles' creed, 175
Aquinas, St Thomas, 188, 191, 198, 208, 212
*Argumentum ad hominem*, 69
*Argumentum ad misericordiam*, 69
*Argumentum ad populum*, 69
Aristippus, 85, 142
Aristotle, his life, 111*ff*, criticism of Plato, 113, on logic, 114*ff*, theory of development, 118*ff*, on causation, 120*ff*, on morality, 124*ff*, *summum bonum* of, 125, golden mean of, 127, theory of state, 128*ff*, on art, 131*ff*, 208, 212, 275, 349, 535
Arius, 177
Armenian church, 178
Art, as catharsis, 131, medieval art, 207
Astrology, 210
Ataraxy, 157
Athanasius, 177
Augustine, St, 169, 178*ff*, 186, 193, 244
Austin, J, 572
Averroes, 208

B

Bacon, Francis, 209, 216, life of, 222, on traditional learning, 223, on object of knowledge, 224, idols, 225, on method, 226, criticism of deduction, 227, 236, 326, 383
Becoming, 36
Being, 42
Bentham, Jeremy, 370*ff*, on psychological hedonism, 371, 373, hedonistic calculus, 372, sanctions of, 372
Bergson, Henri, 36, 531
Berkeley, George, 3, 302, life of, 311*ff*, arguments on materialism, 313*ff*, on abstract ideas, 314, nominalism, 314, primary and secondary qualities, 316, criticism of Locke, 316, on source of ideals, 318, *esse est percipi*, 319, on external world, 320, on God, 321, *summum bonum* of, 323, 326, 340, 414
Blount, 326
Boccaccio, 203
Bodin, J, 543
Boethius, 184
Bohr, N H D, 603
Bolingbroke, H, 326
Bosanquet, B, 459
Boundless, The, 22
Boyle, Pierre, 279, 326
Bradley, F H, 459
Brahmanism, 14
Bridgman, P W, 610
Bruno, Giordano, 205, 212, influence of Copernicus, 217, criticism of church, 218, on God, 219, on uniformity of nature, 220, 277
Buddhism, 15
Buffon, 509
Burke, E, 561
Butler, Joseph, 364*ff*

C

Cabell, James B , 476
Cambridge Platonists, 339*ff*
Capella, 184
Cardinal virtues, 102
Cassiodorus, 184
Catastrophism, 509
Causation, Aristotle on, 118*ff* , Hobbes on, 231, Hume on, 336*ff* , Kant on, 413*ff* , Hegel on, 443
Chaerephon, 76
Charron, Pierre, 208
Christological problem, 177
Chrysippus, 144
Chubb, 326
Cicero, 537
City-state, 21, 129
Cleanthes, 144
Clement VII, 212
Communism, 105, 129, 573
Comte, 480*ff* , origin of positivism, 480, science of humanity, 481, law of three stages, 481, classification of sciences, 484, sociology, 485, moral progress, 486, religion of humanity, 487
Condillac, 385
Confucius, 16
Consistency, principle of, 26
Contradiction, law of, 46, 118
Conversion of propositions, 115
Copernican theory, 211
Copernicus, 206, 209, 211, 592
Correspondence theory, 149, 498
Council of Nicaea, 177
Council of Trent, 205
Cousin, Victor, 387
Crates, 141
Cratylus, 90
Creation, 180
*Crito*, 79
Croce, B , 459
Cudworth, Ralph, 359
Cumberland, Henry, 360
Cuvier, 509
Cynics, 82, 84*ff* , 143, 534
Cyrenaics, 82, 85*ff* , 100, 137, 142

D

D'Alembert, 384, on knowledge, 393
Dante, 203
Darwin, Charles, 505; influence of Lyell, 510, principles of evolution, 511, acquired characteristics, 512, natural selection, 513, survival of fittest, 513, influence on social theory, 514, reaction to, 515, criticisms on Darwinism, 517, 573
Darwin, Erasmus, 590
Deism, 308, 323*ff*
Democritus, 50, 56*ff* , 138, 229
Demosthenes, 113
Descartes, René, 216, 228, life of, 238*ff* , on mathematics, 239, on method, 240*ff* , on self, 242*ff* , on God, 243*ff* , on possibility of truth, 245, on error, 245, on origin of ideas, 246, on mind and matter, 247, on extension, 248, on thought, 249, on psychology, 250, on emotions, 251, 276, 290, 300, 340, 587
Desiderius, 187
De Vries, H , 529
Dewey, J , 497, 577
Diderot, D , 391, the *Encyclopedia*, 392, on knowledge, 393
Diogenes, 85, 188, 534
Dionysius, the Areopagite, 184
Dionysius of Syracuse, 89
Dualism, 33
Dun Scotus, 188, 199
Durkheim, E , 495

E

Efficient cause, 120
Einstein, A , 598
Eleatics, 35
Flecticism, 157*ff*
Emanation, 163
Emergent evolution, 530
Empedocles, 50*ff* , 60, 506
Encyclopedists, the, 391
Engels, F , 573
Entelechy, 122
Epictetus, 144
Epicureanism, 136*ff*
Epicurus, 136
Epiphenomenalism, 231
Erasmus, 208
Euclid, school of, 87*ff*
Evil, problem of, 147, 181, 280
Evolution, 505*ff*
Excluded middle, law of, 46
*Ex nihilo nihil*, 27, 42, 122

F

Faith and reason, problem of, 196*ff*
Fechner, G T, 459
Fichte, I H, 459
Fichte, J A, 287, 426*ff*, life of, 426, ego and monego, 427, on virtue, 429, on German nationalism, 429, 565
Final cause, 120
Florentine Academy, 208
Formal cause, 120
Formalistic ethics, 422

G

Galileo, 212*ff*, on objective method, 214, criticism of deduction, 215, on terrestrial dynamics, 215, on sense perception, 216, 229, 240, 586
Gentile, G, 459, 544
Geulincx, 253
Gnostics, 169, 172*ff*
Godwin, W, 569
Goethe, 285
Golden Age, 82
Gorgias, 46
Greek religion, 18
Green, T H, 459
Gregory the Great, 187
Grotius, H, 544
Guanilo, 195

H

Hartmann, Edward von, 473*ff*, The Unconscious, 474
Hedonism, 138
Hegel, George, 264, life of, 434, dialetic, 436*ff*, relationship to Kant and Hume, 437, criticism of Schelling, 440, on phenomenal world, 440, thesis and antithesis, 441, criticism of Spinosa, 442, on nature, 442*ff*, on causality, 443, on social order, 445, on right, 446, on property, 447, on morality, 448, *summum bonum* of, 449, on family, 449, on state, 450, philosophy of history, 452*ff*, on absolute order, 453, on art, 454, on Christianity, 457, influence on later thinkers, 457, criticism of, 458, 566
Heisenberg's principle of uncertainty, 605
Helvetius, 387
Hemingway, E, 477
Heraclitus, 35*ff*, 145, 264, 506
Herbert of Cherbury, 325
Hermias, 112
Hiketas, 32
Hippias, 69, 83
Hobbes, Thomas, 216, life of, 229, on method, 230, on reality, 231, on sensation, 231, on truth, 232, on origin of state, 233, on social contract, 234, on morality, 235, 252, 257, 304, 326, 347, 359, 361, 549
Hocking, W E, 11
Hodgskin, T, 569
Holbach, P, 394
Hooker, R, 543
Humanism, 207
Hume, David, life of, 329*ff*, on knowledge, 332*ff*, on impressions and ideas, 332; order of ideas, 333, association of ideas, 335, on causation, 336*ff*, on necessary connection, 337, on substance and external world, 340*ff*, on self, 341, on belief in external world, 343, on constancy and coherence of ideas, 343, skepticism, 345, morality, origin of, 346, criteria of morality, 347, moral "taste," 348, on sympathy, 348, political theory, 349, origin of government, 350, "state of nature," 351, on religion, 352*ff*, natural origin of religion, 352, criticism of religion, 356, 367
Hutcheson, F, 364
Hylozoism, 23, 220

I

Identity, law of, 47
Immediate inference, 115
Induction, 117, 488
Inquisition, 215, 218, 240
Intelligibility, principle of, 42
Interpretation, allegorical and literal, 170
Irenaeus, 174*ff*
Isidore of Seville, 184

J

Jamblichus, 166
James, William, 407
Jeans, Sir James, 610
Jefferson, T, 557

Justin Martyr, 174
Justinian, 166, 538

K

Kant, Immanuel, 285, 287, 304, life of, 403*ff*, reaction to Hume, 404, synthetic judgments a posteriori, 407, synthetic judgments a priori, 408, 410, 413, sensation and reason, 408, Transcendental Aesthetic, 409, forms of space and time, 409, phenomena, 410, things-in-themselves, 410, 418, the objective world, 411, Transcendental Analytic, 412, faculty of judgment, 413, categories, 413, on causation, 413*ff*, on error, 415, Transcendental Dialetic, 415, antinomies, 416, on God's existence, 416, 424, on rationalism and empiricism, 417, noumena, 418, 419, freedom, 419, 423, Hypothetical Imperative, 420, Categorical Imperative, 420, 424, good will, 421, moral goodness, 422, the Ideas, 419, on immortality, 424, 564
Kepler, 206, 209, 214, 587

L

Lamarck, I, 509
La Mettrie, J, 252, 394
Lange, A, 493
*Laws*, 90
Leibnitz, G W, 257, life of, 274*ff*, on reality, 276*ff*, on monads, 277, on apperception, 278, theology, 278*ff*, on God, 279, on evil, 280, on immortality, 281, on knowledge, 282*ff*, on sufficient reason, 282, on empiricism and rationalism, 283, influence of, on German enlightenment, 284, 586
Leonardo da Vinci, 210
Lessing, G, 285
Leucippus, 50, 56
Levelers, 548
Levy-Bruhl, L, 495
Locke, John, 155, 216, 257, life of, 289*ff*, theory of knowledge, 291*ff*, on origin of ideas, 291, on innate ideas, 292, on sensation and reflection, 293, on simple and complex ideas, 293, mode, substance, relations, as ideas, 294, organization of knowledge, 296, agreement and disagreement of ideas, 297, on knowledge of external world, 299, primary and secondary qualities, 301, on substance, 301, on human nature, 302, on government, 303, on social contract, 304, on religion, 305, 307, on morality, 306, contrast with Hobbs on morality, 306, on God, 307, on education, 308, 340, 385, 550
Logos 38, 148, 171, 177
Logos doctrine, 171
Lotze, H, 459
Lucretius, 137
Luther, Martin, 205

M

Mach, E, 493
Machiavelli, 204, 553
Magellan, 206
Magic, 18, 210
Maine de Brian, 387
Malebranche, 252, 311
Malthus, 509
Manichaeans, 169
Marcionites, 174
Marcus Aurelius, 144
Marsiglio, 542
Marx, K, 573
Megarans, 82
Melissus, 46
Michaelson-Morley experiments, 598
Michel de Montaigne, 208
Milesian philosophers, 22*ff*
Mill, James, 374
Mill, John Stuart, criticism of Bentham, 375, 378, personal and individual happiness, 376, quality of pleasure, 378, empirical positivism, 487*ff*, on logic, 488*ff*, scientific method, 488*ff*, scientific assumptions, 490, external world, 492
Millay, Edna St Vincent, 477
Minoans, 17
Monad, 219, 277
Monism, 40
Montesquieu, C, 155, 383, 388, 553
More, Henry, 359
Morgan, Lloyd, 530

N

Natural rights, 534*ff*
Natural selection, 52, 513*ff*

Neoplatonism, 162ff , 236
Nestorian church, 178
Newton, I , 215, 220, 276, 586ff.
Nicene Creed, 177
Nietzsche, F , 204, 523ff , will to power, 523, goal of evolution, 524, criticism of morality, 525, criticism of Christianity, 526, social theory, 526, on German nationalism, 527, on superman, 528
Nihilism, 46
Nirvana, 17
Nominalism, 94, 188, 216, 314
Nous, 55
Number, mysticism of, 30ff

O

Occam's razor, 192
Occasionalists, 253
Ontological argument, 194
Origen, 172
Original sin, 181
Orozco, José, 1
Orpheus, 19
Orphic cults, 161
Owen, R , 569

P

Paine, T , 556
Palingenesis, 146
Pantheism, 43, 145, 218, 252
Paracelsus, 210
Parmenides, 35, 40, 264
Pasteur, L , 507
Patristics, 170
Paul, St , 173
Pauline dualism, 173
Pericles, 53
Persian Mani, 171
Persians, 66
Pessimism, 6, 86, modern, 461ff , later, 473ff
Petrarch, 203
*Phaedo*, 102
*Phaedrus*, 101
Phidias, 53
Philo, 170ff
Philosophy of history, Christian, 183, 202
Photius, 184
Physiocrats, 553
Plato, 81, 89ff , on his predecessors, 89ff , influence of Socrates, 91, on reality, 93ff , departure from Socrates, 94, nature of Ideas, 95, physical world, 96, dialectic, 98, ethics, 100ff , self-realization, 100, on soul, 101, doctrine of remembrance, 102; cardinal virtues, 102, theory of state, 103ff , equalization of sexes, 104, communism, 105, philosopher kings, 107, on art, 107, on state reform, 108, 149, 188, 208, 535
Plotinus, 162
*Poetics*, 132
Poincaré, H , 493
Polemo, 143
Pomponazzi, 208
Porphyry, 162
Positivism, 480ff
Pound, R , 583
Pragmatism, 36, 496ff , development of, 496, criticism of empiricism, 497, criticism of association psychology, 498, criticism of truth criteria, 498, origin of beliefs, 500, on absolute knowledge, 500, beliefs as truth claims, 501, function of beliefs, 501, test of truth, 502, on reality, 503
Proclus, 166
Prodicus, 83
Protagoras, 53, 68, 71, 83
Proxenus, 111
Ptolemaic theory, 211
Ptolemy, 134
Pufendorf, S , 551
Pyrrho, 155
Pythagoras, 27ff , 44, 211, 214
Pythagorean philosophy, 27ff

Q

Qualitative pluralism, 53ff
Quantitative optimism, 56ff.
Quantum theory, 65ff

R

Realism, Plato's, 94, 188
*Reductio ad absurdam*, 44
Relativism, 39
Renaissance, 203, 207, 223, 274
Renouvier, C , 459
*Republic*, 80, 91, 104

**Robinson**, E Arlington, 477
**Roscellinus**, 188
**Rousseau**, J J , 155, 304, 330, 384, 395*ff* ; criticism of arts and sciences, 396, *Emile*, 397, and Hume, 397, criticism of society, 397, on return to nature, 398, on education, 399, *The Social Contract*, 400, criticism of civilization, 400, group will, 401, 555
Royce, J , 459
**Russell**, B , 602

S

Saint-Simon, 481
Santayana, George, 12
Savigny, F K von, 572
Schelling, Fredrich von, criticism of Fichte, 430, the Absolute, 430, and Spinoza, 431, on will, 431, on thing-in-itself, 431, romanticism, 432
Schiller, F C S , 497
Scholasticism, 186*ff*
Schopenhauer, A , 15, life of, 461*ff* , philosophical influences upon, 463, on appearance and reality, 465*ff* , on world as will, 466, on will to live, 467*ff* , on suicide, 468, on art, 469, on religion, 469, on intellect, 470, denial of will, 470*ff* , on genius, 471, on women, 472, on ennui, 472, criticism of Leibnitz, 473
Scotus Erigina, 184, 190, 196, 209
Seneca, 144
Sextus Empiricus, 156
Shaftesbury, Earl of, 289
Shaftesbury, third Earl of, 361*ff* , 363
Sidgwick, Henry, 380
Simplicity, principle of, 26
Simplicius, 184
Skepticism, ancient, 155*ff* , 160, 208
Slavery, 130
Smith, Adam, 367, on "inner man," 368, on progress, 368, on economic theory, 369, 564
Socrates, 53, 69, 74*ff* , and sophists, 74, on perception, 75, on physical science, 75, on method, 76, his dialectic, 76, on ignorance, 77, on virtue, 77, on insight, 78, on politics, 79, 94, 188, 367
Socratic schools, 82*ff*
Solomon's House, 224
Sophists, 64*ff* , 94
Sophocles, 53
Spencer, Herbert, 517*ff* , relation to Darwin, 517, on knowledge, 518, definition of evolution, 519; origin of society, 520, on individualism, 521, on adaptation, 522, on pleasure, 522
Spinoza, Baruch, 25, 252, 254, life of, 256*ff* , criticism of religion, 258, influence of Descartes and Bruno, 259, on substance, 261*ff* , on attributes, 262, on modes, 264, theory of knowledge, 265*ff* , intuitive knowledge, 266, on error, 266, adequate and inadequate knowledge, 267, on emotions, 268*ff* , on freedom, 269, on intellectual love of God, 271, social philosophy, 272*ff* , 304, 325, 431, 553
Stilpo, 87, 143
Stoicism, 15, 143*ff* , 208, 536
Syllogism, 115, 116
*Symposium*, 98
Synod of Chalcedon, 177

T

Tarde, G , 495
Teleology, 91, 123, 150
Telesio, B , 209
Tertullian, 167
Thales, 22, 505
Theophrastus, 113, 143
Theosophy, 209
Thomasius, C , 552
Thrasymachus, 71
*Timaeus*, 91, 173
Toland, John, 325
Transmigration, 29
Trinity, the, 177
Tycho Brahe, 206, 209

U

Ulpian, 538
*Universalia ante res*, 190
*Universalia post res*, 191
*Universalia in rebus*, 191
Universals, problem of, 188*ff*
Utilitarianism, 370*ff* , on pain and pleasure 371, criticism of, 379

V

Vattell, E , 552
Virtue for virtue's sake, 84, 138, 151, 422

Voltaire, 327, 383, 387*ff*, influence of English, 388, *Candide*, 389, criticism of Leibnitz, 389, reaction to church, 390, on democratic government, 391 554

W

Waldo, Peter, 205
William of Champeaux, 188
William of Occam, 188, 192, 199, 209
Wolff, School of, 285
Woolaston, 326
Wycliffe, John, 205

X

Xenophanes, 40, 43, 506
Xenophon, 81

Z

Zeno, the Eleatic, 43
Zeno, the Stoic, 87, 143*ff*