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AN INTRODUCTION TO PHILOSOPHY

BY

ORLIN OTTMAN FLETCHER

PROFESSOR OF PHILOSOPHY IN FURMAN ?
UNIVERSITY



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1913

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Set up and electrotyped. Published June, 1913.

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> Norwood Press J. S. Cushing Co. — Berwick & Smith Co. Norwood, Mass., U.S.A.

PREFACE

This Introduction is a product of the classroom. It originated in a desire to outline an undergraduate year in Philosophy that would be both critical and constructive.

The History of Philosophy affords a natural introduction to the problems with which this discipline deals. It acquaints the student with the questions considered by those who have determined the course of reflective thought, and it reveals their attitudes and modes of ap-It also furnishes him with developed statements of philosophical problems, and discovers to him the advance made in their solution. In thus tracing the development of the Science of Sciences, the student grasps the significance of philosophical activity. This course is also preëminently fitted to develop the critical interest and aptness which are essential to the framing of worthy philosophical conceptions. But the results have led many to doubt the wisdom of limiting the undergraduate to the History of Philosophy. Most students whose only acquaintance with Philosophy has been made through a historical study of it, are merely critical. Many become philosophic sceptics; and most of those who retain some philosophic faith are sadly confused.

On the other hand, if the history of reflective thought be ignored and the student be immediately introduced to a completed statement and solution of these problems, he fails to get what the history alone furnishes. This alternative course tends to a blind acceptance of the views held by the teacher; and the resultant dogmatism prevents the development of the philosophic spirit and the attainment of a philosophic vision.

I sought a course which would be critically constructive, one in which the student would become acquainted with the great thinkers of the past and their thought, in which he would also be led to a solution of the main problems. A certain end influenced my choice of approach and presentation. It is agreed that the teacher of Philosophy is not to aim to give his students information concerning Philosophy and philosophers; he should induce them to philosophize. He and they are not to read and think and talk about Philosophy; the students are to be incited to think critically and constructively of themselves and the world of persons and things and history. Up to the measure of his ability the student is to become a philosopher; and, in endeavoring to secure this, we are to keep in mind the fact that a true Philosophy is not a mere theory of the universe, it is a personal relating of the Self to all that is.

These considerations led me several years since to outline the course herein presented. Lectures, classroom discussions, and the criticisms of friends have determined the filling in of the outline. At the urgency of persons who were acquainted with the results, it was offered for publication.

Frankly, I have a philosophical doctrine, and that doctrine determines the treatment given the questions and opinions which are considered. My point of view is that of Objective Idealism. Reality, in its epistemological relation, is conceived as being with meaning; in its ontological relation, as active being; "active" being here used with the meaning assigned it on page 187. In a word, Reality is regarded as cognizable and immanently active. I also distinguish between a "totality" and "a true

whole." A totality, being an aggregation, lacks the oneness which is essential to a unitary whole. In dealing with the categories, I have followed a pedagogical order; but weighty reasons may be advanced in favor of presenting them in the logical order of their development.

I owe a great debt of gratitude to Dr. J. E. Creighton, of Cornell University. He gave time to the reading of my manuscript, and his suggestions and criticisms have been invaluable. I would also acknowledge aid rendered by Dr. A. H. Jones, of Brown University. But I alone am responsible for what is justly open to adverse criticism. The list of references which follows the text gives the names of a few among the many authors to whom I am under obligation. I owe much to authors from whose philosophic doctrines I feel compelled to dissent; naturally few of these appear in that list. But for my wife's encouragement, the publication of this work would not have been undertaken; but for her constant assistance, this Introduction could not have been brought to completion. She has looked up references, criticised statements, read proofs, and prepared the Index.

O. O. F.

Greenville, South Carolina, June, 1913. Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

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INTRODUCTION TO PHILOSOPHY

PART I

GENERAL INTRODUCTION

CHAPTER I

INTRODUCTORY

§ 1. Ourselves and the World. — We find ourselves in a world where there are things and other persons, and where events occur. We have dealings with these persons and things, and we have part in some events and take interest in others. Life is very real. We are real, and the outer world and all that is in it are real. fact of the reality of ourselves and all that is about us has been impressed upon us by the experiences we have had in our intercourse with persons and our handling of things. We have found that, if we would succeed in our undertakings, we must recognize the reality of that with which we have to do, and we must adapt ourselves to its way of behaving; and we are certain that, if we should ignore the reality of the world and its happenings and the way things and persons behave, we would invite trouble, if not disaster.

Through the experiences which have impressed us with the reality of ourselves and the world, we have come to personal and practical acquaintance with ourselves and with what is other than self. We have learned something of the meaning for us of events and things and persons,

something of their meaning for life. Our knowledge is not complete, neither is it always exact. Experience discovers to us the incompleteness and inexactness of our knowledge and enables us to enlarge and correct it. We recognize that the man of careful thought and extended practical acquaintance with the world and its affairs is the man whose opinion is of most value; it is most likely to be correct. This is illustrated in the value which we assign to the judgment of the lawyer or the physician of wide reading and large practice, assuming that he is also a man who judges his experiences critically. In a word, reflection upon what has come to us in our commerce with the world of nature and persons and happenings, i.e. a thoughtful reasoned consideration of our experiences, tends to accurate knowledge. In this day of general education, the knowledge of most persons is to no small degree systematized. It is because their knowledge of numbers is to some extent systematized, that the merchant and the farmer are able to calculate the value of goods and produce. The knowledge of the scientist, like that of all others, comes through his experiences; but it differs in some particulars from the knowledge of those who have not pursued critical studies. It comes more largely from reflection upon experiences; and it is more extended, more exact, and better systematized.

Summary: Our intercourse with persons and things gives us experience. Experience impresses us with the reality of the world and ourselves and life, and furnishes us with the content of our consciousness - our feelings and our knowledge. Through it we develop skill in thinking and doing; and our more exact knowledge comes of the reasoned consideration of our experiences.

§ 2. Experience and Philosophy. — We have seen that we come to assurance of the reality of the world and to

knowledge of it, through experience. The question we have now to consider is, What does Philosophy, as distinguished from other forms of thought, find in experience? To this we can only give a general answer at this point. This book, as a whole, is little more than the beginning of an answer to this question. An illustration will help us to recognize what is peculiar to Philosophy in its view of experience. You hear a confused noise, you look in the direction of the sound and see a runaway horse bearing down upon you, you are filled with fear and flee to shelter. Let us see what Psychology, a science closely allied to Philosophy, will do with this. Speaking in very general terms, we may say that the Psychologist will note the auditory sensation and the localization of the source of the sound, then the visual sensation and the localization of the object, then the instinctive fear and the motor reaction in running to shelter. He would distinguish much more, but this will answer our purpose. For him, this experience is a process, or rather a series of processes.

Philosophy, on the other hand, notes three characteristics of this experience which are of special moment for reflective thought. First, you are certain of the reality of what you heard and saw and fled from, and of yourself as seeing, fearing, and fleeing. Philosophy deals with this fact of reality; and what it has to say concerning it will appear in our further study. The second characteristic of this experience is that you interpreted what you heard and saw, that you discovered meaning in it for yourself. What you were conscious of was not merely some sounds and an extended patch of color moving toward you; but that a runaway horse was bearing down upon you. The perception of meaning was an element of the seeing and hearing. Philosophy deals with this fact of knowing. What it has to say about it will appear farther

on. Just here we wish to emphasize another characteristic of this experience. This characteristic is that the experience as a whole, and in every stage of it, has two contrasted aspects. You hear the sound and refer it to something apart from you; you see something and refer what you see, and your fear, to what is not you; and you run to some place which is shelter for you. In these experiences, the hearing, the seeing, the fearing, and the idea of shelter have each of them two references; one of them to you, the other to something which is not you. These two references are two aspects of one experience. Every experience has these contrasted references, or aspects. Later we shall have more to say about this. What we wish to do here is to call attention to this characteristic of experience as a cardinal fact for Philosophy. Philosophy has not always taken account of this fact, nevertheless it has affected all philosophic thought, except possibly the earliest.

Summary: An experience is a selected whole of consciousness; it may be regarded as a process in consciousness, or as content of consciousness. An experience has two aspects; it is a unitary consciousness with duality of reference, a reference to the self and a reference to something to which the self is giving attention. Philosophy is the reasoned consideration of experience, as experience.

§ 3. Subject and Object. — An experience reduced to its simplest form may be stated in one of three ways: "I know something, I do something, or I feel somehow." It is evident that in each of these there is a self who experiences and something in respect of which he has the experience. This agrees with what was said about the two aspects of experience. The self who experiences is the Subject; that in relation with which the subject has the experience is the Object. Our experiences come of

our giving attention to objects. In the first two forms,—
"I know something," and "I do something,"— the object
appears as something which is other than the subject;
it is trans-subjective—i.e. beyond the subject. In
the other form, "I feel somehow," the subject directs
his thought toward himself as feeling; that is, he makes
himself the object. We do this whenever we give attention to ourselves, as when we say, "I know myself," or
"I feel disturbed." There are other experiences which
appear to be like these last named, though they really
differ from them. Examples are at hand in experiences
that may be stated thus: "I know what he thinks of it,"
and "I can picture the river-bank." In the first of these
just given, the subject has an idea, or a thought, for his
object; in the second, his object is a mental image.

One may also have experiences that would be expressed in these words: "I am glad," and "I saw a beautiful house." The "gladness" has its existence in you; you are the subject of the "gladness." The "beauty" is of the "house"; the "house" is the subject of the "beauty." The subject is that to which the state or quality pertains.

Summary: The subject is the self who experiences; or that to which a state or quality pertains. The object is that in relation with which the subject has an experience, or that toward which the subject directs his thought. The subject may make himself, an idea, or a mental image, his object.

§ 4. Subjective and Objective. — Our personal experiences belong peculiarly to ourselves. You cannot have my headache. You determine to write a letter; that experience, as a purpose, is yours. Another may have a similar experience, but he cannot have yours. These experiences are in a sense "private property." Looked at thus, experiences are Subjective; they are in the subject

and of the subject. In contrast with this "private property" in experience, we have "public property" for experience. The world of nature, the events of history, literary remains, and current happenings, are objects for all of us just as they are for each of us. Some of us may get more from them than others, but they are there for all of us. What is "public property" for experience is said to be Objective. You picture the face of an absent friend by visual memory; or you recall a symphony which you have heard, by auditory memory. These mental images are subjective in so far as they are in you and of you; but, inasmuch as you direct your thought to them, they are at the same time objective. What is in experience is subjective; what is for experience, is objective.

§ 5. The Problem in Philosophy. — The purpose of any particular line of study determines the point of view, the choice of material, and the method. The geographer and the geologist both study the earth; but they have different ends in view and, as a consequence, they differ in their selection of material. We have seen that Psychology and Philosophy differ in their study of consciousness; this difference arises from the difference in the tasks they set for themselves. The important question for us at this point in our study is, What is the task which is undertaken by Philosophy? All exact knowledge is attained by critical and systematic study of what comes to us in our experiences; and we have concluded that Philosophy studies experience, as experience. Our present question, then, is, What does Philosophy seek in its study of experience?

We say that the world as a whole is real and that the persons and things which are in it are real; but what is it to be real? Shall we say that what we can measure and weigh and what we can see and touch is real, and that what we cannot see and touch is not real? Is reality

always "lumpish," or is there reality which does not occupy space? If ideas are as real as houses and trees, have we two kinds of reality, one that fills space and another that does not? If so, what is the relative value for us of that which fills space and that which does not? Which is most important for us, that we accumulate the things which can be measured and weighed or that we develop our minds and have right purposes? Or we may ask, Is the world which we know the real world, or is it only a shadow or sign of the real world? These questions are not prompted by idle curiosity; they are asked because we wish to know just what we are and what those actualities are with which we are dealing day by day. It is important also that we attain to positive and correct answers to these inquiries. In fact, we have, each of us, already answered them, in part at least. We have certain notions respecting things and man, certain ideas as to their make-up and what they are for. Are these notions valid? Do they accord with reality? This is not a mere debate about words. Our belief as to what we are and as to what the world of things and other persons is, affects our thoughts and feelings and purposes. It determines the value we give to things. If to be real is to fill space, and if what does not fill space is not real, we will naturally put highest value on what is material; and our ability to think will be valued only because it is a means for acquiring things. Our conception of what man is and of what he is for will certainly influence our thinking and our doing; it will determine our attitude toward the questions of the day. We have questionings and fears, longings and hopes. These doubts, aspirations, and assurances have their origin and their support in our notions of the world and ourselves, in our conception of what is essential to the reality of man and things. We repeat that most,

if not all, of us have arrived at some kind of an answer to these questions; but our conclusions are of doubtful worth, because they are not the result of critical and systematic study. Philosophy seeks a positive and valid answer to these inquiries. Philosophers wish to know the nature of the reality in us and in things and the true significance of life for us. In short, Philosophy seeks to give an exact and systematic account of the essential nature of all that is.

§ 6. Philosophic Material. — We have concluded that Philosophy is the reasoned consideration of experience. From this it naturally follows that all particulars of experience are material for Philosophy. Each of us has such material in his own consciousness - in his feelings and instincts, in his thought of himself and the universe, in all that he has felt and purposed. But we are not confined to our private experiences; we may know the experience of others. Men are constantly giving expression to their experience. We hear it in conversation, we find it in their writings, it is embodied in their art. Literature, art, and religious ceremonies and beliefs are expressions of the conception of the universe and man and life had by authors, artists, and worshipers; and they are therewith expressions of what these men themselves were. In fact, all the activities of men are expressions of experience; and the products of these activities record the thoughts and longings and hopes of men; and so far as they do this they are material for Philosophy. Sometimes men are subject to illusions, and many of their conceptions are doubtless incorrect, and the best are incomplete; but these illusions and misconceptions are experience facts and are, therefore, philosophic material. Erroneous views and gross superstitions are oftentimes significant material for the philosopher. The tested and assured findings of scientific investigation are of great value. So, too, are the views which have been held by men who have studied the world and man most critically and who have greatly affected the thought of their time. Of still greater value are the reasonings and teachings of those who have influenced thought long after their own age. All this material comes of commerce with the world of persons, things, and events, and of thought respecting the world and reflection upon it and ourselves. We conclude, then, that the universe, what it contains, and all ideas respecting the universe, its events, and ourselves are material for Philosophy.

But, inasmuch as Philosophy would give an exact account of experience, the philosopher may not assign like value to all the items in this vast store of material. be exact, we must be critical; and, while all the material has some value, the particulars are of unequal worth. The peach tree bearing fruit yields fuller information as to what a peach tree is than the young tree just appearing aboveground. The thoughts and purposes of primitive man, as evidenced by the way he lived and what he did, are of value for the study of man; but the activities of civilized man present a completer and, therefore, a more valuable embodiment of human experience. What is important for the understanding of one age, and therefore important for a true understanding of man, may be of little importance if we are studying man in another age. It is also possible that what at first may seem to be of great value, will be found to be relatively valueless; and that what is apparently trivial may prove to have great significance. We must be careful in our evaluation of material.

Our account is to be systematic, otherwise it will not be exact. This will require that the particulars of the material shall be carefully classified, and that the items shall be set in an orderly relation to each other and to the whole. If we would know the significance of any organ of the body, we must study it in its relation to the other organs and to the body as a whole. To get a true conception of the meaning of a finger, it must be studied in its relation to the other fingers, to the hand, and to the arm. In fact, we need to discern its part in making the hand an efficient instrument and in conserving life. It is not sufficient that the conclusions of philosophic study shall be organized into a system; but it is antecedently necessary that our material shall be organized, each part being set in right relation to the others and to the whole; for only thus can we perceive what each item signifies.

Summary: The task of Philosophy is to discover the essential nature of all that is and to give a systematic statement of its findings. In order to this, it is required to furnish a systematic and reasoned justification of its findings and of the course of thought by which it attains these conclusions. All human experience is philosophic material. The critical use of this material calls for a judicious classification and evaluation of the material, and for the careful and exact relating of the various particulars to each other and to the whole. The real significance of an experiential fact can only be discovered when it is studied in its relations.

PART II

HISTORICAL INTRODUCTION

CHAPTER II

PREFATORY

- § 7. Purpose of this Historical Sketch. Our purpose in this sketch is to take advantage of the work done by those who have preceded us. Much has been accomplished by men who have thought upon the great questions discussed in Philosophy — the universe, whence it came, and what it is; man, his origin, nature, and destiny. The records which preserve their discussions constitute a great storehouse of philosophic material; but what they hand down to us is of such a character that it can only be rightly valued and efficiently used if we shall trace its development. In following the course of its development, certain facts will become evident. We shall see that upon the whole there has been steady advance. At times, progress will appear to halt; at some points, it may even look as though the movement were backward. But such halting and such backward movement are more apparent than real, and are only temporary. We shall discover that some questions have been settled. We shall also perceive that there are three great topics for thought:-
- (1) The Object, *i.e.* the world of nature and history, of persons and things and events all that is not the Self;

- (2) The Subject who is conscious of the object and of Self;
- (3) The Religious Consciousness with what it signifies. These are not always, all of them, distinctly treated in the Philosophy of every people and period; but philosophic thought and, in fact, the thought of all men is constantly related, directly or indirectly, to these topics. We shall likewise learn how Philosophy has defined itself, its problem, and its province; and we can note incidentally how it has approached its task and what are some of its conclusions.

The limitations of this Introduction will require that we limit our sketch. We shall, therefore, confine it to what will best serve to introduce us to a study of the main problems of Philosophy. The observance of this limitation will result in the omission of much that is of itself interesting and valuable. For example, the questions immediately related to the religious consciousness will only be referred to in passing, except in the instance of the Medieval Philosophy. The study of the religious consciousness, though of the highest importance, must otherwise be left until later.

- § 8. General Divisions. The most general classification of philosophic thought is into Oriental and Occidental (or Western).
- 1. Oriental Philosophy. The Oriental peoples Babylonians, Hebrews, Egyptians, Persians, and others gave the religious feelings dominance in reflection. This is true also of the Hindu philosophies, which survive even to-day. The earlier Chinese thought was distinctly religious; but under the influence of Confucius it became ethical rather than religious. Because of the dominance of the religious feelings and purpose, some would regard the thought under consideration as not in any true sense

philosophic. But its literature evidences a thoughtful consideration of the origin, nature, and destiny of the universe and man; and this is philosophizing thought even though it lacks cogency and system. As familiar instances, we may name the Brahmanic, Buddhistic, Zoroastrian, and Hebrew literature. The philosophic character of the thought of portions of the Bible is evident. As examples we may refer to the Books of Job and Ecclesiastes, and to some of the Psalms.

- 2. The Poetic Period of Western Philosophy. The early Philosophy which is of special value to us is the Western. In its earliest, or Poetic, period it corresponds to the Oriental in the prominence which it gives to the religious conceptions and in its not being distinctively systematic. In the writings of Homer, Hesiod, and Pherecydes, we find the answers of the thought of their day to the questions raised by reflection upon man's experiences. They furnish accounts of the origin of the gods, and attempt is made to explain the origin of the cosmos (or orderly universe).
- 3. Western Philosophy Proper. About 600 B.C. Western reflective thought became somewhat critical and systematic. It is this more critical and systematic reflection to which the term "Philosophy" is usually applied; and it is this Philosophy whose development we purpose to sketch. For historical purposes it is convenient to consider it under three divisions: Ancient, or Greek, Philosophy (from 600 B.C. to 325 A.D.); Medieval (150 A.D. to 1625 A.D.); Modern (1625 A.D. to the present). These dates are merely approximate. It will be seen that Ancient and Medieval Philosophy overlap in time. This is because the classification is not fundamentally chronological, but is determined by affinities of thought.

DIVISION A: ANCIENT PHILOSOPHY

CHAPTER III

GENERAL VIEW; PRE-SOCRATIC PHILOSOPHY

- § 9. Ancient Philosophy. 1. General View. The Western Philosophy had its birth and early fostering in Greece; in consequence of this, it is frequently spoken of as Greek Philosophy. It differs from Oriental Philosophy and the higher thought of the Poetic Period in its subordinating the religious element to the intellective. But it did not suppress the religious instinct; on the contrary, the religious feeling had so large a place in the Greek consciousness that it indirectly prevented the limiting of reflective thought to the consideration of the material world and present-day interests. With this exception, Philosophy had free range, subject only to the demand of the Western mind that its procedure should be rational.
- 2. Divisions. Ancient Philosophy will be considered under the following heads: I. Pre-Socratic Philosophy (600–400 B.C.); II. Socratic Philosophy (440–300 B.C.); III. Græco-Roman Philosophy (380 B.C.–300 A.D.); IV. Neo-Platonic Philosophy (40 A.D.–325). The dates given are approximate and indicate the periods of effective activity. Thus, the Neo-Platonic Philosophy was taught as late as 529 A.D.; but it ceased to be effectively active about 325 A.D., hence the latter date is given.

3. Schools in Philosophy. — It must not be assumed that

all the thinkers of any one of these great divisions held the same views or were in exact agreement as to what are the important questions. The philosophers of each of these divisions fall into groups, or schools. These schools are made up of thinkers who consider the same questions and whose views have certain fundamental likenesses. Hence when we speak of a school in Philosophy, the term "school" does not signify an institution of learning, but a group of thinkers who agree as to what are the important questions and whose fundamental doctrines are somewhat alike.

§ 10. The Pre-Socratic Philosophy. — General View. — The Pre-Socratic schools, given in the order of their development, are the Milesian or Early Ionian, the Pythagorean, the Eleatic, the Later Ionian, the Atomists, and the Sophists. The earlier schools studied the external world, - the object of experiences, the first-named of the three great topics of thought (§ 7); in other words, this Philosophy was in the main objective. The Sophists turned attention toward the subject who has experience of the world, and Philosophy became somewhat subjective. The questions to which these early philosophers gave consideration are the germinal questions of reflective thought. Their ideas may seem to us to be very crude; nevertheless these thinkers were men of ability and they did effective pioneer work. They defined, in general outline, the task of Philosophy; and they developed opposing attitudes toward the universe and life, attitudes which have been represented in every age since and which must be recognized if we would understand the Philosophy of to-day. To note these great questions and to follow the development of these attitudes will lend interest and give value to our further study. Their first inquiry was as to what the world is made of; and, in their endeavor to answer this question, they give us their theory of the cosmos, or orderly world, *i.e.* their Cosmology.

- 11. Particular Doctrines. 1. Change and Permanence. — This world seems to us to be stable, yet changeful; and so it appeared to these first philosophers, and they thought of it as made out of a changeful single sub-That the world is of one substance is a first assumption of the Milesians. In selecting a substance which would answer to the requirements, they naturally sought a substance that would change readily. Thales, the pioneer, chose water; and he thought of air and mist as water rarefied, and earth and rock as water condensed. Anaximenes selected air; and Anaximander chose the Unlimited or Indeterminate, for it might become anything. But the Eleatics insisted that what is real cannot change; and, believing that what they perceived was real, they declared, "All is; there is no becoming; change is an illusion." Heracleitus — of the Later Ionians affirmed in opposition to the Eleatics, that "all is becoming"; but inconsistently with this he believed that reason — the order of the world — is unchangeable. The Sophists followed Heracleitus in declaring that "all is becoming." Empedocles and Anaxagoras (of the Later Ionians) and the Atomists held to the changeability of all else than the elements of which the world is composed; but these unchangeable elements may change their place, and the world which we know comes of the changeful commingling of the moving elements.
- 2. Hylozoism. The Milesians assumed that matter, since it moves, is alive. In this they were followed by most, if not all, the Pre-Socratics down to the time of Empedocles. This is known as the doctrine of Hylozoism. The important fact for us is that they were thinking about the nature of reality.

- 3. Monism; Pluralism; Dualism. We have indicated that the Milesians assumed that there is one world-stuff, and we have noted what some of them believed this worldsubstance to be. Of the Eleatics, Parmenides insisted that this substance is Being and that this Being is both matter and thought; Xenophanes said that the world-God is this substance, and in this he identified God with the world; Heracleitus - a Later Ionian - declared fire to be the world-stuff. Here we have the doctrine that all the phenomena of the universe are derivable from a single principle, or source; this doctrine is known as Monism. Against the view just stated, Empedocles asserted that the world-substance is many, not one. He said that there are four elemental substances - earth, air, fire, water. Anaxagoras insisted that the elemental substances are infinite in number; and the Atomists taught that the world-substance is an infinite number of indivisible, unchangeable, physical points, which are called atoms because of their indivisibility. Here we have the doctrine that the universe comes of a plurality of sources, that it is composed of many ultimate reals. This doctrine is known as Pluralism. Some of the Pythagoreans developed a doctrine of Dualism, i.e. they would derive the world from two principles. This is a special form of Pluralism. These doctrines - Monism, Pluralism, and Dualism - have all been held in varying forms down to the present. We call attention to the fact that this philosophy was questioning as to the nature of the reality with which men are in constant commerce.
- 4. Reality, and the One and the Many. The Milesians and the early Pythagoreans accepted the reality of the one world-substance and the many objects in the world. The Eleatics denied the reality of the many and insisted that reality is simple, it is all-alike oneness. The Later

Ionians (except Heracleitus) and the Atomists accepted the reality of the many and denied the oneness of reality. This question persists in Philosophy, but with great changes of reference and import.

- 5. Cause. Down to the time of the development of Pluralism, those who accepted the fact of change, accepted it without asking how it originated; their Hylozoism led them to think of change as in the nature of the world-substance. But it was different with the Pluralists. Their elements were considered as unchangeable; and, as a consequence, they were forced to ask how change of place could occur in a world of changeless elements. Out of this inquiry arose the problem of Cause. Empedocles held that the elements were commingled through the action of some force external to them; Anaxagoras taught that reason, the most mobile of the elements, is supreme in power and determines the motions of the elements; the Atomists insisted that the elements combine by necessity quite apart from any agency.
- 6. Mechanism and Teleology. Empedocles and the Atomists conceived the universe to be constituted solely by matter in motion. With Empedocles, change is change of place, not change of quality; and the elements of the Atomists do not differ in quality. In a word, they held that all changes in the universe are due to matter in motion, and that all differences in objects are really differences of quantity, not differences of quality. These differences in quantity arise through a commingling of the elements, and this commingling is determined by external compulsion or the nature of the elements. There is no place here for the free purposing and directing of changes by thought; all moves machine-like. This is known as the doctrine of Mechanism. Anaxagoras held a doctrine which differs radically from that just described; his con-

ception of it was, to be sure, crude. He assumed an element, the reason, which he conceived as differing in quality from the other elements. According to him, this reason, or Nous, knows all things, and is free in action and supreme in power. He insisted that the Nous determines the commingling of the elements, and that the Nous determines it toward a chosen end. Here we have the doctrine that all change has respect to an end; and this is known as the Teleological conception of the universe. Teleology and Mechanism are distinctly opposed to each other as theories of the cosmos; both views have persisted through varying statements down to the present. He introduced the distinction between mind and matter.

- 7. Knowledge. Doubt as to whether our knowledge is valid appears to have originated with the Eleatics. Parmenides, an Eleatic, declared that the senses deceive us, but that truth may be attained by thinking. A classic instance of such deception is the straight stick appearing to be broken when it is thrust into water. Anaxagoras averred that "all our ideas are derived solely from sensations"; and, in this statement, due emphasis is to be given the word "solely." This doctrine is known as Sensationalism; we shall have occasion to consider it more particularly later in our study. Sensationalism followed upon the distrust of knowledge and culminated in the teachings of the Sophists. They taught, —
- (I) That knowledge is only sense-perception; it consists of ideas aroused within us by objects from without. The subject perceives merely his idea of the object, not the object itself; hence perception gives no knowledge of the object.
- (2) That all is becoming; therefore objects only become for the person perceiving i.e. the percipient, and they become in the moment in which they are perceived.

- (3) That sense-impressions are unreliable. This they held was shown in the fact that different percipients have differing experiences of the same object.
- (4) That particular sensations are the only reality; hence we only know our ideas of particular objects.
- (5) That it follows from the above that knowledge is purely personal (i.e. valid only for the individual subject), and is determined by education and intellectual habitude and condition. "As each thing appears to me, it is to me; as it appears to you, it is to you." Any statement and its contradictory are both true, if they each appear to different persons to be true. There is no reality for common, or public, knowledge; this would follow from their claim that the object becomes only for the one subject. And there is no knowledge which is valid for all subjects; this follows from the doctrine that all knowledge is purely personal, or individual.

Under Gorgias, this teaching developed into absolute scepticism. He held as follows: (1) Nothing exists; (2) If anything could exist, it could not be known; (3) If we could know, we could not communicate our knowledge. His argument ran thus: That which is thought is something else than that which is, or they could not be distinguished; hence we do not know the thing, we only know our thought of it. We cannot communicate; for every one has his own ideas, and there is no guarantee of mutual understanding.

We call special attention to particulars of this teaching. The first is, that the immediate object of knowledge is not the object itself, but the subject's idea of the object. We shall have occasion to deal with this later; for it was scarcely challenged until late in the Modern age of Philosophy. The other is, that there is no common knowledge.

Democritus, the ablest of the Atomists, a man of com-

prehensive learning and unusual acumen, was a contemporary of Protagoras, the ablest of the Sophists, and of Socrates and Plato. He revolted from the scepticism which was the logical consequence of the Sophist sensationalism; and, in his revolt, he developed a dualistic doctrine of knowledge. His doctrine will be more fully stated in our study of Aristotle.

§ 12. Conclusion. — Philosophy first studied the object and sought to know what the world is made of; in other words, it questioned as to the Being of the world. The pursuit of this inquiry led the later Pre-Socratics to ask as to how we know, what we know, and whether our knowledge is valid. The problem of Philosophy thus takes two forms: it is the question of the Being of all-thatis; and the question of Knowing. Corresponding to these two forms of the problem are the two great divisions of Philosophy: The theory of Knowing, or Epistemology; and the theory of Being, or Ontology. These are not, however, wholly separable questions; each involves the other. One cannot treat Ontology apart from his theory of Knowing; nor Epistemology apart from his theory of Being. The question of Reality is raised by these thinkers. They ask, Is the world that we know the real world? and, What is the real world? The question of Reality gives heart and life to Metaphysics — the theory of the essential nature of Being. The ultimate questions of both Epistemology and Ontology fall to Metaphysics. These ancient philosophers studied their experience in order that they might find out what experience had to say respecting the world and man. That is what Philosophy is doing to-day.

CHAPTER IV

THE SOCRATIC PHILOSOPHY

THE Socratic Philosophy is the product of three of the world's greatest thinkers - Socrates, Plato, and Aristotle. § 13. Socrates. — I. His Purpose. — Socrates did not develop a system; he sought practical ends, not the construction of a theory. He was not interested in Philosophy, as such. His sole interest was in the discovery of the principles of right conduct; in other words, his interests were exclusively ethical. But he believed that true knowledge is the sole basis of upright conduct. He held that only he who has true knowledge will live a life of moral goodness; and that he who has valid knowledge will live such a life, i.e. will be virtuous. Therefore, since knowledge is virtue, and morality is not possible without valid knowledge, Socrates believed that valid knowledge is of fundamental importance. He also believed that by criticism and self-examination valid knowledge may be attained. His ethical interest caused him to be dissatisfied with the sceptical conclusions of the Sophists, although he was himself of that school; and his ethical impulse and his conception of the ground of morality led him to seek ethical knowledge which is not merely relative, not merely valid for the individual, but valid for all.

2. Socrates and the Sophists Contrasted. — The Sophists had been led to doubt the validity of knowledge by reason of the emphasis which they laid upon the differences in

the judgments of men respecting persons and things and events; Socrates called attention to the fact that there is a general agreement among men touching ethical questions. The Sophists based their views on the contradictions in the experiences of individuals; Socrates insisted that the truth is not to be found in the opinions of the inconstant individual, but in the experience of all men taken together. The Sophist, Protagoras, had said, "Man is the measure of all things"; and he meant by this that truth is merely relative to the individual, and that contradictory opinions held by different individuals are true because each is true for the subject holding it. Socrates would also say, "Man is the measure of all things"; but he would mean by "man," not the individual man, but man in general, universal man, humanity. He insisted that in the opinions of all men taken together we find a rational agreement, an agreement which proves that there is ethical knowledge which is universally valid.

3. His Method. — He proceeded by asking questions, as if he were himself seeking knowledge; and he would ask for the exact definition of words. Thus, if the conversation should touch upon good citizenship, he would ask those with whom he was conversing to tell what they meant by "the good citizen." He might follow this by asking that they apply their definition to particular cases, or he might pass from this to the question of "goodness." He would in this way approach the definition of the various ethical terms—as "piety," "virtue," "patriotism," etc.; and it would be found that there was substantial agreement, such agreement as made it evident that ethical judgment is not merely relative to the individual, but that the ethical experience of all subjects has a common content. It is also seen that there is general agreement as to attitude toward ethical questions, i.e. that men have

common ethical attitudes and opinions. This is shown in the very fact that they use common terms — as "good," "bad," "right," "wrong" — to express their ethical experiences. These common ethical opinions and terms are concepts; and one great service that Socrates rendered to reflective thought was his demonstration of the value of the concept.

4. The Concept Illustrated. - In emphasizing the difference in the knowledge of individuals, the Sophists had sense-perception in mind. Socrates searches for the common objective element and finds it in the concept. The significance of the concept and its place in cognition, or the act of knowing, will be more fully treated later; at this point, we will merely illustrate the concept, believing that such illustration will make for a readier understanding of the course of Philosophy from this time on. We will take "chair" for an example of a concept. There are objects which differ in particulars, but which are nevertheless alike in that they all have their parts so related that any one of them will serve as a seat, and they all have a part against which the sitter may lean back. Despite the individual differences of these objects, which may be many and marked, they are so far similar that they express a common idea - the idea of something to sit on. They have a common content for thought. Thus we see that "sufficient similarity" between objects gives them a common content for thought, so that in knowing one of the particular objects we know all that have this common content. We perceive qualities and relations which are common to a number of objects; and, assigning a name to this common content, we give our experience a fixed form. It should be noted that the term "concept" may be used of the idea which is common to the class, or group, or of the word by which we express this idea in speech.

The former may be indicated by the term "idea-concept," the latter by the term "word-concept." In contrast with the percept in sense-perception, the concept is the universal which includes what is common to all the percepts which embody this common idea. Thus, the concept "book" is the universal which includes what is common to all the particular objects that embody this idea.

Summary: Socrates was unsystematic; but his great ability and enthusiasm and the directness of his practicality led him to a choice of method and an attainment of results which have been of great worth to Philosophy. It was his purpose to lead men to recognize the validity of ethical judgments. In accomplishing this he opposed the scepticism of the Sophists, and effectively criticised their doctrine that knowledge is purely relative to the individual; and he called attention to the value of the concept for thought and to the fact of our common humanity and common ethical experience. He insisted that we may have absolute knowledge and arrive at universal truth.

§ 14. Plato. — I. General View. — Of Plato's long life of eighty years, sixty years were given to Philosophy. He agreed with Heracleitus that the world about us is a world of Becoming, and with the Eleatics that the world of Reality is a world of eternal, unchangeable Oneness. He believed that we may know Reality; but along with this, he accepted the doctrine of the Sophists, and of Socrates, that sense-perception only yields relative truth. With the Pythagoreans, he rejected the Eleatic doctrine of the all-alikeness, or homogeneity, of the One Reality, and insisted that the eternal unchangeable Reality is Many in One, i.e. that the ultimate is complex unity. From Socrates he received the notion of the concept. It may be justly asserted that this principle of thought, the concept, ordered his Philosophy.

- 2. General Estimate. It must not be assumed that Plato merely collected and adopted the thoughts of others. He was not an eclectic; he was an independent thinker and a man of giant intellect. Plato gave new meaning and added value to every view in which he appears to be in agreement with others. Thus, while he remained true to his master, Socrates, he did not limit his interest to ethical questions; he took the broader, philosophic view. It was this broader interest and outlook which led him to use the conceptual principle in the philosophic study of the world at large; and in his application of this principle he utilized it in considering questions of Knowledge and Reality. Our limited sketch cannot give an adequate presentation of his system. Extended study is necessary if one would duly appreciate its comprehensiveness, its coherence, and its great advance beyond the philosophic thought which preceded him. We select for special mention here one notable contribution of his to Western Philosophy, — the conception of Reality as immaterial.
- 3. His Doctrine of Ideas. Plato's doctrine of reality can scarcely be understood or duly appreciated apart from his doctrine of Ideas. He developed this doctrine from the Socratic notion of the concept. He was many years perfecting his view of the Idea and at the last the Platonic Idea differed greatly from the Socratic concept. With Socrates the concept is a construct of thought and is a complex of the qualities which are common to a number of objects; and it is at the same time the thought-content which is common to the opinions of men. In other words, with Socrates the concept is related in thought to percepts; i.e. it is logically related to objects. With Plato the Idea bears the same relation to any particular of which it is the Idea that the Idea of the sculptor bears to the completed statue. The statue comes to be, in order that the

sculptor's Idea may have embodiment. The Idea is before the statue, and it is the cause of the statue in this sense, that the statue comes to be because of the Idea. The statue is the means for realizing in marble what was first realized in the mind of the sculptor. The sculptor's Idea included the purpose to create the statue; and this purpose is said to be the teleological cause of the statue. The purpose of any action is known as the teleological cause of the action and of the result of the action. So Plato conceived the particulars of the physical world as means for the expression of the world-Idea, as so many partial embodiments of that Idea. The world-Idea was before they began to be, and they come to be because of it. The world-Idea is related teleologically to the particulars of the world. Each of these particulars is but an incomplete expression of the world-Idea; and, because of its incompleteness, it is not real. The Socratic concept is related logically to its particulars; the Platonic Idea is related teleologically to its particulars.

4. His Doctrine of Reality.—This world and the persons and things in it with which we have intercourse are real to us. We demand the real; we would not consent that life should be a pretence or that that with which we deal should be a mere seeming. We require that what is offered us for acceptance shall be a statement of reality before we accept it and undertake to act upon it. Philosophy raised the question as to what is real very early. It was involved in the discussions of the Eleatics. They held that the only reality is the Universal One, and that the many particulars, the individual persons and things, are not real. Plato stated the question in a way then quite new; but this statement so affected reflective thought that we must understand Plato here if we would understand the subsequent course of Philosophy. He asked,

Is Reality in the concept (or Universal) or in the senseobject (or Particular)? Stating it in terms of Plato's doctrine of Ideas, the question would be, Is the Idea or the perceived object real? For example, which is truly real, this desk at which I sit, or the universal "desk," the "desk" as Idea? Plato insisted that reality is in the "desk" Idea; the desk at which I sit is only an incomplete, an imperfect, representation of the real "desk." Because of its incompleteness and its being subject to change, it is not real; for with him reality is perfect, eternal, and unchanging, and the particular is imperfect, temporary, and in constant change. His doctrine of knowledge also led him to deny the reality of senseobjects. He believed that perception only gives us relative knowledge, not absolute knowledge or knowledge of reality. But sense-objects are, according to Plato, known by perception; hence the particulars thus known are not reality. On the other hand, Plato held that knowledge by concepts, or knowledge of Ideas, is absolute knowledge. From this, it would follow that reality is in the Universal, or Idea.

5. Dualism. — Plato agreed with the Eleatics in holding that the world of Reality is a world of unchanging Oneness. Despite this manifest monistic assumption, he developed a distinct Dualism. Plato's Ideas were the structural types of physical objects; that is, his world of Ideas was a world of norms, the Ideas being the norms of the particulars of the physical world. The Ideas are not mental constructs, they are independent of the subject; in other words, they are evidently objective, not subjective. In holding thus, Plato's system offers us two objective worlds — one the becoming, changeful world of physical objects; the other, the unchanging world of Ideas. These worlds are represented as explanatory of

each other; but Plato's system keeps them otherwise apart, they are not organically united. In this he is dualistic; and the recognition of this Platonic Dualism is a pre-requisite to the correct interpretation of Aristotle. This is Ontological Dualism, — a dualistic theory of Being. His system also presents a dualistic theory of Knowledge, *i.e.* an Epistemological Dualism. He separates apprehension through perception and apprehension through reason. According to Plato, perception only gives us relative knowledge, or opinion, whereas reason yields absolute knowledge.

6. Was Plato's World of Ideas Pluralistic? — His world of Reality appears to be constituted of many independent Ideas. But while he conceived the Ideas as independent of the subject, he did not think of them as wholly unrelated. The particulars of the physical world are related teleologically to the Ideas; and the Ideas themselves are related teleologically to the Idea of the Good. This Idea of the Good holds the primacy in his world of Reality; all the other Ideas are partial realizations of this primal Idea, they are that it may be realized. Hence Plato's world of Ideas is not a pluralistic world; its Reality is a unitary Reality, the plural Ideas being unified in their teleological relationship to the primal Idea of the Good. His was a thoroughgoing teleological conception of the universe.

Summary: Plato prepared Western thought to recognize immaterial Reality; previous to him Greek philosophy had assumed that Reality was material. In this he opened the way for a clearer distinction of mind and matter, although he himself did not definitely distinguish them. His system was for the time a strong defence of the validity of knowledge against the assaults of philosophical doubt. His adoption and advocacy of the teleological

doctrine — that the world as a whole and all particulars of it exist for some purpose — was of itself a great contribution to reflective thought. Much of his work was achieved in his treatment of questions which do not come within the province of this introduction. From the point of view of our present inquiry, his great work is found in the stage to which he developed thought, making it ready for Aristotle, and in the training of Aristotle for a still greater achievement than that effected by Plato himself.

§ 15. Aristotle. — 1. Introductory. — We preface our study of Aristotle with a consideration of the dualism which is implicate in the epistemology of Democritus and Theirs were the forms of philosophic thought which were most active when Aristotle began his studies, and they naturally affected his procedure and conclusions. (Democritus was a materialist and Plato was an immaterialist; but they agreed in holding that there are two kinds of knowledge - knowledge obtained through sense-experience and knowledge attained by reason.) Perceptual knowledge—that had through senseexperience - was said to be merely relative; rational knowledge was thought to be absolute. According to Democritus, perceptual knowledge is knowledge of mere appearances, or phenomena; according to Plato, it is opinion respecting what is an incomplete copy of reality.

Plato's dualism was involved in his separation of the world of Ideas—i.e. the world of reality—from the world of perceptions. This has been set forth in our study of Plato. Democritus grounded his belief in two kinds of knowledge upon a distinction in the properties of the atoms. He divided these properties into two classes, and these became known later as the primary and secondary properties of matter. In the first of these classes he placed form, size, inertia, density, and hardness; and he held

that these are properties of the atoms themselves; and, as he believed that the atoms are reality, they were, for him, properties of reality. It would follow then that we know reality in knowing these properties. He held further that these properties are known through reason, not through perception. In the second class of properties, he placed sound, color, taste, and smell; these are thought to exist only in the appearances and are perceived through the senses. From this we see how it was that Democritus and Plato were agreed in rejecting Sensationalism the doctrine that knowledge is constituted solely of senseelements - and in recognizing the activity of reason in cognition. The doctrine that the subject is rationally active in cognizing is known as Rationalism. Both these philosophers were rationalists, but they differed in their emphasis. Plato gave emphasis to the world of Ideas; Democritus, upon the whole, to the facts of sense-experience, or empirical facts as they are commonly called. Neither Democritus nor Plato could effect a union of the two worlds; their philosophy had in it an element of Dualism.

2. Aristotle's Attitude toward this Dualism. — Aristotle was convinced that his master, Plato, erred in not giving due value to empirical facts. Neither could he agree to the separation of the world of Ideas from the physical world. To separate them, as Plato did, would be to make knowledge of the world of nature impossible; and Plato himself taught that we know the physical world. To be sure our knowledge of it is not a knowledge of reality; but that is because what is known is not reality. Besides this, how could the world of nature be related to the world of Ideas if they were separate as Plato taught? Yet Plato asserted that they were related teleologically. Aristotle could not accept the materialism and the radical

mechanism of Democritus. Therefore he rejected the dualistic Philosophy of his time.

- 3. Doctrine of the Universal. Aristotle accepted the principle of the concept, or the universal; but he did not accept the Platonic relation of the universal and the particular. The difference between him and Plato may be stated thus: With Plato, the Idea, or the universal, is before the thing; with Aristotle, it is in the thing. For example, according to Plato, the ideas "man" and "dog" are, and the particular man and dog come to be as means for the expression of these Ideas. But this conception does not include a real linking of the Ideas and the objects; as to reality, they are apart and cannot be joined by this thought of them. Aristotle, on the other hand, holds that the universal "man" or "dog" is in the particular man or dog as the essence of the particular. The universal is reality; but it has no being apart from the particular; and the particular has its being through the universal which is in it, which is there as the essence of the particular. Thus, the universal "man" or "dog" has no reality apart from some particular man or dog. Thought of apart from any particular, it is a mere abstraction. the other hand, the particular man or dog is because of that in it which is the essence of every man and every dog. For Aristotle, the concrete particular thing is the real.
- 4. Principle of Development. The next question to be answered is, How is this universal, or essence of the particular, related to the changing particular? The answer is, The particular is the unfolding of the universal; that is, the particular is the universal in the developing expression of itself. An oak tree is an unfolding expression of its own essence, and this essence is the universal "oak." When we apply this interpretation of the uni-

versal to the world of nature, we get a very different conception of it from that which is presented in the Platonic system. Plato's Idea is unchangeable, or static; Aristotle's universal is active, or dynamic. As the universal is reality, reality is active being. We must not, however, overlook the fact that Aristotle's development differs from the modern conception of development; his is simply development within the particular, not a

development of new classes, or genera.

5. His Doctrine of Development is Teleological. — We have seen that Anaxagoras grasped the idea of teleology that changes in the universe are related to purpose and move toward the fulfilment of purpose; but he limited his application of this principle to the astronomical world. Plato needed it that he might effect a relation between his Ideas and the physical world. It has a place in Aristotle's fundamental conception of reality. According to him, (there is in every particular of the world of nature an essence which is unfolding into perceptible expression; i.e. every particular is matter to which form is being given. He thus distinguishes two elements in the particular: Matter and Form. Matter, apart from Form, would be undetermined, would have no character. Form is the principle which gives character to the Matter of a particular. The Matter of an oak, conceived apart from the Form, is a potential oak; the Form is that by means of which the potential oak becomes actualized. The body of each of us is such a real particular; and its form is determined from within by its essence. In this relation, he conceived of the essence as active Form giving its own expression to Matter.) From this it follows that all such activity is toward the fulfilment of a purpose, viz. the expression of the essence. The ideal end and the activity are within the particular; that is, they are immanent, not external. Aristotle's concept, or Idea, or universal, is being which is immanently and teleologically active.

- 6. A Dualistic Remainder. Aristotle himself did not succeed in avoiding dualism. We note one instance of his dualistic thought. What was said above about the immanent teleological unfolding of the universal into the particular seems clear and evident when we study the activity of nature and attend only to the individual object. But when Aristotle gave his attention to the activity of man in the shaping of material, -e.g. that of a carpenter making a box, — he felt that he was forced to seek the end and the activity outside that which is forming. Some changes do not appear to be effected immanently; and when we relate particulars to each other, their related changes appear to be effected externally and mechanically. He failed to include these experiences in his teleology. At this point he accepts that change may be brought about by action from without, and he conceives particulars to be externally related to one another. He thus holds two opposed conceptions: Mechanism and Teleology.
- 7. Logical Doctrine. We desire that our conclusions about things and events shall be dependable. It is but natural that men should feel that they must have assurance that their knowledge of things and events is valid. If our judgments concerning the affairs and objects of life in which we are interested and with which we have to do are not valid, we are in a sad case. Sometimes the question takes this form: How may we reason convincingly, so that the reasonable man will accept our conclusions? The Sophists had laid down some rules for convincing thought; but Aristotle was the first to make an extended and thoroughgoing investigation of the forms of valid thinking. His work was so comprehensive and was so

well done that little occasion has arisen for making material change in the principles of Deductive Logic as stated by him. He agreed with Plato that there is one all-inclusive cause for all that is and all that occurs. He was an accomplished scientist; and, as a scientist, he was wont to seek one general cause for all similar physical events. In other words, he had learned that particular events are individual instances of a general process. This is a common-place now in science, and gravitation is a notable instance of such a general process. Believing as he did, it was but natural that Aristotle should assume this to be true of the process of thinking and that he should endeavor to discover the general laws and forms of valid thought. His search for these laws and forms was the origin of the science of Logic.

For our inquiry it will only be necessary that we take note of three particulars of his logical doctrine. First, he laid hold of a truth which has been too often overlooked; A complete thought is always a conclusion respecting the object of thought. It is not a mere name-idea, as the name of a thing or a quality; it is a judgment. To state it otherwise, the unit of thought is a judgment respecting some object; in the speech of the Plain Man, a complete thought is an opinion about some person, thing, or event. An illustration will help us to understand the second particular to which we call attention. Passing along a strange road, you see a building and you say, "That is a schoolhouse." You arrived at this conclusion in this way: You have a general idea of the appearance of a schoolhouse and its grounds; you see this particular building and its grounds; you compare the general idea and this particular perception, or idea; and you draw your conclusion. Here we have three judgments: one general judgment (the general appearance of a schoolhouse), a singular judgment (the appearance of this building), and the conclusion. Here is the foundation of his doctrine of the syllogism. The third characteristic of his logical doctrine comes of the fact that question may be raised as to the truth of either of the first two judgments, or propositions. It is evident that if we undertake to establish the premises from which our conclusion is drawn, we must seek yet more general premises and the truth of these may be questioned. From this it follows that, if our reasoning shall be valid, there must be back of all thinking some truths which are not dependent upon proof for their validity, truths which are self-evident. Aristotle insisted that there are such truths; e.g. a thing cannot be both itself and not-itself.

8. Doctrine of Man. — Aristotle taught that man is body, soul, and Nous (or intelligence). The soul and the Nous are immaterial. According to him, all organisms have souls; plants have nutritive souls, animals sensitive souls, and man has a rational soul. It is the Nous, or intelligence, which distinguishes man from other organisms, as to constitution. In the latest form of his teaching, the Nous has no bodily organ; it enters man from without. Man thus becomes a triple real — a real as to the body, the soul, and the Nous.

Summary: Our study of Aristotle has barely alluded to a few particulars of the thought of this wonderful genius, the father of Logic, one of the greatest scientists, and probably the greatest of philosophers. He was a Monist in purpose, but his system has in it an element of dualism. He advanced far beyond his predecessors in his apprehension of the significance of the concept and in relating the concept to the individual object. At this point, he overcomes the dualism of Democritus and Plato. The universal, or concept, is seen to be the essence of the partic-

ular, or percept. There is no particular apart from the universal, and no concrete universal apart from the particular. Reality is in the particular. Aristotle believed that we know reality in knowing the object. He perceived that the unit of thought is a judgment, he discovered the fundamental forms of valid thinking, and he averred that some truths are self-evident. His conception of reality as dynamic, not static, was of itself a valuable contribution to Philosophy. His conception of development was, indeed, limited to development within the individual, but it was a distinct advance beyond the Platonic thought. He was dualistic in that he believed that changes which appear to be mechanical — as the movement of a ball when it is struck - are wholly apart from, and fundamentally different from, developmental changes - such as occur in the growth of a plant.

§ 16. Teleology in the Socratic Period. - A clear understanding of the significance of teleology is so essential that we give a further illustration and description of it. Your friend goes into the country to visit his brother. Your friend's movements are undertaken for a purpose, - visiting his brother, - and they are determined with a view to the attainment of that purpose. His action is teleological, because it is related to a purpose, or end. Teleology is the theory that the world and its changes are purposeful; this theory holds that they - the world and its changes - exist for a purpose. The purpose is usually spoken of as the end. In ordinary speech, the word "end" signifies a termination; but it does not necessarily mean a terminus when used teleologically. In fact, in the teleological theory of the universe as it is generally held, "end" does not signify the terminus of activity. An illustration will make its meaning clear. You see men and materials gathered at the foot of the rapids and some

work begun. Upon inquiry, you learn that a dam is to be built. Now, the completed dam is not the end, or purpose, of these changes, although the building of the dam is purposed. The end of this activity is the continued utilization of the water-power. The teleological end of a series of changes is that result which is sought through the changes, and the end may be something which is not thought of as terminating.

The Socratic philosophers had a teleological conception of the universe. Socrates believed that the world was arranged with a view to man's advancement. that the changing world is in order that the Idea of Goodness may have expression. It will be necessary to revert to Aristotle's doctrine of the Form if we would understand what he conceived to be the end of the universe and its changes. He conceived the reality which is the essence of any particular as immanently active, somewhat as the Plain Man thinks of the life of the plant as active within the plant. He likewise held that in its activity, this essence gives form and motion to matter; and he also conceived this activity as developmental, as giving gradual expression to the nature of the essence. He called this reality, this essence, Form. But his conception of Form required a prime mover to initiate the world-changes; and this prime mover must not be dependent upon matter, as is the form of every particular of the universe; it must be a perfect universal. Aristotle spoke of this prime mover, the perfect reality, as pure Form; it is his basal conception of God. Aristotle was the first philosophical monotheist. For him, the end of the universe is the expression of the pure Form, the perfect universal reality which gives reality to all that is. God is this pure Form, the perfect Being; and the end of the Cosmos is the expression of God's thought and blessedness.

CHAPTER V

GRÆCO-ROMAN PHILOSOPHY; NEO-PLATONIC PHILOSOPHY

- § 17. General View of the Græco-Roman Philosophy. — The interests of this Philosophy were specifically ethical. Distrust of the prevailing religious thought had developed, and an effort was made to substitute individual morality for religion. In connection with the discussion incident to this attempt, and through the persistence of previous philosophic questionings, inquiry was made as to the tests or criteria of truth, the activity and passivity of the mind in cognition, the validity of knowledge, the idea of cause, and the teleological conception of the world. It was held by many that we have ideas previous to experience. This is the doctrine of innate ideas; it comes into evidence from this time on. This was a period of marked advance in the sciences. Archimedes, Aristarchus, - who anticipated Copernicus, - and Euclid, the geometer and physicist, had part in this movement. The sciences were cultivated apart from philosophical system; but there was no suggestion that Science and Philosophy differ in purpose and in field of thought. This Philosophy is represented in the following schools: Stoics, Epicureans, Sceptics (or Agnostics), and Eclectics.
- § 18. Doctrines of the Græco-Roman Schools.— I. Reality. Plato first introduced the idea of immaterial reality into European thought; with Aristotle this reality became virtually spiritual. But it was a difficult con-

ception for the West. The Stoics and Epicureans insisted that only the material is real; and the Stoics went so far as to declare that qualities, relations, and feelings are material. Despite the work of the Socratics, the prevailing doctrine of reality was materialistic down to the rise of Neo-Platonism. According to the Stoics, ultimate reality is one; the Epicureans were Atomists, and as a consequence, Pluralists. The Stoics held that the one reality is subject to changes of quality; the atoms of the Epicureans are unchangeable.

- 2. Cognition. The Stoics taught that the mind is active in cognition; it assents to certain representations as true because it is forced so to do by tension aroused in the soul by the shock of the sense-impression. From these perceptions and certain innate ideas which arise naturally in us through experience, we form conceptions. These conceptions are thought-shadows of reality, but are themselves unreal. The Epicureans taught that all cognition consists of transformed sensations; but Epicurus recognized the activity of reason and the reality of "preconceptions." These "pre-conceptions" are composite images which arise from repeated sensations; and the use of a term connected in thought with the sensation calls up this image. He cannot connect his world of images and his world of objects.
- 3. Validity of Knowledge. The Stoics believed that conceptions, scientifically proved, gave greater certainty than perceptions. Immediate conviction was their criterion of truth. The Epicureans held that we know images, but do not know objects; there is no valid science. With them, vividness of feeling in connection with sensations is the criterion of truth. The Sceptics insisted that we only know appearances and that there is no criterion of truth. They argued that any assumed criterion would

have the same source as the conviction which was to be tested by it. We only have probability, but that may approximate certainty. The Eclectics believed that we may trust what is immediately given in consciousness. Antiochus, an Eclectic, contended that Scepticism destroyed itself. Thus, the Sceptics held that we can arrive at probable truth; but if the true cannot be known, how can we know that we have the appearance of truth, that what we know is probably true? Further, Scepticism averred that there is no such difference between true and false interpretations as that we may distinguish them, nevertheless it undertook to define and reason; this is inconsistent.

- 4. Teleology. The Stoics held that the being and course of the world are determined according to a rational purpose. They undertook to hold this teleological conception along with the view that the course of the world is determined by a law of necessity. The Epicureans had a mechanical conception of the universe, but they assumed that some of the atoms had the power of self-determination.
- 5. Ethics. While it is not our purpose to trace the history of Ethics, the ethical temperament of the Græco-Roman Philosophy calls for the presentation of two widely divergent ethical theories which were developed in this period. The Stoics advocated a theory which may in a general way be characterized as Perfectionism, i.e. they held that the end of conduct is the perfection of the individual. They believed that the ideal man is one who is in harmony with nature. "Nature" had for them a two-fold reference. It signified first the nature of the universe. As thus used, they insisted that men should freely accept the course of the world, for the order of the world is the true order of experience. "Nature" also signified for them the nature of man, not the individual

man, but the universal man; that is, in this reference "nature" means essential human nature. The later Stoics gave greater emphasis to this second meaning. At root, these meanings are one; for the Stoics believed that the nature of man is one with the nature of the world. To live according to nature is to oppose sensuous inclinations, to subdue passions, to lead a life of reason, a life of justice and sympathy: this is the "duty" of man. This virtuous life will be accompanied by mental quietude, because it means the mastery of all that might disturb. But this "happiness" is not the end to be sought; it is a state attendant upon the attainment of the end.

The Epicureans declared that "self-love is the centre of all virtues"; and in this they advocated what is commonly called a theory of Hedonism. Hedonists hold that happiness is the highest good, and that the end of life is the attainment of happiness. According to Epicurus, the ideal state is one of unperturbed satisfaction; and the ideal man, while not indifferent to pleasures, is independent of them. He would give mental joys, æsthetic enjoyments, the first place. Epicureanism was necessarily individualistic; it did not recognize social obligations and could not command heroism. One should do justice and cultivate friendship; but only because, and in so far as, they minister to the satisfaction of the self. Few, if any, Hedonists of the present would agree in all particulars with the Epicureans; and the same may be said of Perfectionists and the Stoics.

Summary: The prevalent conception of reality is materialistic. Effort is made to describe and explain the cognitive process; and there is recognition of two factors in cognition — the subjective and the objective. The Socratic Philosophy was intellectualistic; the knowing subject was thought of as essentially intellect. The Stoics

and the Eclectics indirectly assign value to feeling, while they directly conceive man as a thinking being. For Epicureanism, "man is a feeling being." The inconsistency of fundamental doubt of the validity of knowledge is exposed. This indicates that Philosophy must begin by accepting the trustworthiness of cognition; to do otherwise is to invalidate all thinking, even our doubt. The doctrine of innate ideas which first appears definitely in this Philosophy raises a question which is much discussed long after this period: Is man at birth mentally "a blank tablet," or is he born with a mental furnishing? and, If he has a mental furnishing at birth, what can we say definitely respecting it?

§ 10. General View of Neo-Platonic Philosophy. — We cannot rest in a Philosophy which accounts the world or ourselves unreal; neither can we rest in a Philosophy which cuts us off from real knowledge - i.e. valid knowledge - of the real world. Previous to the rise of the Neo-Platonic Philosophy there had developed a widespread distrust of man's ability to attain the truth. With the belief that reason is unable to respond adequately to man's demand for actual and valid knowledge of the world with which he is in constant and unavoidable commerce, there arose doubt as to whether reason has authority to dictate our beliefs. When men became convinced that the conclusions of reason are out of harmony with our daily experience of real knowledge of a real world, they began to ask whether there is not some other source of knowledge and some other standard of truth than reason. Judaism and Christianity insisted that they were in possession of knowledge which is derived from a source higher than reason; they claimed that it was received by immediate communication from God, the source of truth. Philosophic thought acted upon this suggestion.

In addition to this philosophic dissatisfaction, there was extended religious unrest and hunger; the prevalent materialistic Philosophy could not satisfy the longing and demands of the religious consciousness. At this juncture some thinkers seized upon the suggestion of a "superordinary" mode of cognition; and from this there developed the Pagan, or Anti-Christian, Neo-Platonism. Previous to this, however, an allied Jewish philosophy had been constructed and the Mediæval Philosophy, which we will study later, accepted a super-rational source and standard of truth. In all ages since, there have been those who have insisted that there is a super-rational mode of obtaining knowledge, viz. by spiritual illumination. This doctrine is known as Mysticism. Neo-Platonism is the real source of all later philosophical mysticism.

- § 20. Neo-Platonic Doctrines.— I. Philo represents Jewish Neo-Platonism. Moved by the eclectic spirit of his age, he sought to harmonize Greek Philosophy and the religious thought of the Old Testament. His superordinary source of truth was the Nous, by which we immediately lay hold of truth in contemplation. Man acquires the Nous in the renunciation of self and consequent absorption into unity with God. The body, being matter, drags the soul down; but the soul may rise to union with Deity through the Nous.
- 2. Plotinus, the founder of Pagan Neo-Platonism, held that it was the task of Philosophy to bring us to consciousness of our essential oneness with God. With this consciousness there comes the mystical ecstasy in which the knower becomes one with what is known and thus attains knowledge of the true, for he shares in the divine contemplation. Matter, an emanation from individual souls, has neither quality nor being; the world-soul, an emanation from the world-reason, gives ideas to matter; the

world-reason is an emanation from the Primal. Of the Primal, or God, we cannot say any more than that he is and that the universe is an efflux, or overflowing from the unchanging God. Jamblichus developed a polytheistic theology from the system of Plotinus; and opponents of Christianity utilized the teachings of Jamblichus with the hope of reviving interest in the heathen religions and worship.

- § 21. At the Close of Ancient Philosophy. 1. Point of View. - At the close of the Ancient Philosophy, thinkers are considering subject and object, idea and sense-object, activity and passivity of the mind, change and permanence, motion and rest, unity and manifoldness, mind and matter, freedom and necessity, mechanism and teleology. Those who do not accept some form or modification of Neo-Platonism regard the principles in each of these pairs as inherently exclusive of each other, with possible exception of the last pair, - mechanism and teleology. Hence the prevailing conception of the universe outside Neo-Platonism was fundamentally dualistic. But despite this, when Justinian forbade the teaching of Philosophy at Athens, reflective thought was striving after a single primal reality which shall be the ground of the being and order of the cosmos. That is, Philosophy was seeking a monistic ultimate, and this ultimate was generally conceived as spiritual.
- 2. Philosophical Doctrines.—We have seen that differing philosophical doctrines developed from Greek philosophical activity. A clear definition of these differences will tend to a better understanding of the subsequent course of Philosophy. It must be remembered, however, that the lines of difference are not always sharply drawn, and that the names given these doctrines, together with their definitions, are to be taken as applicable only in a general

way to individual thinkers. Monism is the doctrine that there is only one ultimate real; Pluralism, that there are many ultimate reals; Dualism, that the universe is derived from two fundamental principles. Any view is said to be dualistic if it regards the phenomena or realities of the universe as reducible to two orders which are inherently exclusive of each other; e.g. Plato's world of Ideas and world of objects. Sensationalism is the doctrine that ideas are constituted solely of sense-elements; Rationalism, as opposed to Sensationalism, is the view that elements of knowledge are contributed by the mind. The Sophists were sensationalists; Democritus and Plato were rationalists. Idealism - known also as Spiritualism - holds that the universe "is the embodiment of reason"; Materialism insists that matter furnishes a sufficient explanation of the universe. The Socratic philosophers were idealists and rationalists; the Stoics and Epicureans were materialists. We have learned that the Stoics conceived man to be a thinking being; and the Epicureans regarded him as a feeling being. We have also called attention to the fact that every experience can be stated in one of three ways: as a knowing, feeling, or doing experience. The Socratic Philosophy gave supremacy to knowing, i.e. to intelligence; so did the Stoics. This attitude toward man and related philosophical questions is known as Intellectualism. The Epicureans and the Neo-Platonists and Mystics give supremacy to feeling, or affection as it is termed in Psychology; and this attitude is called Affectivism. In our further study we shall discover that some regard the self as essentially will, or volition; for these, man is a willing being. This attitude is known as Voluntarism.

DIVISION B: MEDIÆVAL PHILOSOPHY

CHAPTER VI

GENERAL VIEW; PATRISTIC PHILOSOPHY; SCHOLASTIC PHILOSOPHY

- § 22. General View of Mediæval Philosophy. 1. Relation to Ancient Philosophy. - Ancient Philosophy, during the greater part of its history, developed in relative independence of religious instincts and ideas; but in Neo-Platonism this apparent apartness of Religion and Philosophy ceased. Mediæval Philosophy is dominantly religious. In its beginning it was closely related to Neo-Platonism; but it was moved by purposes, and took on forms, which clearly distinguish it from that Philosophy. Its life and distinguishing characteristics have their origin in devotion to Jesus and in the acceptance of him and the religious teachings of the Bible as revelations of the highest truth. Throughout the Mediæval Age, Philosophy continued to claim the whole field of scholarly thought, although Mathematics and the Natural Sciences were not pursued with ardor except by a few. Roger Bacon is the most notable representative of independent and efficient scientific research during this age.
- 2. Divisions. Mediæval Philosophy will be treated under the following heads: I. The Patristic Philosophy (150-800 A.D.); II. The Scholastic Philosophy (800-1450 A.D.); III. The Transition (1450-1625 A.D.). The

Patristic Philosophy falls naturally into two periods: i. Period of Growth (150-430 A.D.); ii. Period of Decline (430-800 A.D.). The Scholastic Philosophy divides readily into three periods: i. The Platonic Period (1000-1200 A.D.); ii. The Aristotelian Period (1200-1300 A.D.); iii. Period of Separation (1300-1450 A.D.).

I. The Patristic Philosophy

§ 23. Point of View. — The Patristic Philosophy was developed by the early expounders of Christian doctrine. These teachers are known as the Church Fathers, and the Philosophy derives its distinctive name from this fact. It regarded the Bible as a source of knowledge superrationally communicated. In holding to the possibility and value of knowledge so obtained, it was in agreement with Neo-Platonism. But it differed radically from that Philosophy in some particulars, among others in this: The content of the super-rational knowledge of the Patristic Philosophy was fixed, - it was the content of the Old and New Testaments; whereas the knowledge to be obtained through mental ecstasy - the super-rational knowledge of Neo-Platonism - had no fixed content. The widespread opposition to Christianity set the task for these first exponents of Christian Philosophy. They undertook to defend Christian truth; and in order to defend it, they were obliged to discover and specify the particulars of Christian doctrine. Much of the content of the Christian doctrine was believed by the Fathers to have been obtained through a super-rational mode of communication. This content was accepted as valid because of faith in its source and the mode in which it was communicated. From this the Christian doctrine itself came to be known as the Christian faith, or simply the faith. Hence in the writings of the Fathers and those

who succeeded them, we find that the term "faith" signifies the mental process by which the Christian doctrine is appropriated, and also the doctrine itself. Faith thus conceived is set over against reason. Reason signifies intellective activity and the knowledge obtained through intellective activity; and faith signifies a mode of cognition distinct from intellection, also that content of knowledge which is distinctively Christian. From these distinctions as to mode of cognition and knowledge contents, there arose the question of the relation of faith and reason, and the kindred question of the relation of Revelation and Philosophy.

Man is regarded as central to the universe, and it is believed that his destiny gives significance to all historical movements. In other words, this Philosophy is anthropocentric. Revelation is thought of as progressive and as determined with a view to the gradual enlightenment of mankind; that is, revelation is teleologic. In fact, the Fathers held that all history is teleologic.

i. Period of Growth

§ 24. Doctrines. — I. Revelation and Philosophy. — All but a few of the Fathers assumed the inner harmony of Philosophy and Revelation and insisted that Christianity is the highest Philosophy.

2. Mind and Matter. - Most of the Fathers held to the ultimate distinctness of mind and matter and the immateriality of the soul. A few had a materialistic con-

ception of mind.

3. God and Reality. - The dominant Patristic Philosophy conceived God as personal and spiritual, the creator of the world and man. Origen insisted that reality is spiritual in its nature, that God is the true real, that the spiritual ideas in man constitute the real in him, that the highest reality in God is the creative will, and that will is the essential expression of personality. He was a Voluntarist.

4. Augustine; His Doctrine and Method. — Augustine was the philosopher and the theologian of the early Christian community; and his philosophy is the philosophy of much of the religious thought of to-day. He attained conceptions which seem almost modern. His starting point is experience of self; in this he advanced beyond all who had preceded him. He argues thus: I know that I have sensations; this indubitable fact carries with it the certainty that I am; and this certainty also attaches to all phases of consciousness, since consciousness is unitary. He held that reason furnishes the standard for — i.e. the norms of — truth and right and beauty; the authoritativeness and the sameness of these norms for all subjects constitute the warrant of their universal validity.

His Doctrine of Reality. — We find reality in our consciousness of self; and we are conscious of ourselves as being and knowing and willing; therefore being, knowing, and willing are attributes of reality. We may not affirm knowing and willing of a body, hence a body is a defective reality. Man does not have fulness of being and knowledge, and he is not perfectly free in willing; hence man is also a defective reality. God alone is the perfect reality.

His Doctrine of Knowledge. — We attain knowledge by reflecting upon our sense-impressions and our intellectual life. We need Divine aid both in reception of truth and in reflecting upon it; and this aid is given in the Bible and the gracious illumination of the individual. Faith is a condition of knowing and is ultimately resolved into knowledge; it is not opposed to reason.

ii. Period of Decline

§ 25. Period of Decline. — Philosophical discussion degenerated to what was little better than word-juggling. It aroused mental activity, but was out of touch with the world of reality. Apart from the work of two men -Erigena and Gerbert — there is little in this period that would be of value for our study. Erigena was virtually a Neo-Platonist. He held that God is the substance of the world, and that God himself is without mode of being, but takes determinate form in the world. The doctrine that God is the substance of the world is Pantheism. Gerbert, who travelled extensively, came into contact with Arabians and became interested in their scientific researches. He urged that the pursuit of empty wordsubtilities be given up and that thought be directed to the study of nature. But Christian thought at large did not turn to scientific methods and investigations until much later.

II. The Scholastic Philosophy

- § 26. General View.— 1. The Task of Philosophy.— It was now generally accepted that the Fathers had settled the form and substance of truth. The Christian doctrines as set forth in the Patristic Philosophy were also regarded as the standards, and truth and untruth were determined by conformity or non-conformity to these teachings, or dogmas. In this period, the religious consciousness has the chief place in philosophical thought. Primacy over reason is given to faith, and reason is made to serve the interests of faith. The task of Philosophy is to explain and justify Christian dogma.
- 2. The Form which the Problem Assumed. The ablest exponent of Patristic Philosophy had established con-

sciousness as the starting-point of philosophical inquiry. Scholastic Philosophy does not continue the development of Augustine's thought; it reverts to a question which was discussed by Plato and Aristotle — the question as to whether reality is in the universal or the particular (§§ 14, 4; 15, 3). Out of the controversy which was consequent upon this statement of the philosophical problem, there developed three philosophic doctrines; these are known as Realism, Nominalism, and Conceptualism. These doctrines did not originate in this period; but the interests of the church at this time gave them such value as to bring them into prominence. They are involved in subsequent philosophic thought; in fact, this question of reality is even now a matter of controversy, but presents itself in a somewhat different form.

Realism. — The Realists held that universals alone are real. "Rose," the universal, is real; a particular rose — as that rose in the vase — is an imperfect copy, an incomplete and changeful expression, of the universal "rose," and it is by that much unreal. This is readily recognized to be the same with Plato's doctrine of the Idea and the sense-object.

Nominalism. — The Nominalists insisted that the universal is a mere word; the more extreme would say that it is a mere sound. Thus, "rose," the universal, is a mere word; and there is no objective reality corresponding to this word. Only the independent particular is real. We may have a number of objects each of which is a rose; but the "rose" class is merely a mental construct; there is no such objective reality. What is true of groups is also true of parts of an individual object; they are mental figments.

Conceptualism. — Conceptualism is intermediate between Realism and Nominalism. According to it the

universal "rose" is a mental construct; but it is true for individual flowers, because it has ground in the characteristics which are common to certain flowers. The universal has no objective reality, merely as a universal, but it is objectively real in all individuals which have the common marks. This connects directly with Socrates' doctrine of the concept.

These views variously modified are present in subsequent Philosophy. The Schoolmen, the learned men, — or Doctors, — of this period contrasted these doctrines in certain concise formulas. The doctrine of Realism was said to be *Universalia ante rem* (Universals are before the thing, or sense-object); the doctrine of Nominalism, *Universalia post rem* (Universals after the thing); the doctrine of Conceptualism, *Universalia in re* (Universals in the thing).

§ 27. What gave this Discussion Importance. — To the church, this controversy was no mere dispute about words; grave consequences were involved in it. The church declared in favor of Realism, because the leading Doctors believed that it was vital to the church and its dogmas. According to Realism, only the universal church is real; hence authority is in the universal church. According to Nominalism, the so-called universal church is a mere term. It is a convenient term for thought and intercourse; but the only real church is the particular church. If Nominalism be true, it would seem to follow that individual experience is the only real expression of religious reality; and leaders in the church believed that this would destroy the reality and authoritativeness of general dogmas. Realism was also accordant with the doctrine of the Unity in the Trinity; whereas Nominalism would involve the conclusion that each of the three persons in the Trinity is an independent reality, and that the Oneness of the Trinity is a mere mental concept, i.e. Nominalism led to

Tri-theism. It is not strange, therefore, that the church held with Realism and condemned Nominalism; and as the Philosophy of this age is the product of the church, Realism was the prevailing philosophic doctrine. But extreme Realism tended toward Pantheism, and this led some to revolt from it. It must not be concluded that this discussion is simply an incident in the historical past of Philosophy. This question is with us to-day in the inquiry as to what may be said of the reality of the laws of nature and the reality of scientific concepts—as atoms, electrons, sensations, memory, etc.

i. The Platonic Period

- § 28. Representative Teachers. In this period, the Platonic Philosophy stated the problem, and it largely determined the generally accepted doctrine and its interpretation. We will give the views of three teachers a representative of each of the three types of doctrine discussed in the two sections preceding this.
- 1. Anselm was a Realist.—This is shown in his argument for the existence of God. It is sufficient for our purpose here to state that his argument is determined by his belief that reality is in the universal, not in the particular. He also believed that faith precedes knowledge, that faith and reason are in agreement, and that the church doctrines are rationally intelligible.
- 2. Roscellin represents Extreme Nominalism.— He insisted that only individuals are real, and that a universal is merely a human device for the inclusion of different reals or qualities. He was a Sensationalist and a Tri-theist.
- 3. Abelard was opposed to Realism because of its tendency to develop into Pantheism; he contended that it was inherently pantheistic. Abelard laid the foundations of Conceptualism. As stated by him, this doctrine would

run thus: The universal exists before the particulars in the mind of God, as a type; after the particulars in the mind of man, as the result of conceptual thought; in the particulars, as likeness of qualities and relations, i.e. as likeness of accidents. The prevalent thought of this period regarded the Christian dogmas as the standard of truth, and as authority for reason in otherwise doubtful cases; but Abelard insisted that in doubtful cases reason should be recognized as judge. He was opposed in this; and the opposition to him developed a Christian Mysticism.

CHAPTER VII

SCHOLASTIC PHILOSOPHY (continued); THE TRANSITION

ii. The Aristotelian Period

- § 29. General View. Aristotle's principal writings were unknown to the Fathers and to the earlier Schoolmen. They were recovered during the latter part of the Platonic period, and their recovery imparted a new zest to philosophic study. Aristotle's dominance in reflective thought began, and all subsequent Science and Philosophy have been greatly influenced by him. Settled dogma had become authority for faith; Aristotle became authority for reason.
- I. Philosophy and Theology; Faith and Reason.— Two kinds of knowledge are recognized: That which is attained through faith; and that which is acquired through reason. Philosophy and Theology, reason and faith, are regarded as harmonious; but distinct provinces are assigned them. It was held that Philosophy deals with truths which may be attained and comprehended by reason; and that Theology deals with truths which are beyond the reach of reason, but may be acquired through faith in the Christian revelation. Philosophy has rationality for its guide; Theology is guided by revelation. "Theology views truth in the light of Divine revelation; Philosophy views it in the light of reason."
- 2. Arabian Influence. The Mohammedan conquests brought Arabian scholars into contact with the results

of the Græco-Roman scientific activity and put the works of Aristotle into their hands. They achieved much in Science; but, with the exception of Averroës, they accomplished little in general Philosophy. Jewish students became acquainted with the work of the Arabians; and, through their extended commercial relations, they furthered the distribution of the Arabian thought throughout the West. The Jews themselves made no material contribution to Philosophy; Maimonides, their ablest thinker, simply gave a Jewish dress to Averroës. Scholastic Philosophy proper had no special scientific interest, except in the instance of Albert the Great and Roger Bacon; and they seem to have been aroused by the scientific activity of the Arabians.

- 3. Moderate Realism. Moderate Realism was the view generally held of the relation to reality of the universal and the particular. It may be stated thus: The universal exists before particulars in the mind of God, as a type; after particulars in the mind of man; in particulars as the essence of each particular. Comparison of this with Abelard's statement of Conceptualism shows that these doctrines differ at one point; and the difference is important. Conceptualism finds the universal in likeness of accidents: Moderate Realism finds it in the essence, not the accidents, of particulars. According to Abelard, the universal is a mere thought-construct, and is grounded in phenomenal likeness; according to Moderate Realism, the universal is grounded in identity of essence. This modified Realism connects directly with Aristotle; its universal corresponds to Aristotle's Form.
- § 30. Other Doctrines. I. Philosophy and Theology. Albertus Magnus held that the realm of faith lies beyond the world of reason, and that it is the continuation and completion of reason. In relating Philosophy and

Theology, Thomas Aquinas, who studied under Albert, distinguished three orders of truths. The mysteries of faith — as the doctrine of the Trinity — are in the highest order, and he assigned these mysteries to Theology. Truths of the next lower order — as those relating to man's destiny and the existence of God — he assigned to both Theology and Philosophy. Truths of the lowest order he sets over to Philosophy. Roger Bacon taught that Theology is based on the authority of the Divine will, all other knowledge on experience or reason.

- 2. Cognition. Albert insisted that the mind can only know what is within itself; and he inferred from this that the immediate object of knowledge is an idea. The Stoics and Epicureans held the same view as to what the immediately known object is. Until relatively late in the modern age of Philosophy, it was held, without serious question, that what we perceive is a state of consciousness. Thomas Aquinas sought to explain the process in cognition. He taught that the soul and the object interact and this interaction produces a copy of the object in the mind, and that what the subject perceives is this mental copy of the object, and not the object itself. Thus, in seeing a tree, or hearing a song, the mind and the object interact and produce a mental copy of the tree or the song; and we perceive this mental representation of what is itself external to the mind.
- 3. Man. Aquinas developed Aristotle's doctrine of Forms and applied it to man. He distinguished two classes of Forms Inherent and Subsistential; the latter have being within themselves. The former realize themselves in matter; the latter are active intelligences and realize themselves apart from matter. These two orders of Forms are, according to him, united in man; and man, as subsistential Form, may exist apart from the body.

- 4. Intellectualism. The philosophers of this period followed Aristotle in giving supremacy to intellect over will and feeling. Averroës, the noted Arabian philosopher, went so far as to deny volition to the Supreme. He contended that the subject wills, and only wills, because he has a sense of imperfection; and, as the Supreme is perfect, we may not think of him as willing. This view is also found in Modern Philosophy.
- 5. Science. Albert made original scientific researches and was himself an authority in Natural Science for his period. Roger Bacon's great work in the sciences, his intense ardor, and the persecution he had to endure are well-known facts. Three centuries passed before Christian thought gave itself to scientific investigation; but, in the meantime, some of the ablest minds took part in preparing the way for its ultimate recognition as a worthy line of study.

iii. Period of Separation

§ 3r. General View. — The Patristic Philosophy assumed the harmony of faith and reason, but the Philosophy of this period held that that which distinguishes the Christian faith is of a realm distinct from reason. Religion was even thought to be independent of a reasoned explanation or foundation for the truth it declared; it was regarded rather as an attitude of submission to authoritative statement. In keeping with this, the church Doctors taught that the church doctrines needed no reasoned justification. An ardent and influential Mysticism developed; it had its source in the teachings of Thomas Aquinas. Intellectualism was prevalent in this period, so much so that although Mysticism has a natural affinity for Affectivism, Eckhart, a typical Mystic, was an intellectualist. Duns Scotus was by way of exception a voluntarist.

- § 32. Particular Doctrines. 1. Thomas Aquinas had assigned some Christian doctrines - as creation and immortality - to a field common to Philosophy and Theology; Duns Scotus and William of Ockham, Doctors of this period, assigned all religious truths to Theology and gave Philosophy a purely secular field. They contended that the church, and not reason, is the authority for faith; and that a proposition may be both true and false - say true according to reason and false according to faith.
- 2. Cognition. Duns Scotus held with Thomas Aquinas that what we apprehend in cognition is a mental copy of the external object. William of Ockham believed with Scotus and Aquinas that an idea is interposed between the subject and the object; but he differed from them in holding that this interposed idea is a mere sign of the object, not a mental copy of it. Both views have been held in some form down to the present.

3. Mysticism. - Eckhart and Nicholas of Cusa are representative Mystics. They were men of unusual ability. Our limitations do not permit such a statement as would adequately indicate their influence upon subsequent Philosophy. Eckhart gave German Philosophy its earliest form of expression. Both he and Nicholas were learned in Science. Nicholas insisted that the earth revolves around the sun, anticipating Copernicus in this. German Mysticism has its source in Eckhart. For him the church doctrines are temporal symbols of eternal truth, and this truth is purely spiritual. He was an intellectualist; but he believed that eternal truth, which is the spiritual essence of all that appears, may be had by all the pious, and only by the pious. Both he and Nicholas were extreme Realists. Nicholas taught that God, the One, is real; and that the Many come to reality in the One.

III. Time of Transition

- § 33. General View. The Natural Sciences begin to receive such attention as had not been given them in the Mediæval Philosophy, and scientific methods and ends are coming to definition. Among the thinkers of this period we find Copernicus, Tycho Brahe, Kepler, and Galileo. Hitherto the Aristotelian astronomy had been accepted, and the earth was conceived as the centre of the universe. The new astronomy and the new conclusions in Science gave a new view of man's position in the universe and a new estimate of his importance. The new Science would lead to the conclusion that the earth and man are relatively unimportant. As a consequence, thinkers were inclined to doubt the older conceptions and to seek a new point of view. Independent Philosophy discarded Aristotle; in discarding him it rejected what was true in his system along with what was false. The Christian conception of God and man and the world had been identified by most teachers with the Aristotelian science; and this led those who held to the Scholastic Philosophy to attack the new Science.
- § 34. Transitional Schools.— I. The Italian School was naturalistic and insisted that the universe and all its phenomena, including mental and moral phenomena, may be explained in terms of the physical world. Bruno, the ablest of this school, held that God, an eternal spirit, is the original matter of this world and the only reality. But he also held that the universe is composed of a number of ultimate monads; and in writing of these, he sometimes speaks as if he were a Pluralist. Campanella, a Sensationalist, contended that we perceive, not objects, but states of consciousness which objects arouse in us; and that sense-qualities—as color and taste—which we

assign to objects are states of consciousness which are for us signs of the objects.

- 2. The German School was distinctly Mystical. Jacob Boehme, its most notable representative, sought to unite religious Philosophy and Science. His favorite thought of the world was that it is an organism developing outward from within. According to him, the highest knowledge comes of illumination, not reflection. All creature consciousness is, in his view, God's consciousness; nevertheless he thinks of God as somehow other than the universe.
- § 35. Summary of Characteristics of the Mediæval Philosophy. - 1. General. - The Mediæval philosophic aim was definitely religious. The relation of Philosophy and Theology, hence also of reason and faith, was a dominant question. It passed through the following stages: (1) They were assumed to be identical; (2) They were regarded as supplementary, with some province in common; (3) They were thought to be supplementary, with different provinces. Faith and Theology were generally deemed to be the higher in rank. Their relation, as conceived, may also be stated thus: (1) In the Patristic Period the task assigned Philosophy was that of determining and defending Christian dogma; (2) In the Scholastic Period, Philosophy was subject to the Christian dogmas, being required to accept these dogmas as criteria of validity; (3) By the close of the time of Transition, religion and Philosophy are set in a relation somewhat like that which obtained in the Greek Philosophy, but with a noteworthy difference. The Greek Philosophy down to Neo-Platonism did not have a determinative religious aim, and it made no endeavor to find a philosophic justification for religious faith. In contrast with this, the Mediæval Philosophy owes its being and its

distinguishing qualities to the religious life. The early Christians felt called upon to give a systematic and reasoned statement of their views to the world that misunderstood them, and to defend these views against the attacks of their enemies. In doing this, they were forced to relate their religious life to Philosophy. The effort to relate Philosophy and the religious life discovered an important fact: Philosophy will not submit to external authority; it cannot and be true to itself. It cannot accept aught the acceptance of which is not justified by reason; and it is bound to accept whatever bears the certification of reason. But while Philosophy may not submit to external authority, even though it speak in the name of religion, it may not be indifferent to the religious consciousness, to its instincts and its contents; for religious experience gives content to our general experience, and questions respecting object and subject cannot have full answer apart from the recognition of the reality and the significance of the religious consciousness.

2. Various Doctrines. — Attempts to explain the cognitive process have led some to conclude that what is immediately known is a mental image of the external object; others hold that the known object is a state of consciousness which is a sign of the object. According to either view, what the subject immediately knows is a subjective state, not the external object. The doctrine of Reality remains a question of difference. There are Realists, who hold with Plato, and Nominalists, according to whom the universal is a mere device for facilitating thought. Moderate Realists and Conceptualists are found; and they agree that, as to the world of nature, the universal is real, but that it has no reality apart from the particular. Conceptualism finds the universal and its reality in the phenomenal likeness of particulars; Moder-

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ate Realism finds the reality of the universal in the essential likeness of individuals. The tri-phasal character of consciousness is recognized; and some give emphasis and authority to intellection, others to the will, still others to feeling. Realism shows pantheistic affinities. An implicit Dualism pervades much of Philosophy. This is manifest in the assumed mutual exclusiveness of mind and matter, and of subject and object, and in the asserted apartness of faith and reason which we find in the later Mediæval thought. The way is prepared for a more general recognition of the worth of scientific studies, for freedom to pursue them without incurring authoritative opposition, and for the development of Science.

DIVISION C: MODERN PHILOSOPHY

CHAPTER VIII

GENERAL VIEW

- § 36. Introductory. I. Some Contrasts. The Pre-Socratic Philosophy occupied itself mostly with the object; Modern Philosophy begins with the subject. Mediæval Philosophy is restricted by its partial aim - which was religious - and by its submission to authority; Modern Philosophy acknowledges no restrictions except those involved in the demand that reflective thought shall be true to reason. Hitherto the problem of Reality has been resolved into the question as to whether reality is in the universal or the particular, and Realism has signified the doctrine that the universal is real. The Modern Age states this problem differently and in a way that seems to bring it nearer the common conception. Modern Philosophy studies the reality of the world of other persons and things and events; it would know what is the nature of the reality of the objective world, what the reality of the universe is. We shall learn further on that the doctrine of Realism to-day is something very different from the Realism which we have found in our study thus far.
- 2. Cognition. In the Summary at the close of § 18 we note that philosophers were undertaking to describe and explain the cognitive process. Two factors were recognized the object and the subject; and question

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had been already raised as to the activity and passivity of the mind in cognition. Democritus, the Atomist, regarded the mind as active in attaining knowledge; and the Socratic philosophers certainly held the same view. But there were those who insisted that ideas are composed solely of sense-elements; they would even reduce the thought-products of reflection to sensation. Out of the discussion incident to this study of cognition, there developed two opposed attitudes. These attitudes represent opposing views of the relation of the mind and the object in perception. There were those who would begin with the object in explaining this process; they would emphasize the impression which the object makes upon the subject through sensations which it arouses. They would, for example, describe your perception of a tree thus: You are looking over the landscape; the tree intercepts your vision; it acts upon you through your visual sense-organs and arouses sensations; and these sensations are in some way so combined as to give you a perception of the tree. Similarly as to the dinner-bell which breaks in upon your study. This is a very general, yet sufficiently specific, illustration of what is called the sensational theory of cognition. It contends that there is nothing in the intellect which has not been in the senses. According to this theory, we have a datum, a somewhat given, to consciousness; and this datum coming from without is the sole material of knowledge. As thus viewed, experience is merely datum to consciousness, conceived apart from mental activity, and hence does not include any content of consciousness that comes of thought. Any theory of cognition which limits experience to sense-data and finds its point of beginning and the total material of knowledge in experience, is known as Empiricism. Our experience comes of commerce with other persons and things and our

interest in events. In every moment of our intercourse with the objective world, we are mentally active; and all actual experience, viewed as a process, has an element of mental activity. Hence experience as conceived by Empiricism is incomplete; in fact, it is not real experience, it lacks an essential element. There is no such experience as this Empiricism assumes; for there is no experience apart from mental activity.

The opposing theory begins with rational activity, or reason. It contends that there is no sensation apart from mental activity; that there is no experience which is a mere datum to consciousness, or impression upon it, from without; and that rational activity itself always contributes somewhat to perception. Inasmuch as this theory emphasizes the rational factor and would find the key to the problem in the activity of reason, it is known as Rationalism. Rationalism and Empiricism are thus seen to be opposing theories of cognition. Empiricism in its crudest and extremest form makes knowledge to come to man from without: Rationalism in its extremest form would make knowledge purely subjective, it would come wholly from within. It is doubtful if any one at present takes either extreme view. These two theories, as thus described, are opposed philosophical methods or modes of approach to the problem of knowing. One approach is by way of the rational activity of the subject; the other by way of the object regarded as acting upon the senseorgans of the subject.

3. Immediate Object of Knowledge. — Up to the beginning of the modern age of Philosophy and down to a relatively late period in this age, it seems to have been assumed that the immediate object of knowledge is subjective, — in and of the subject; and that the subject passes by some mental process from this subjective object

to mental grasp of the external object. Some have held that the object, through its action upon the sense-organs of the subject, produces in the subject a mental image of the object; others, that it produces a state of consciousness which is a mere sign of the object. Some conceive of this image or state of consciousness as the product of the interaction of subject and object. But all, at the beginning of the modern age of Philosophy and for some time after, held that the immediate object of knowledge is an idea or a state of consciousness, and not the external object. Further on we shall find that this assumption is challenged.

4. Rationalism. — We have found that Philosophy is unwilling to submit any of its questions to external authority for final settlement. It holds that reason is the sole authority for reason. In this relation, reason signifies the mind as active, with special emphasis upon intellective activity. The Socratic philosophers appealed to reason alone; Augustine found the standard of truth in reason; and the endeavor of Mediæval Philosophy to relate faith and reason concluded the discussion of this question. That conclusion is that reason must pass upon all claims to validity; and it will accept no certificate of validity except such as reason itself issues. As Philosophy is the reasoned consideration of experience, its conclusions must be the conclusions of rationality. This philosophical attitude - that of unwillingness to submit the settlement of philosophical questions to authority — is known as Rationalism; and, in this sense, all Modern Philosophy is Rationalism as a philosophical attitude rationalistic. is to be distinguished from Rationalism as a theory. As a theory, it is opposed to Empiricism; and when we speak, as we shall, of Idealistic and Realistic Rationalists, we have in mind those who are opposed to Empiricism, those

who hold that the mind contributes content to knowledge.

§ 37. Schools in Modern Philosophy. — The Modern Schools will be treated in the following order: Substantialists (1625–1750); Earlier Empiricists (1625–1820); Idealistic Rationalists (1750–); Realistic Rationalists (1750–); Later Empiricists (1820–). Following this, we will append a concise statement of the differing philosophical attitudes of the present.

CHAPTER IX

SUBSTANTIALISTS: EARLY EMPIRICISTS

I. The Substantialists

§ 38. General View. — The philosophers whose views we are about to consider, were extreme Rationalists, at least in purpose. They would find the basis of Philosophy in reason apart from experience of the external world. Descartes, from whom Modern Philosophy dates, takes this position definitely; and those of this school who come after him, do not free themselves from the limitations of this fundamental assumption. In constructing their Philosophy, they make much of substance. It is with them the ultimate reality; and the differences in their teachings arise from their differing conceptions of substance. All of them conceive substance as that which exists "in such a way as to stand in need of no other thing in order" that it may exist. Substance manifests itself in some mode or modes, but it is not a mere mode; it is that which exists in some mode. What we know about substance, we know through its having marks or qualities; but these marks or qualities are accidents of the substance, not the substance itself. They agree so far; but they differ in their conception of the nature of substance. They agree also in regarding the changes of the universe as being mechanically effected; they believe that these changes are effects produced by causes external to the objects in which the changes take place.

- § 39. Doctrines of Representative Substantialists. Descartes, Spinoza, and Leibniz are representative Substantialists.
- I. Philosophic Method. Descartes believed that experience — and experience with him is sense-experience is deceptive, and that only that knowledge is valid whose origin is in human intelligence and whose basal content is contributed by reason. He also believed that the principles of intelligence have their expression in mathematics; and he concluded from this that mathematics would furnish the true philosophic method. But mathematics is a development of ideas that are immediately (or intuitively) known, ideas whose truth is self-evident; and he held that we should similarly deduce Philosophy from some indubitable principle. He found such a principle in the consciousness that he doubted. He could not doubt the fact of his doubting; hence it was evident to him that he thought. This is the origin of his famous, Cogito, ergo sum. He is not to be understood as arguing from the fact of his thinking to the fact of his existence. "Therefore I am" is implicit in "I think." What he would assert is, that he has an immediate certainty of his own existence. This was his indubitable principle; but, in making his deductions from it, he regarded it as the same with certainty of his own existence as a thinking substance. That is, Descartes assumed that his immediate apprehension of himself as doubting was the same with knowledge of himself as thinking substance; and he believed that he had discovered this without appeal to sense-experience. Spinoza and Leibniz adopted Descartes' method, the method of deduction from rationality; and Spinoza was even more severely mathematical than Descartes.
- 2. Substance. Descartes begins with self as thinking substance; and from the existence of self he undertakes

to prove the existence of God. Consideration of his argument for the existence of God does not fall in with our purpose at this point; what we would note here is, his belief that the existence of self involves the existence of God. His conception of substance is, that it is that which has no need of any other that it may exist; and he holds consequently that God is the sole primary substance, for God alone has no need of any other that he may exist. The self as thinking — i.e. the mind — is in his view dependent upon God for being; it is, therefore, created or relative substance. Following this he grounds his belief in the reality of material substance upon two facts: that God would not give us over to deception, and that material objects force themselves upon our attention. In this way, Descartes finds one primary substance, God, and two created substances - mind and matter.

Spinoza's conception of substance differs from Descartes' in one important particular. To Descartes' definition of substance as that which exists by itself, he adds an attribute—it is that which is conceived by itself alone. From this he concludes that, since substance is not dependent upon anything for its conception, there is only one substance. For him there is only one reality, and God is that reality.

According to Descartes and Spinoza, substance is independent existence; according to Leibniz, it is independent activity. He believed that there are many independent individual existences; and that activity is the essential characteristic of each of these. He called them monads. Descartes' system was dualistic. Spinoza was a Monist, and Leibniz was a Pluralist.

3. Leibniz's Monads. — Leibniz's monad is in no sense a physical entity; it is a force-centre. The monads are conceived by him to be independent centres of activity, each of which is sufficient unto itself. These monads

combined into groups compose the objects which make up the universe. In each organic group — as a plant, an animal, or a man — there is a central monad. This central monad most fully and definitely represents the idea of the group; and it is also a peculiar representation of the universe, for the universe has a specific and particular representation in every monad. Man is a self-conscious group-monad. Below man the monads have lessening degrees of consciousness until in plants and inorganic objects consciousness is wholly wanting. The perfection of the monad is its conscious representation of the universe. Above man is God, the highest monad; the universe is perfectly represented in him. Every monad is active toward the expression of the ideal which is completely represented in God.

- 4. Mind and Matter. According to Descartes, mind is thinking substance and matter is extended substance. Bodies are distinguished from one another by differences of form, size, place, and motion; and form, size, place, and motion are modes of extension. Minds differ as to modes of consciousness judgments, ideas, and will. He believed color, taste, and sound to be modes of consciousness, not qualities of perceived objects; i.e. they are not properties of the object, but states of consciousness of the subject. Democritus had propounded a similar doctrine; he taught that color, odor, taste, and sound arise in sense-perception. With Spinoza, thought and extension are not substances; they are attributes of the one and only substance God. They are two aspects, but not the only aspects, of the one substance. Leibniz's monads are immaterial.
- 5. Knowledge. We have stated Descartes' view as to how valid knowledge may be attained. His criterion of truth was clearness and distinctness. By "clearness" he meant what is immediately present to the mind; by "dis-

tinctness," what is in itself clear and exactly defined. We have this clearness and distinctness in our knowledge of self in self-consciousness; and he held that to be true which is thus clear and distinct. Spinoza did not criticise his own processes; he naïvely assumed that what he held to be knowledge could be accepted without question. To clearness and distinctness he added another mark of validity - adequacy. He believed that what is obtained through sense-experience is inadequate; that which is attained through reason, by deduction, he regarded as adequate. He also accepted the fact and adequacy of intuitive knowledge. In this mode of cognition, he believed that we see everything in the light of God, the one substance. Leibniz describes the monads as "windowless"; nothing "can enter them or depart from them." We might conclude then that for him knowledge of the external world is impossible; for, according to this conception, the monad can only know its own states. But Leibniz avoided this consequence, for he also held that every monad "is a mirror of the cosmos"; i.e. that the cosmos is represented in the monad. It follows, then, according to his view, that the more clear and definite the consciousness, the better and fuller the knowledge of the universe. The idea in the conscious self is one with the idea in the universe, and knowledge of the self is knowledge of the cosmos.

6. Mechanism and Teleology. — According to these philosophers, nature is perceived as subject to mechanical law. Every event is the necessary consequent of some preceding event. But Leibniz gave the succession of events a teleological significance; for he conceived the whole course of nature and history as progress in the expression of the ideal which is represented in God, the central monad.

^{7.} Parallelism. — Spinoza was a Monist, nevertheless

he sharply distinguishes extension and thought. He conceives them as two orders which are parallel; and he holds that for every mode of thought, there is a parallel mode of extension, and that the changes in these orders run parallel with each other. The unity of the two orders in any instant is in their having the same content of substance; this identical content expresses itself in the one instant in a mode of thought and a mode of extension. Thus, when I will to sit down and sit down, according to Spinoza, my seating myself is not caused by my will; but the one content of substance expresses itself in my will and in my sitting down. He proffers in this a parallel dualism of phenomena, which is applicable in the description of related phenomena of mind and body. Ideas are causally related to ideas, and motions to motions; but they are in separate orders, orders which do not interact.

8. Pre-established Harmony. — Leibniz conceives the monads to be absolutely independent in action; no one of them ever influences another. Nevertheless he believes that the changes of the universe are orderly. How is the orderliness of these independently active ultimates to be explained? Leibniz does this by his doctrine of preestablished harmony. Every monad is within its limitations the same with the central monad; the Creator has so made it. Each monad is active in the direction of expressing the idea of the central monad; hence the harmony of the activity. The concurrent action of the mind in willing to sit down and of the body in sitting, comes of the pre-established harmony of the mind and the body. This harmony is pre-established, not by the ordering of each event, but by giving to each monad an ideal in keeping with the ultimate end, which is the expression of the Divine ideal.

II. The Earlier Empiricists

§ 40. General View. — The Sophists were Empiricists, and since their time Empiricism has had continuous representation in Philosophy. It is so consonant with the "common-sense" view of the questions involved that it finds ready acceptance, especially when it is set in contrast with the subtilties of the Mediæval Philosophy. The fruitless word-combats of the Schoolmen, the apartness from life of their discussions, and the opposition of the Schoolmen to the scientific method prepared the awakening mind of the Renaissance to welcome thought which appeared to deal with facts instead of abstractions, and fitted it to give a sympathetic hearing to a Philosophy which pursued a method of observation and induction. But Empiricism possibly won most favor from the fact that it studied man; for the time in which it came to flower was a time when man and the study of man were glorified. The Earlier Empiricism was thus the product of the enlightenment which followed the Renaissance. This was also the period of the Substantialists. These schools were contemporaneous.

Francis Bacon had prepared the way for this Philosophy. In his "Novum Organum," he shows conclusively that we can never attain knowledge of the world of nature by arguing from general truths, and that such knowledge may be gained by a study of particular facts. He was not the founder of the Inductive method, but he presented this method so effectively as to secure attention; and with this he gave method and spirit to Modern Empiricism. Bacon virtually confined his studies to Science, as distinguished from Philosophy proper. Hobbes, for a time Bacon's secretary, adopted Bacon's method and applied it to General Philosophy. The Empiricists who come after

Hobbes agree with him in two particulars. They hold that we do not know the reality of objects, and that the immediate object of knowledge is some state of consciousness. Empiricists approach Philosophy by a study of cognition; and they begin this specific study with an analysis of the cognitive process. In this analysis they undertake to distinguish the part which sense-experience has in this process from that of the mind. They would pass from the object through various assumed stages of the process to completed knowledge. It belongs to Psychology to seek an orderly description of processes in consciousness; whereas Philosophy would discover the import of the cognitive consciousness for the great questions asked respecting the world, of which the subject has experience, and the subject who has experience of the world. From this it is evident that Empiricism arises from an endeavor to apply the Psychological method to Philosophy. Our first interest in these philosophers is their Epistemology. They hold that we do not know reality, that we only know appearance. This is the doctrine of Phenomenalism.

- § 41. Specific Doctrines of Early Empiricists. Three men represent this school Locke, Berkeley, and Hume. Locke was an Empirical Realist, Berkeley was an Empirical Idealist, and Hume was an Empirical Sceptic. They all accepted that the immediate objects of knowledge are ideas.
- I. Innate Ideas. Cicero, of the Græco-Roman school, held that certain ideas as duty, freedom, immortality are inborn. This doctrine of innate ideas persisted in Philosophy; and it was accepted that these ideas are authoritative and that they constitute rational knowledge. Descartes held that all presentations which are as clear and distinct as consciousness of self are innate; Spinoza begins his Philosophy with the innate idea of substance; according to Leibniz, all ideas are innate.

As the doctrine developed it came to mean, not that man has these ideas at birth, but that man is so constituted that with the development of the individual subject certain general notions will develop. Locke denied that there are innate ideas which are authoritative; but he recognized that "there are natural tendencies implanted in the minds of men." According to him, "there is nothing in the intellect which has not been in sense," and the mind at birth is like a wax tablet with no writing on it. He insisted that the mind of every individual is at the beginning free from pre-determined notions.

2. Cognition. - Locke believed that the capacity of the mind for knowing is merely its capacity for receiving impressions, and that all ideas are presentations to the mind, not constructions of the mind. He held that our knowledge of the external world is through sensation. In sensation simple ideas impress themselves upon the passive mind; and these ideas constitute sensitive knowledge. In sensitive knowledge we have intuitive certainty that the idea is present; but, as knowledge of the external world, it lacks certainty and is inadequate. In reflection, the subject is conscious of the operations of his mind as it combines simple ideas into complex ideas, as it perceives relations and separates ideas from other ideas which accompany them. In all these operations, the content of consciousness is furnished by the senses; and the knowledgeattained is valid within the world of ideas, and only there. We also have intuitive knowledge of our own states.

Hume held that all knowledge is reducible to impressions. We are shut up within the circle of impressions and can never get beyond ourselves. There is no knowledge of an external world; we only have knowledge of these impressions and of the ideas which are memory images of impressions.

3. Reality. - Locke accepted the reality of ideas and of spiritual and material substance. He conceives substance to be the unknown substrate of qualities, to be that in which the qualities of an object inhere. He divided qualities into two classes - primary and secondary. The primary qualities are solidity, extension, figure, motion or rest, number; they represent the nature of objects. secondary qualities are color, taste, etc. These secondary qualities are what they are because of the effect of objects upon our sense-organs; the object itself does not have color or taste. That is, the secondary qualities are dependent upon the mental and physical organization of the subject. Berkeley argued that all qualities, primary as well as secondary, are dependent upon mind. He held that all we can know of any object is what we can get in sense-experience, and that all we can thus obtain is sensa-Sensations are for him ideas of sense; and the objects of the external world are complexes of ideas of sense. An object is merely the complex of perceptible qualities. There are no objects outside consciousness; nature is merely a succession of ideas, and natural laws are ideas of succession. With Berkeley, idea meant "object presented to the senses, or represented in image." "To be is to be perceived." He held, therefore, that reality is necessarily particular and concrete. Nevertheless, he accepted that we may so think a particular as to render it universal. Thus, in reasoning about triangles in general, the triangle which we draw, or image, is an equilateral, an isosceles, or a scalene triangle; but we think of it as representing the characteristics which are common to all triangles. He would say that this general idea is valid for reasoning; but it is not a complete reality, for it is not "an object presented to the senses, or represented in an image." As a consequence, he declared "material substance" to be unreal; but he assumed the reality of "spiritual substance."

Hume declared that impressions and ideas are the only realities; and that view reduces all reality to ideas. These ideas are individual and disconnected. The mind itself is a stream of disconnected ideas, and different movements and situations have no identity or bond. There is no self, no world, no knowledge.

CHAPTER X

IDEALISTIC RATIONALISTS

III. Idealistic Rationalists

- § 42. Idealism Defined. 1. Objects are Embodiments of Ideas. - At the beginning of our study we described characteristics of experience which are of special interest to Philosophy (§ 2). One of these characteristics is that other persons and things and events have meaning for us; no object is for us a mere actuality. A study of the illustration given in the section referred to above will make this evident. Your attention is arrested by a sound, looking you see a horse running madly toward you, and you hasten to shelter. Every particular of this experience has meaning. Your visual experience has the meaning of a runaway horse bearing down upon you, and that means danger to you. The place to which you flee has for you the meaning of safety. Even the sound has meaning; it signifies that something is occurring to which it is worth your while to give attention. All with which we have to do is qualified with meaning. To say that every object has meaning, is to say that objects embody ideas. That the particulars of the universe are embodiments of ideas is a cardinal doctrine of Idealism.
- 2. Reality is Rational. Another characteristic of experience is our consciousness of the reality of ourselves and of that with which we have to do. What is it to be real? It may be difficult if not impossible, to give a final answer to

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this question; but we are ready, at this point, to note a certain aspect of reality. Reality is more than existence. Whatever is, is in some sense or degree real; but to be real is more than to exist. All being is necessarily of some sort; it is, as we have said above, being with meaning. Being and meaning are inseparable aspects of reality; and by so much as reality has meaning by that much it is intelligible and may be known. Idealism holds that all reality is the embodiment of mind; and that whatever is, is rational.

3. Experience has Duality of Aspect. - It arises in the subject-object relation and is a consciousness of self and of object. A study of the example given in § 2 will make this clear. Every selected particular - as the hearing, seeing, fleeing - has in it a subject aspect and an object aspect. We do not know of any experience, we cannot conceive an experience, in which either aspect is wanting. Idealism holds, not only that these aspects are inseparable, but that there is no experience where either subject or object is absent. Those who accept this doctrine insist that there is no subject who is not experiencing; and, as experience can only occur in the subject-object relation, there is no subject apart from this relation. They also assert that there is no reality -i.e. no real object which is independent of consciousness. That subject and object are interdependent, not independent of each other, is a principle of Idealism.

What we have just given is by no means a complete statement of Idealism. Other characteristics of this doctrine will appear as we proceed.

§ 43. Historical. — Idealism has its roots in the Socratic Philosophy. Plato held that each particular is the expression of an idea, and that the object comes to be in order that the idea may have embodiment. He likewise

believed that reality is in the idea; and from this it follows that for him the objective world was an expression of reality. He also held that reality is intelligible; and that we may and do know the real. Aristotle was also an Idealist. He taught that objects owe their being and form to universals, each object being a development of a universal, the universal itself determining the form of the matter of which the object is constituted. In this, he, to be sure, conceives of matter as independent of the idea, or universal, except as to the form which it takes; nevertheless, the Idealistic element in his teaching is evident. So far as subsequent Philosophy accepted the Platonic and Aristotelian conceptions, it was Idealistic. Spinoza's Idealism is obvious; and he profoundly influenced German thought, giving it an Idealistic cast. Berkeley set forth a distinct and extreme doctrine of Idealism. According to him, all objects other than persons are only ideas of sense. He insisted that "there is no world without the mind, distinct from the ideas which are within us"; and that nature has existence solely in our experience. He was the author of the formula, Esse est percipi — to be is to be perceived; and this would easily lead to the conclusion that the reality of things is in our perception of them, not in their perceptibility. Late in life he seems to have modified this doctrine, but he never worked the modification into his system. Kant revolted from Berkeley's Idealism and from Hume's Scepticism. He believed that both doctrines were irrational. Beginning with Kant we will consider Idealism as represented by him, and by Fichte, Schelling, and Hegel.

§ 44. Kant. — I. Introductory. — We shall merely give a cursory statement of the philosophical problem as conceived by this master mind, without undertaking to set forth in detail the arguments by which he would sustain

his conclusions. Our study of his system will necessarily be limited to those particulars which are directly related to the purpose of this Introduction. Criticism has modified some of his doctrines and has rejected others; but we cannot undertake here to note specific views or methods concerning which there is reason for dissenting from him. Some of these points of difference will appear later. Kant's motive came from Hume's conclusions. If Hume were right, there is no knowledge and scientific judgments cannot be rationally justified. Kant was unwilling to accept such a conclusion; and he set out to investigate knowledge, with a view to determining its validity and limitations. Hence his philosophy is primarily a theory of knowledge, or an epistemology.

2. His Conception of the Cognitive Process. — Consequent upon a critical study of cognition, Kant concluded that there can be no knowledge without sense-experience. There must be sense-experience that we may attain knowledge; but there must also be that in our cognitive consciousness which is not derived from sense-experience. We now give a general sketch of the cognitive process as conceived by him.

Perception. — External realities act upon the senseorgans of the subject, and the subject in consequence receives disconnected and chaotic sense-data. These data are not knowledge, but are material from which knowledge is to be constructed. Take, for example, our frequently used illustration of the horse running away. The data which came to you through the action of certain realities upon your sense-organs did not come to you as a horse running away; the mere data had no order or meaning. This passive reception of sense-data Kant speaks of as perception; but it is not for him perception of objects. In his study of perception, he established a fact of prime

importance for Philosophy: Nothing enters into consciousness as a mere datum; the mind deals with all it receives. He likewise called attention to the combining, or synthetic, activity of the mind. This synthetic activity of the subject makes for the unification of the disconnected sensedata. We perceive objects in related positions; they are apprehended as co-existing in apartness from each other; and we also have a consciousness of succession in our experiences. In other words, our perceptions have space and time characteristics; they are not in disorder, but are given a space-order and time-order. He holds that the synthetic activity of the imagination gives this space-form and time-order to the chaotic sense-data. Space and time are of the mind, and are contributions of the mind to perceptions. Being constituted as we are, we treat in this way the data which we receive in sensation. According to Kant, space and time do not come with the sense-data; they are the contribution of sensibility. Sensibility with Kant includes imagination. The demand that there shall be in the cognitive consciousness an element which is not derived from sense-experience, is so far satisfied.

The Understanding and Knowledge. — Kant held, however, that perception does not complete knowledge. In combining sense-data into an image, the imagination works blindly in certain fixed ways; whereas cognition is a distinctly conscious process. There is no attainment of knowledge apart from a conscious uniting of ideas. To conclude that 5 plus 7 equals 12, calls for conscious determination of mental activity. The cognitive process concludes in a judgment; and a judgment is the assertion that certain ideas are conjoined. The synthetic activity of the imagination which completes the process in sensibility is, for Kant, the unconscious activity of the understanding; the synthetic activity in judgment, by

which ideas are united, is conscious activity of the understanding. You know that horse as one, as in a certain relation to you, and as having certain characteristics. We know sensible objects in terms of quality, quantity, and as being in relation. These are general forms in which all sensible objects are known. According to Kant, the understanding judges the space- and time-ordered material prepared for it, judges it by means of these conceptions relation, quality, quantity, etc. These concepts are its general forms of judgments; being forms of judgment, they are known as categories. In judgment we combine ideas; and the understanding in judging combines the manifold elements of perception into one experience. Any single object, as a book, has many particulars in it; but these particulars are synthesized into one experience. The sense-data of an observed object are received as a series continuing during the observation; but these perceptions are united into one experience by the understanding. The conceptions, or categories, in terms of which the understanding frames its judgments and thus constitutes knowledge, are supplied by the mind. All that sense-experience contributes is the chaotic and disconnected sensedata, the mere material of knowledge; the mind orders and unifies the data, it contributes that which gives meaning to the material.

3. As to the Objectivity of what is Known. — From the foregoing, it appears that, according to Kant, the objects of knowledge are subjectively constituted. But, if the only objects which can be known are objects which are thus constituted, it would seem to follow that the world which each subject knows is a world whose appearance is constituted by the subject himself. The characteristics of the known world, the forms in which it appears, do not come from the external world of realities; they originate

in the subject and are the production of the subject, not a reproduction by him. We might seem justified, then, in concluding that the individual subject's world and knowledge are merely his own, and that this world is not an object for other subjects. This, if true, would be a serious criticism of Kant's doctrine; for he held that that only is valid knowledge which is universally valid, and that that only is truly objective which is object for all. But he would deny that his doctrine leads to the conclusion that the individual subject's world and knowledge are merely that subject's own. He held that the principles according to which the sensibility and the understanding act in constituting objects from sense-data, are grounded in the nature of mind. These principles are the principles, not of the individual mind, but of the universal human reason, of the super-individual consciousness. In Kant's view, the individual subject does not determine the characteristics of the objects which he knows; they are constituted, not by our known, or experienced, self, but by the super-conscious self which is the ground of our "empirical self." This unknown, but only real, Self is independent of conditions and experience; and the principles of the understanding are the expression of the activity of this super-conscious Ego. Hence the world which we know is, for Kant, truly objective, because it is object for all as it is for each.

4. Reason and the Regulative Ideas. — Kant gave to the term "reason" a broader and a more restricted meaning. In its broader meaning, it stands for the whole mental activity as related to knowledge; in its more restricted application, it signifies "a higher function of the mind than the understanding." The understanding occupies itself with the material which is given it through the sensibility, i.e. with the material of sense-experience. Reason, in its nar-

rower meaning, is occupied solely with itself and makes inquiry into its own nature. This inquiry is not determined by the forms of the knowing process; it is purely contemplative. But while it is merely contemplative, the inquiry is not haphazard and purposeless; the reason has a purpose and the inquiry is regulated by certain Ideas. The purpose is to discover a final reason for all that is and all that occurs. Kant finds that the reason is insistent in its demand that we seek a principle which shall be the ground of explanation for all phenomena; and, since this principle is all inclusive, it will necessarily be a principle of unity. From a study of this demand of reason, he further concludes that there are three Ideas which regulate the synthetic activity of reason as it searches for such a principle of unity. These Ideas are the Self, the World, and God. By World, he means not the world of phenomena which is constituted by the understanding, but the totality of things-in-themselves from which we receive the unordered material for knowledge. By Self, he means not the known self of experience, but the super-conscious Self to which we have already referred. Space and time are synthetic forms of sensibility, the categories are synthetic forms of the understanding; the reason regulates its synthetic activity by the three Ideas just named. It does not constitute objects by means of them; but it unifies all the particulars of experience by assuming that the Self, the World, and God are realities, and by referring all phenomena to these Ideas as their ground principle of explanation. Thus, phases of inner experience more directly related to our consciousness of personal identity are referred to the Self as their principle of unity and explanation; and all phenomena of inner and outer experience more directly related to sense-data are referred to the World as a system of related realities for their principle of unity and explanation. And by setting before itself God as "self-subsistent, unconditioned, and creative reason," reason "is enabled to give the greatest unity, extent, and system to our empirical knowledge." According to Kant, we must regard the Self, the World, and God as realities, even though they are not objects of knowledge. His doctrine respecting this will be further treated under the next two topics.

5. Reality; Phenomena and Noumena. - According to Kant, known objects are phenomena, not realities. objects are constituted by sensibility and the understanding out of sense-data. The space and time characteristics and their categorical forms are given them by the mind. The mind has contributed to the sensible material all that the subject is conscious of; hence we do not perceive things as they are in themselves, but we perceive objects as the mind makes them to appear to us. With Kant, then, an object is not a thing in itself, but a phenomenon. Nevertheless, Kantian objects, or phenomena, are not mere seeming, not pure illusions. These phenomena have a reality which is relative to the universal human reason of which we have spoken, reason in this relation signifying the cognitive faculty. In contrasting phenomena and realities, Kant speaks of the latter as noumena. A noumenon is not an object; in fact, it cannot become an object of knowledge; it is "the idea of an object which is not an object of sense." Things-in-themselves, the superconscious Self, and God are examples of noumena. Realities are noumena; they are ideal objects and cannot become objects of sense; hence they cannot be known. That reality cannot be known, is a cardinal Kantian doctrine. What is more, according to Kant, knowledge gives us no warrant to assert that noumena really exist. It follows that, so far as knowledge goes, we may not affirm

that there is any real Self or World, or that God is. But it is also true that no man has warrant to deny their actuality; for, though the understanding does not give knowledge of what is not phenomena, it suggests the possibility of the existence of noumenal reality.

6. That Noumena are Real, not Simply Ideal. - The agnostic conclusion, that knowledge does not give warrant for asserting or denying the actuality of supersensuous reality, opens the way to the more constructive part of Kant's system. He insisted that the regulative Ideas of reason have a significance which calls for more than experience can supply. Reason, as "a higher function than the understanding," makes a demand which experience cannot satisfy; it demands more than the understanding can give. We are not bounded by experience, even though our knowledge is thus limited. We are conscious of ourselves; this is an assured fact. But the objects of the world of knowledge are not conscious of themselves. Kant held that the self of experience is a known self, not the knowing Self. The knowing Self is a superconscious Self, a self that is not known and cannot be known. that we are conscious of ourselves is an indubitable fact: and this fact shows that we are not shut up within the world of knowledge, that we are not mere phenomena. The noumenal Self is regarded as an actuality, even though it cannot be known. For we must assume that there is a knowing Self if we would render the fact of self-consciousness intelligible. We do not know this superconscious Self; but we posit, or affirm, that this ideal Self is a reality. Further, we act as well as know; and, in our acting, we judge that there is that which we ought to do. In this, also, we distinguish between ourselves and the objects of the known world; "ought" has no meaning for them. We are certain that we are subject to the moral

imperative, Thou oughtest. This law is universal and unconditional; and "it has no meaning unless I can do what I ought to do." The reality of the moral law is indubitable. But freedom is essential to the reality of the moral law; therefore we must believe that we are free. The free Self is a posited reality. Kant held that we do not know that we are free; for freedom is supersensuous and cannot be known. Nevertheless we affirm our freedom; it is an affirmation of faith. Faith is, with Kant, a rational belief; and, in the realm beyond sense, it is as universal and necessary a principle as the categories are in the realm of experience. Here Kant reached the end for which he set out. From the posited reality of the free Self, he argues to the existence of God and the immortality of the soul.

7. Mechanism and Teleology. - Kant holds that "the very nature of intelligence compels us to regard every whole in nature as . . . a mechanical system." He conceives such a whole to be an aggregation of parts which are externally joined and related. Objects and parts of objects are conceived as influencing other objects and parts of objects, from without. Hence every event in the world is known as the effect of a cause which is externally related to the object in which the event takes place. Nevertheless, Kant recognizes that this does not afford a complete explanation of the world of nature. He allows that the parts of organisms have their significance because of the idea, or significance, of the whole. In organisms, the whole appears as constituting the parts; they are, and they are what they are, because of their relation to an end, and that end is expressed in the whole. Kant argues that this demands a cause "that acts by ends, i.e. a will"; and he agrees that such a cause is not mechanical. He insists, therefore, that we are compelled to utilize the teleological conception in the explanation of organized beings; and that this forces us to conceive nature as a system in which changes are determined with respect to ends. According to Kant, this teleological conception does not come of sense-experience, neither is it a category; hence it is not an element of knowledge. It merely conditions our knowledge of nature. He holds, therefore, that all objects are, and must be, mechanically related and determined; but he concedes that the teleological idea is essential to the extension of knowledge and the fuller apprehension of natural objects and events. It is noumenal, however, and falls within the field of the reason as distinguished from the understanding.

8. His Dualism. — Despite Kant's insistence that reason demands a ground principle of unity, his system has many dualistic features.

Subject and Object. — He conceives the subject to be passively, as well as actively, related to the activity of the opposing object. The data which come to the understanding through the sensibility are set over against the understanding, as something foreign to it. The activity of the subject is related by Kant to something which is independent of the consciousness of the subject. There is a definite dualism in his conception of the superconscious and unknowable Self, as subject, and the empirical, or known, self, who is object. In his treatment, inner and outer experience appear as parallel kinds of knowledge, whereas his system should have led him to treat them as dual aspects of a unitary knowledge.

Phenomena and Noumena. — Kant presents two worlds for acceptance: the world of sensibility and the understanding, and the world of reason. The former is a world of phenomena; the latter is a world of noumena. The world of phenomena is known; the world of reality is

unknowable, it is a posit, or affirmation, of faith. The world of phenomena is constituted by us; the noumenal world conditions our thought. Man is of both worlds. As of the known world, he is under the law of necessity; as of the world of reality, he is free.

Perception and Conception. — Kant regards perception and conception as essential elements of knowledge, differing in kind, not degree. In connection with this sharp distinction between perception and conception, he relates the sensibility and the understanding to each other as distinct faculties. They are regarded by him as departments of mental activity, not as aspects of a unitary activity.

9. Summary. - Kant was a Realist in so far as he held that there are "realities which are independent of consciousness." He was an Idealist in so far as he taught that the mind contributes to the object, and that the external object exists only for a subject. His Idealism has a subjective cast; and, as he gives intelligence the primacy in his Epistemology, his system may be classed as Intellectual Idealism. Although he held that freedom, the immortality of the soul, and God are not objects of knowledge, he insisted that they have all the reality that may be ascribed to known objects. He established three facts: that self-consciousness and consciousness of object are inseparable; that the mind is active in perception; that the teleological conception is essential to Philosophy. He also served in directing attention to the synthetic activity of the mind, and in undertaking to give it critical and extended treatment. The synthesizing mind unifies the diverse elements of experience and makes the experience of the past an element in the experience of the present. By constituting a unitary experience out of elements which are diverse and which enter experience at

different times, it gives us a consciousness of self-sameness. It likewise presses us to seek a ground principle of unity for the World and the Self. His service to Philosophy is of incalculable worth; but he left the problem unsolved. According to his Epistemology, we know phenomena and only phenomena. The philosophers who followed him and who recognized the cogency of his reasoning were shut up to one of two positions: they must accept that all is phenomenal and that the noumenal is for exact thought a fiction; or they must show that reality may be known. He had separated the subject from reality. Rationality will not accept such a conclusion as satisfactory; and those who came after him sought to open a way to reality.

CHAPTER XI

IDEALISTIC RATIONALISTS (continued)

§ 45. Fichte. - I. His Motive. - Fichte's earlier philosophic thought was largely derived from Spinoza; but he was distressed by Spinoza's insistence that the universe including man is subject to necessity and that freedom is an illusion. In this particular, Spinozism seemed to him both unanswerable and unbearable. Kant's Critique of the Practical Reason gave him relief and turned the current of his thought. In Kant's system, he had found ground for asserting that man is not subject to the invariable law of the physical world. But he was dissatisfied with Kant's dualistic conception of necessity and freedom. According to Kant, the physical world is a realm of necessity; whereas the noumenal Self is of a world in which the order is free and uncaused. This gives us two antithetical worlds, each having its own principles and order; and man is in both. Fichte could not accept such a conclusion; he was too conscious of the reason's command that we seek a ground principle of unity, and he was too certain of the fundamental unity of all that is, to give full consent to such a doctrine. He insisted that one of these orders — that of necessity or that of freedom — is ultimate and, therefore, primal; and he felt that one of them must be reduced to the other. Ultimately he came to agree with Kant that the imperative, "Thou oughtest," with its implicate of freedom, is an indubitable fact. "That I myself am a freely acting individual must be the

fundamental thought of every true philosopher." But Idealism is in his view the inclusion of the phenomenal series within consciousness. This means for him that the necessitated series is an aspect of a series which is essentially free.

2. His Epistemology. - Fichte objects to the dualistic features of Kant's account of cognition - e.g. the sharp distinction between sensation and thought, and the assumption of things-in-themselves which are independent of consciousness and yet obtrude into consciousness. He, Fichte, had no need of the Kantian thing-in-itself, for he has the ego originate the process which gives sensations. He holds that the ego must act, and must act freely. The necessity that it act, is in its own nature; for it is only in acting that the ego can become - i.e. come into self-consciousness. The lowest form of this activity is unconscious, and the product of such activity is sensations. They seem to come from a source that is other than ourselves and to be thrust upon us, simply because they are our unconscious creation; but they really have their origin in us. He holds further that the ego in creating sensations has limited itself and has, in this self-limiting act, become self-conscious. Although self-consciousness is of the nature of the ego, we are only self-conscious as we distinguish self from what is not-self. In perceiving the sensation as other than itself, the ego becomes self-conscious and posits itself as real. In creating the non-ego, the ego gives it - the non-ego - space form and time form. Hence we know all objects as spatial and all changes as occurring now or then; and we can only know them thus. In all cognitive and practical dealing with objects, we find ourselves conditioned by space and time. Reflecting on the non-ego, the ego passes to fuller development of the non-ego in terms of the categories. In this higher stage, the self is still limited by what it has created; for the ego in all its dealings with objects is conditioned by their quality, quantity, etc. Thus the ego passes from sensation through perception and reflection towards complete knowledge. This higher knowledge is a completer knowledge of self and is attained through the ego's own activities. The highest stage for the finite ego is reached in the apprehension of the moral imperative; and here the ego is fully conscious of itself as self-determined. The world which is known in the process outlined above is the creation of the ego and exists only in the ego; and this is, according to Fichte, the one world of reality and knowledge. In short, the conscious self is the sole reality.

3. The Ego. - Kant distinguishes the empirical self from the superconscious Self. Fichte's Ego presents itself in two aspects: the ego which is limited by consciousness of the not-self, and the Ego which brings the not-self into existence and determines its characteristics. The first of these is the individual subject; the other is the Universal Ego which creates the finite ego, or individual subject. The finite ego is a self-limitation of the Universal Ego. The Universal Ego is the self of practical thought. We have seen that knowledge is knowledge of the ego itself and is attained by the ego through reflection upon its own activities; it is purely subjective. And since he holds that the Ego is the only reality, Fichte's reality is also subjective. His Idealism has, therefore, been known as Subjective Idealism. Nevertheless, the object - i.e. the not-self - has one characteristic of objectivity; it is object for all as it is for each. The world of objects is not the creation of the individual finite subject, but of the Universal Ego. This gives ground for universality in characteristics of objects and principles of cognition; they are created by one Ego and for one inclusive end. Fichte's Universal Ego is the Absolute, and is impersonal. This distinguishes it from Kant's superconscious Self, which is individual, conditioned, and personal.

- 4. His Teleology. According to Fichte, things do not come to be, neither do events take place, simply because something else is, or some other event has occurred. All things and events are linked to the ego; but the linkage is not external and mechanical. The bond which unites things and events is immanent; it is the purpose of the ego. The world which we create and know, is created in order that we may perform our task, in order that we may do our duty.
- 5. His Idealism. We have said that Fichte's Idealism is subjective. It is also distinctly ethical. Moral obligation is at the foundation of his system. For him the characteristic spiritual quality of man is will, not intelligence. The end of man is the performance of his task. In this, as in the attainment of knowledge, man is limited by the not-self. We can neither know anything nor do our work apart from the not-self; nevertheless the not-self limits our knowledge and thwarts our performance. Hence life is a continuous struggle. The process is unending; but virtue and development are in the striving.
- § 46. Schelling.— I. His Statement of the Problem.— In his earlier philosophical studies, Schelling was greatly influenced by Fichte; in fact, he at first adopted Fichte's system, and he began a work which was to supplement what his master had done. But he was from the first much disturbed by a feeling that Fichte erred in not recognizing the reality of the world of nature; and ultimately he became convinced that Fichte's conception of the object as a purely subjective product does not properly interpret nature. Schelling was certain that "there exist

things outside of us," and that what is thus objective is not the product of the subject. Being assured of this, he made it his task to construct a philosophy which would recognize the reality of both matter and mind, subject and object. His thought was in constant change, and his views at different periods of his activity were by no means consistent; nevertheless he was true to his purpose through all these changes.

- 2. Matter and Mind. Fichte begins with mind and ends with mind; Schelling begins with unorganized matter and represents the human organism as evolved from unorganized matter. During this evolution, spirit enters into immanent relation with what is evolved, and does this in ever increasing degree. With him, matter is not inert, it is unconscious activity of spirit; it is the lowest expression of spirit, spirit's expression of itself to the senses. From unorganized matter, he would pass through the plant and animal until we have in the brain of man the highest product of matter. Schelling regarded spirit as invisible nature. What is subjective is the invisible expression of spirit; and in man the increasing immanency of spirit in the higher evolved products of matter issues in perfect ideality. Objectively regarded, man is the perfected evolution of matter; subjectively regarded, he is ideality perfected. The objective world is a manifestation of spirit, the same principle whose activity is the inner world of experience. The same spirit is in man and nature. Since matter and mind, man and nature, have the same root, they are not alien to each other.
- 3. His Absolute. The ground principle of unity is denominated by him the Absolute. In his earlier thought, he conceives the Absolute to be distinctionless. No attribute may be affirmed of it; it is neither matter nor mind, subject nor object; it is mere self-identity. The Absolute

and the universe are simply two "aspects of one and the same thing." Later, however, in his Philosophy of Religion, he recognizes a personal God.

- 4. Knowledge and Reality. According to Schelling, there is no thing-in-itself from which the knowing subject is cut off. The known world is a world of reality, not a world of phenomena. In this he breaks with Kant. Nevertheless his conception of the ultimate reality the Absolute as he termed it makes it unknowable. It may not be said to be of any kind, for it is distinctionless. What is not of any assignable kind cannot be known. Kant's limitation of knowledge arises from the limitations of our mental constitution; Schelling's comes of the conception of the Absolute as being without distinction.
- 5. His Ideal sm. With Schelling, the highest expression of reality is in genius; the highest objective expression is in art. Kant's Idealism is intellectual with subjective features; Fichte's is subjective and ethical; Schelling's is objective and æsthetical.
- § 47. Hegel.— I. Nature of Reality.— We have said that Idealism conceives reality as being with meaning. Thus in the illustration which we have so often used—that of the horse running away—the reality of that moving mass was for you inseparably associated with its meaning. That object from which you ran was not a mere that without significance; it was for you an embodiment of danger. The idea of which it was the expression was an essential element of its reality. Hegel calls attention to the fact that "reality" is used in two relations. When a man's purpose—e.g. to found a hospital—has been carried out, that man's idea has had expression given it. The hospital, as a reality, is the expression in actual being of the founder's idea. The hospital is the idea realized; in that institution, the idea of the founder has come to

concrete objectivity. This is "reality" in one of the two relations noted by Hegel. If we should say of the institution, "That is a real hospital," we would indicate by that statement that the institution completely expresses its own ideal nature. This is "reality" in the other relation. We see that "reality" is in both relations the correlate of "ideality." In other words, reality is the concrete expression of ideality, and ideality is the essential nature of reality. An object is actualized — i.e. realized — idea; and reality is significant being. In keeping with this, Hegel held that "all reality is rational." By this he meant that the essential nature of all reality is kindred with mind.

2. Ultimate Reality: The Absolute. - From this it follows that, for Hegel, ultimate reality is rational. Because he so conceives it, he speaks of it as the Absolute Idea; for in his thought the Absolute is unconditioned reality. In characterizing the ultimate reality as the Absolute, he means that it is self-subsistent and selfexplanatory; its reality is complete and underived. But to understand what he means by the Absolute Idea, we must also note his conception of rationality. The term "rationality" is usually restricted in its application; for it is generally taken to refer solely to man's intellective capacity, to his faculty for framing judgments of truth. In other words, when men speak of "rationality," they do not as a rule include the willing and feeling functions in their thought. And the term "thought" generally suffers a similar restriction, for it is usually assumed to denote merely the intellective activity, or that which is the product of purely intellective activity. But these terms and the ideas to which they correspond are not so restricted by Hegel. He believed that the mind acts as a unit, and that will and feeling and the understanding,

or judging activity, are not really distinct forms of activity, but are three inseparable aspects of one activity. For reasons which seemed good to him, he assigned to the terms "rational" and "thought" a wider meaning than that usually given them. He would include in the single term all three aspects of mental activity. Hence, in speaking of the ultimate reality as the Absolute Idea, he means that the ultimate reality is rational in this inclusive sense. He proves to his own satisfaction that the Absolute is Person and is One. In his conception of the Absolute, he differs from both Fichte and Schelling. Fichte's Absolute is impersonal; Schelling's Absolute is distinctionless and undefinable, no attribute may be assigned to it; hence it may not be thought of as having personality. Hegel insisted that an undefinable Absolute, or Pure Being, is pure nothing. With Schelling, mind and nature, as distinguished, are wanting in the ultimate reality; in Hegel's conception of the ultimate, mind (or Spirit) has supremacy over nature.

3. The Absolute as the True Universal. — For Hegel, the universe is a setting-forth, or an expression, of the Absolute Idea. Every particular of nature and history, every object and every event, is a manifestation of the ultimate reality. No particular is a complete actualization of the Idea; but it is a true realization of the Idea for that particular's place and part in the system. From this it is evident that, in Hegel's view, the Absolute Idea is the only true, the only complete, universal. In this he advanced beyond Aristotle. According to Aristotle, the universal which thought discovers — e.g. "man," "horse," or "dog" — is concrete in the individual, i.e. in the individual man or horse or dog. The Aristotelian universal has no reality except as it is actualized in the particular; and it is real in the particular as the essence

of it. From this it follows that there is for Aristotle no particular which is a mere particular; for its essence is a universal, and it is itself the realization of a universal. But Hegel insisted that such universals or ideas are only partly true to the essential nature of objects. Such universals include the likenesses of individuals, but they have no place for the differences. He held that the whole nature of every object, what is revealed in the differences as well as in the likenesses, is the manifestation, or actualizing, of the true universal. From this it follows that, for him, the universal is not a mere distinctionless identity; it is many in one, diversity in unity. In an organism, the idea which is the universal -i.e. the essential nature - of each of the parts as parts of the organism, completes itself in the harmonious diversity of the parts. For example, the idea of the body of a man taken as a whole is the idea of each part of the body as a part of the whole. As the universal of the body, it includes, and thus unifies, the parts. In a word, Hegel's Absolute is the complete universal in which all likenesses and differences are immanent.

The Categories. — From the preceding it appears that with Hegel the true universal is mind (or Spirit), and that every particular is a finite expression of this universal. In his view, therefore, the essential nature of every object is constituted by mind. Hence, whatever is true of rationality is true of reality; and in whatever measure any object is a manifestation of reality, in that measure will it have the characteristics of reason. This leads him to differ from Kant's conception of the categories—relation, quality, quantity, etc. For Kant, they are not characteristics of reality, but are imposed by the subject upon sense-perceptions. According to Hegel, they are not mere processes of thought, they are characteristics of

objective realities; every object is a concrete identity, and the categories are diverse aspects of it.

4. Knowledge and Reality. - According to Kant, we know phenomena, and only phenomena; we do not, and cannot, know reality. Hegel held, on the contrary, that reality is cognizable; and he offered incisive criticism of Kant's agnosticism and proffered extended argument in support of his own doctrine. Kant's doctrine that there are things-in-themselves which are independent of cognitive consciousness, is vital to the Kantian system. Fichte and Schelling had rejected this Kantian conception; Hegel contended that it was inherently inconsistent. He calls attention to the fact that Kant conceives these thingsin-themselves to be causes of sensations. In conceiving them thus, he relates them to the consciousness of the subject through the sensations. These sensations enter into consciousness as content of knowledge, and by that much the things-in-themselves are not of a world which is independent of the subject. He argued further that we cannot affirm such realities without giving them some characteristics which relate them to consciousness; we at least think of them as conceivable entities. Hegel conceived the universe as a system, and all objects as particulars of the system and so related to each other. For him, no object is what it is, no object even exists, by and for itself; its existence is only possible through its relation to other things, through its relation to all the particular realities of the system. The conscious subject is one of these realities; in fact, the conscious subject is that for which the object exists. The end of the object is the fuller life of the subject; and, for the development of the subject, it must be in relation to consciousness. In the development of the life of the subject, the ideality of the object is realized. For such reasons, he refused to accept the

doctrine that there are realities independent of consciousness.

Limitations of Knowledge. - Hegel agreed with Kant and Schelling that knowledge is subject to limitations, but he differed from them as to what sets the limitations. Schelling found the limitation in the nature of the Absolute. He held that we may not give the Absolute any attribute, hence it cannot be known. Kant found the limitation in the nature of intelligence. Hegel found it in the limited nature of the object when apprehended apart from the world system. No object by itself expresses the whole of itself; no object in any single relation fully expresses its reality. To separate the arm in thought from the body is to exclude from thought what is essential to the meaning, and hence to the reality, of the arm. The significance of a book to the author is not the same with its meaning to the publisher or the reader. Its complete reality is not expressed in any one of these relations. Knowledge is subject to limitations; but it is not limited, according to Hegel, because intelligence is incapable of apprehending reality; it is limited because the whole of reality is not expressed in any one relating of an object. Nevertheless, what we apprehend is reality.

5. Identity of Subject and Object. — What did Hegel mean by asserting the identity of subject and object? Of course he did not mean to affirm that they are spatially one, that you and the building which you perceive are spatially identified. Kant opened the way toward Hegel's view by distinguishing between externality for consciousness and externality to consciousness. Objects known through sense-perception are known as "out from," or external to, each other; they are for consciousness external to one another. And, if the subject be regarded as an object among other objects, the other objects appear "out

from," or external to, the subject; that is, they are external for consciousness. But these objects are actually perceived; hence they are not wholly apart from consciousness. In some very real sense they are not external to consciousness, but are in consciousness. Since Hegel believed that every object is in its essential nature constituted by mind, and is in nature one with mind, it would follow for him that the essential nature of objects is not subject to spatial limitations. There is no spatial apartness to ideas; they do not displace one another. The same idea may be in the mind of any number of subjects; the same meaning may have expression in many particulars. An object — say a book — is for itself the idea which it embodies: and it is so much of the Absolute Idea as it expresses. The degree in which it embodies the Absolute Idea is the degree of its reality. Now, assume that you know the book, that you have to some extent come into possession of its contents. So far as you have made its contents yours, that far the book is for your consciousness what it is for itself. In that degree, the object as it is in itself is also in your consciousness. If the book should become for your consciousness all that it is for itself, then its reality would be wholly realized in you. In that case, the identity of yourself as subject and the book as object would be complete; it would have no externality for you. Complete knowledge means complete identity of subject and object. Complete identity is only attained in selfconsciousness. In self-consciousness, self as object presents no externality, no aspect of apartness, to self as subject.

6. The Self. — Hegel held that the self is freely self-determined; and he agreed with Kant that the self is more than the conscious self at any moment. He submitted self-consciousness to an exhaustive analysis; and,

as a result of this study, he arrived at the conclusion that "all consciousness is an appeal to other consciousnesses" than the consciousness of the instant, or of the private self. Thus, the knowledge which we have of ourselves at any moment is really knowledge of what we have been, not of what we are in the instant of knowing. It may be knowledge of just the instant previous; it may be knowledge of some time farther in the past. But this much is certain: you may at some future moment know by reflection what you are now, but you do not know in this instant what you are in this instant. Not only is this true; but no self is a real self when isolated from other selves. To think of a person as separate from his relations to others is to separate him in thought from much of his real self. The idea of personality includes the social virtues; these virtues have no significance, and can have no expression, apart from social relations. Hence the real self is an actual social self. In short, Hegel taught that the real self is more than the conscious self of any instant, more than the self of one's private individual experience.

7. Conclusions. — There are few, if any, students of Philosophy who agree wholly with Hegel in his application of the principles of his system; and there are not many who accept his reasoning in all instances as conclusive. But not a few men of repute in philosophic circles believe that he, in principle, gave the final answer to some questions, and that he indicated in general the true course for Philosophy. They would hold that he established certain facts, of which we note only four. First, the unity of subject and object is the point of beginning for Epistemology; to separate subject and object is to destroy experience and make Philosophy impossible. Second, judgment in the same instant unites and distinguishes subject and predicate, object and characteristic; i.e.

synthesis and analysis are aspects of an irresoluble activity. Third, perception and conception are not distinct activities, they are inseparable factors of a unitary activity. Lastly, we know reality. We have called attention to particulars in which Hegel differed from Kant; but it must not be thought that their systems are so fundamentally opposed as these references might seem to indicate. On the contrary, sympathetic students of both systems insist that Hegel developed the Kantian principles, giving them proper criticism and correct statement. hold that Hegel's doctrine tends to unify our conception of the universe by reason of its more inclusive and consistent application of Kantian principles. For example, Kant saw that his mechanical conception of the world was defective; but he so qualified his recognition of this defect as to leave his known world a world of externally related objects and mechanically related events. Hegel's system, Kant's acknowledgment that the teleological conception is essential to an intelligible understanding of experience has its realization in the acceptance of the teleological relation of universal and particular, and in the doctrine that all processes are really immanent and developmental, and not mechanical. The inclusiveness of his thought is seen in the fact that the relation of the concept, or universal, and the object is at once logical, teleological, and essential; and the universal is conceived as the source of differences as well as likenesses. In this we have the Socratic, the Platonic, and the Aristotelian views included, with advance beyond Aristotle. Hegel's system is generally known as Absolute Idealism.

CHAPTER XII

REALISTIC RATIONALISTS; LATER EMPIRICISTS

§ 48. Realism. — I. Definition. — The German historians classify the various systems of Philosophy as Idealistic and Realistic. The preceding chapter has introduced us to Idealism; we come now to the consideration of Realism. Idealism holds that subject and object are interdependent realities; Realism insists that they are independent realities. From the fact that the horse from which you fled existed before you saw it and continued to exist after you ceased to see it, Realists argue that objects are in no way affected by being known or ceasing to be known. If ideas should vanish, it would make no difference to objects; such is the conclusion of Realism. But it is doubtful if any Realists would agree to the converse statement - if objects should vanish, ideas would remain unaffected. From this it would appear that the subject is recognized as in some degree dependent upon the object. Hence the description of Realism given above should be further defined. What Realism insists upon in respect of subject and object is that the reality of each is in no way dependent upon its being related to the other. In other words, the reality of any particular - any subject or object - is wholly independent of the subjectobject relation. The question, then, that remains to be answered is, What do we mean by reality? What is it for any thing to be real? A further difference between Idealism and Realism develops from the realistic

doctrine of a world constituted of objects which are independent of relation to a subject. This doctrine is that the independent objects of the external world awaken ideas in us. The cognitive process is believed to originate thus.

- 2. Kinds of Realism. The various forms of Realism may be reduced to two types: Representative Realism and Presentative Realism. According to the former, the tree which you perceive, by its action upon your senseorgans, awakens in you an idea which is an image of the tree; some, however, regard the idea as a symbol of the object. But all Realists of this class would agree that what you perceive is not the tree itself, but an ideational representation of the tree. Duns Scotus, William of Ockham, and Locke are examples of philosophers who held a doctrine of Representative Realism. Presentative Realism is the doctrine that through the action and reaction of the independent subject and object, the subject has an immediate perception of the object, without the mediation of an intervening idea. That is, you perceive the tree, not a state of consciousness, not some idea which is in some way a representation of the tree. Reid and Hamilton, whose views will be stated later, are examples of teachers who claimed to be Presentative Realists. At the present time there is a revival of Realism; and the proponents of the New Realism believe that their Realistic doctrine is free from the innate weaknesses of Representationism. In its latest form, it is spoken of as the New Realism or Critical Realism.
- § 49. Realistic Rationalism.— I. Rise and Characteristics.— Idealistic Rationalism arose in Germany through Kant's recoil from Hume's scepticism; Realistic Rationalism arose in Scotland at the same time and from a similar impulse. Reid, a contemporary of Kant, had

accepted Locke's presuppositions and had also virtually accepted Berkeley's conclusions. But the sceptical doctrine which Hume so incontestably drew from Locke's and Berkeley's principles forced him to reëxamine his philosophy. As a result of this study, Reid insisted that philosophers had erred in assuming that "all the objects of knowledge are ideas" in the subject's mind. In order to combat this error and to lay the foundation of his own philosophic faith, Reid undertook the study of senseperception. He and those who adopted his principles believed that a true theory of knowledge could only be found thus. Hence they sought a description of the cognitive process, instead of endeavoring to discover the significance of experience for questions respecting itself and the world. In other words, they took a psychological, and not a philosophical, point of view. In fact, Hamilton - usually accounted the most notable of the Scottish school - insisted that Psychology is synonymous with Philosophy. Realists have generally approached Philosophy through Psychology; and they have been inclined to state the problem of Philosophy as the giving of a reasoned account of the process in cognition, and they have tended to ignore, or exclude, questions respecting the nature of reality.

2. Views of Representative Teachers.—(1) Reid.—Reid believed that Hume's philosophic doubt came of the assumption that the immediate objects of perception are ideas of external objects, not external objects themselves. This assumption shuts the subject up with himself; if there were an external world, no one could know it, and the subject has no rational ground for asserting that any reality besides himself exists. Reid desired to set the subject free and to bring him into immediate relation with the object. He held that in perception we come into im-

mediate relation with the object which is in presentation, and that the reality of the object is not dependent upon its being perceived. According to Reid, the unit of knowledge is a judgment, not a particular impression or an idea. He also held that "all knowledge must be built upon principles which are self-evident," and that the subject in judging organizes sensations according to these principles. "Judgments of existence, substance, quality," etc. - Kant's categories - " are implied in the judgment unit." Except for his assertion that the subject is in immediate relation with the real object, this is very much like Kant's teaching; the resemblance to Kant's doctrine of the categories and the synthetic activity of the understanding, is obvious. Reid's criticism of Representationism — a theory held by Idealists as well as Realists - may be regarded as final.

(2) Hamilton. — Hamilton's philosophy contains Kantian elements. He held that the reality of the external world is independent of its being an object of consciousness, and that the mind is "the universal and principal concurrent cause in every act of knowledge." So far he is in virtual agreement with both Reid and Kant. Beyond this he parts from Reid, for he holds that "the immediate object of perception is some quality of the organism" of the subject, and not the thing which is apprehended; and he differs yet more in what is known as his doctrine of the Relativity of Knowledge and the Philosophy of the Unconditioned.

Relativity of Knowledge. — With Hamilton this doctrine signifies that we do not know any object out of relation to other objects. Thus, that chair is known for itself as being like other objects and different from them, as related to them in space, as "before" or "behind," as "larger" or "smaller," etc. This doctrine of the

Relativity of Knowledge is to be taken in conjunction with his insistence that we do not know objects, that we only know their phenomenal states. This is true not only as to objects of external perception, but as to the self. The known self is for Hamilton a phenomenal self, not the real self; so also is the known world a phenomenal world, not the real world. The influence of Kant is evident.

Philosophy of the Unconditioned. — Hamilton argued that to think anything is to condition it; and from this he concluded that we cannot know the infinite; hence God is unknowable. This limitation of knowledge is due to the weakness of our faculties. He, nevertheless, held that we have grounds for a rational belief in the reality of the external world, and the self and God.

3. Relation to Other Schools. — The Scottish Realists are Empiricists in that they undertake to ground Philosophy in the Psychology of cognition. This would class them with Locke and Berkeley. Berkeley is an empirical Idealist; the Scotch Realists are empirical Realists. Their empiricism explains the sympathetic attitude of the Later Empiricists toward them. But Reid and Hamilton are Rationalists in that they find the constitutive factor of knowledge, not in sense-data, but in the rationality of the subject.

Later Empiricists

§ 50. General View. — Hume's Empiricism is rooted in the older Associational Psychology; and the Later Empiricism is based upon that same Psychology somewhat modified. This Psychology undertook to construct a theory of perception; and in that theory it gave to the doctrine of the Association of Ideas a place analogous to that which Kant assigns to the synthetic activity of the mind in his Epistemology. Empiricists,

beginning with Hume and some of the Scotch Realists, adopted this doctrine as the basis of their Philosophy. Kant has sensibility and the understanding order the sense-data and thus constitute objects and construct knowledge. According to the Associational Psychology and the Philosophy which is based upon it, the sense-data order themselves and thus constitute knowledge. These data are conceived to be disconnected units, unchangeable in their nature and, in the later form of the doctrine, of one kind; and every sensation, feeling, or idea is a group of these units. This school in Psychology holds that sensations, feelings, or ideas which occur once in connection or close succession, tend to grow together and so form a larger complex unit; and the subsequent occurrence of any one of the components of this complex unit tends to call up the other components. Thus, the word "house" and the idea of an external object of a certain general character have been connected in our experience; and, if either is presented in consciousness, the other is associated with it in consciousness. Similarly, also, the sight of a horse running away is associated with the idea of danger to any one who may be in the course it is taking. What we have thus described and illustrated is known as the law of the Association of Ideas. Hume and the Later Empiricists held that all the products of mental life, all the particulars of consciousness, are constituted by this mechanical ordering of the disconnected units of sensedata. In the extreme form of Empiricism, there is no place for a rational factor in cognition; knowledge is, as to both content and form, a datum to the subject. Hume has ideas relate themselves by this law to other ideas; but the Later Empiricists found it necessary to recognize a rational factor. The doctrine of association which we have presented above is to be distinguished from the

conception of association which is held by most psychologists now. The earlier conception of it was that it was explanatory of all forms of consciousness. But this view is now generally discarded; and psychologists are inclined to regard association as simply one kind of mental reaction, and as a mode of activity which needs explanation and is, therefore, incapable of explaining experience in general.

These thinkers agree in holding that we only know phenomena. Realistic Rationalism is peculiarly a Scottish philosophy; Empiricism is peculiarly English, although one Scotch thinker — Bain — and one French thinker — Condillac — adopted it. Scotch Realism and English Empiricism differed fundamentally in this, that Realism had a definitely rationalistic cast and Empiricism was just as certainly a form of sensationalism. But they were in accord at one point: both believed that the key to Philosophy would be found in Psychology. Scotch Realists gave impetus to the study of Empirical Psychology, and some of them — as Brown — were hearty in their support of Associationism.

- § 51. Specific Views of Later Empiricists. We will only consider two representatives of this school John Stuart Mill and Herbert Spencer. Spencer is not easily classified; we place him here, however, because of his methods and his immediate philosophic affiliations.
- I. Mind. Mill held that mind is "a series of feelings with a background of possibilities of feelings." The psychical unit for him is a feeling; and Spencer also reduces all forms of consciousness to simple feeling. Sensations, feelings, and ideas are said to be constituted of feeling units in various combinations. The groups of units which constitute sensations, emotions, and ideas are composed of units which are held by us in "inseparable association"

through their constant conjunction in experience. This "inseparable association" in experience is declared to be their only bond. Mill recognizes that it is difficult to reconcile this view with self-consciousness. He acknowledges that we are driven to believe that a series of feelings can be aware of itself, or that the mind is something different from the series of feelings.

- 2. Knowledge. Mill declared that we only know particular phenomena; the universals of geometry may not be true in another world. We say that two straight lines cannot enclose a space; but Mill held that it is not impossible they should. It only seems to us impossible because two straight lines and the non-enclosure of space have always been associated in our experience; and this "inseparable association" makes it impossible for us to conceive of two straight lines enclosing space. The notion that 3 plus 4 equals 6 is not inherently contradictory; it appears contradictory to us because 3 plus 4 and 7 have always been associated in our experience. All so-called universal truths are for Mill simply instances of "inseparable association." Spencer says that what is "primarily known is . . . that there exists an outer object." This seems to be a definite affirmation of immediate, not inferential, knowledge of external objects. But he says elsewhere that "we can know only certain impressions produced on us," and that we are "compelled to think of these in relation to a cause," and from this there develops "the notion of a real existence which generated these impressions." It is difficult to reconcile these two statements: that we know the external object primarily, and that we can know only impressions.
- 3. Relativity of Knowledge. We have made mention of Hamilton's doctrine of the Relativity of Knowledge. Spencer gave this doctrine a development peculiar to him-

- self. He held that to know is to limit or relate. Thus, in knowing this desk, I separate it from a whole which is left unrelated and unlimited. This desk is for me, therefore, a limited and related part of an unlimited and unrelated whole. Now, this whole, being unrelated and unlimited, is unknowable. From this it follows that this desk—so also any other object—exists as a part of an unknowable whole. There must be an unknowable that there may be a known object. The objects of science are, according to Spencer, known but unreal; the objects of religion are real but unknown.
- 4. Objective Reality. According to Mill, extra-mental existence is actual, but it cannot be known. Spencer affirmed that subject and object, mind and matter, are absolutely distinct, but are identical in nature. We can never know what that nature is. In holding to the independent reality of the object, he is a Realist; but in defining reality as persistence in consciousness, he would seem to be an Idealist.

CHAPTER XIII

PHILOSOPHIC THOUGHT OF TO-DAY

§ 52. Questions settled; Points of Difference. — Our study thus far is a general characterization of philosophic thought up to the latter part of the last century. such a statement of Philosophy's own report of itself as comes within the purpose of this Introduction. At the present time, systems and theories are undergoing vigorous In the nature of the case, a period of criticism cannot be readily defined. We can do no more than suggest points of general agreement and indicate some of the outstanding features of philosophic discussion. There is general objection to any theory of Knowing which does not give the subject grasp of trans-subjective reality. An Epistemology, which does not connect the subject with what is other than the mere product of his own mental activity, is spoken of as subjectivistic; and to prove conclusively that a theory of cognition is subjectivistic would mean its rejection by teachers of Philosophy. There is a like accord in the rejection of an Epistemology which obviously makes knowledge a mere datum to the subject. In other words, Sensationalism is a theory whose history is complete. If one should also say that Representationism has had its day, and that its record is closed, there would be few to demur. One of the fundamental questions concerning which there is sharp difference at present may be stated thus: How, and to what extent, may Philosophy keep in touch with the concrete? It has been charged against Philosophy that it is apart from life, and that it concerns itself with the abstract, with mere fictions which are little, if any, more than empty names. If this be true, the mother of the sciences has forgotten her mission; for it is the task of Philosophy to help us discover the nature of the realities with which we are in constant commerce. These realities are concretes, and we must never get out of touch with them. What it means for our study that we avoid abstractions and keep in the realm of the concrete, will become evident later. Another question arises from two demands which are certainly not easily reconciled. One of these is the demand of reason that we shall not give over the endeavor to ground all the particulars of experience in a fundamental principle of unity. It is generally recognized that Kant was right in regarding this as an insistent demand of reason. The urgency of this demand is manifest in the unremitting endeavor of Philosophy to find an ultimate reality which shall be the ground of all being and activity. But it is charged against Monistic systems — i.e. systems which derive all phenomena from a unitary ultimate — that they rob the individual subject of his individuality. Now, if reason demands a unitary ground for all experience, experience just as certainly demands that our free initiative — an essential of personality — shall remain inviolate. Philosophers are not yet agreed as to these demands and their possible reconciliation. A third leading particular of difference arises from this question: How may we construe experience so that rational activity shall always be recognized as inseparably intellective, emotional, and volitional? How shall these phases of mental activity be related to each other and to life activities in general? Some have given primacy to intellection, others to volition, still others to feeling. How shall these differences be settled? A conclusive answer to this question would mean much for philosophical theory.

Idealism and Realism continue to represent opposed views: but the matter of difference is not what it was at the beginning of the Modern Age. They differed then as to the source of knowledge. Idealism believed that the source of knowledge is in the subject; Realism would find it in the object. Realism now agrees that there is a subjective element in knowledge; and Idealism - Personal Idealism possibly excepted - holds that there is an objective element in knowledge. The difference at present is in respect to the relation of subject and object to each other, and the position to be assigned experience in constructing Philosophy. The Realist would begin his Philosophy with the subject and object conceived as independent realities. The Idealist insists that we do not know, and cannot conceive, subject or object apart from experience; therefore, since Philosophy deals with subject and object, it must begin with experience and never break with experience. Or the Idealistic doctrine may be stated thus: Experience is constituted in the subject-object relation and cannot continue apart from that relation; hence, if our analysis gives us subject apart from object, or object apart from subject, we have no experience left and nothing with which to construct a Philosophy.

There is urgent advocacy of Personal Idealism and Pragmatism. We cannot at this point give a detailed statement of these theories; what follows will serve our purpose. Personal Idealism is the theory that "all reality is in souls and their experiences." It is evidently a form of Berkeleyism. Pragmatism — known also as Humanism and Radical Empiricism — has able proponents. This theory agrees with Idealism in asserting the

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interdependence of subject and object, and it agrees with Realism in holding that only the particular is real. Its Empiricism is shown in its insistence that a large element of knowledge is a mere datum, a something which cannot be subjected to the forms of knowledge.

CHAPTER XIV

THE PROVINCE OF PHILOSOPHY

§ 53. Historical. — Ancient Philosophy dealt with all questions raised by cultured thought; it investigated the whole system of things, man included. It gives us Metaphysics, Cosmogonies, Theology, Anthropology, Psychology, Ethics, Logic, Æsthetics, Politics, Mathematics, Physics. In the Aristotelian period of Mediæval Philosophy, Mathematics and the Natural Sciences began to be cultivated apart from General Philosophy. Later, the Arabians and Jews, having become acquainted with the works of Aristotle, pursued philosophic studies with ardor, but gave special attention to Science. Still later, there appeared Christian thinkers in this distinctive field of study, notably Roger Bacon and Copernicus. In respect of time, Francis Bacon marks the close of the Mediæval Age and the beginning of the Modern; but his scientific method and spirit are characteristically modern. Bacon the line of scientists has been unbroken. He regarded his work as Philosophy; and it is certain that he greatly influenced philosophic thought. It is also true that modern philosophers have forwarded the scientific movement. Some, as Descartes and Leibniz, were themselves notable scientists; and the more pretentious systems of Philosophy have sought to relate themselves to the whole range of cultured thought. Hegel's work was encyclopædic; and the same might be said of that mapped out by Spencer. But until relatively late, there has been

no urgent insistence that a separate realm of thought should be assigned to Science. At present, however, philosophers of widest range of work recognize that there is ground of distinction between Science and Philosophy.

§ 54. The Plain Man and the Scientist, or Common Sense and Science. - Our earliest view of the world and life is the uncritical "common sense" view; and that is the conception which most, if not all, of us have of experience. Relatively few men have given their opinions concerning the ordinary and commonest experiences severe and methodical criticism; and still fewer have undertaken to organize their views into systems of thought. Nevertheless, the general dissemination of scientific education and the scientific spirit of the age have given the Plain Man something in common with the Scientist. The boy says that the apple fell because the stem broke; but, if he is pressed to explain why it fell when the stem broke, he will say that the earth attracted it. He has learned so much as that at school. The illiterate dweller by the sea says that the moon causes the tides; and he says that, not only because he has heard that such is the case, but because he has noticed that the tidal movements and the changing and rising of the moon occur in close connection. The view of the Scientist is virtually the same with that of the boy and the shoreman; but he would state it differently. The Plain Man has not given the views which he holds in common with the Scientist the rigid criticism and the extended application that the Scientist has given them. The Scientist not only refers the falling of the apple to the influence of the earth, but he adds to this the statement that the earth is influenced by the apple; and in addition to this he will give the law which determines the relative measure of their influence. He will likewise set forth carefully elaborated reasons for what he says respecting

the falling of the apple and the relation of the moon to tidal movements; and he will explain apparent exceptions and irregularities. He will also show how the succession of night and day, the changes of the moon, and the changes in the location of groups of stars are related to the falling of the apple. Beside this, the Scientist will generally report facts with greater exactness, for he has been trained to observe. In a word, Science gives our knowledge greater accuracy, and it systematizes and extends it. Special training in interpreting observations and making calculations, the accumulated body of critical observations which are at hand, and the invention of instruments and development of methods enable the Scientist to correct and extend knowledge.

§ 55. Science and Philosophy. — All our knowledge of ourselves and the world comes to us through our experience of the world of persons and things and events. Science enlarges experience and gives it definiteness. Having noted so much as this, we undertake now to distinguish the field of Science and the province of Philosophy.

In the case of the falling apple, Science deals with the process, or event, and the objects involved in it; and that is true of all its thought. Objects and changes make up the subject-matter of Science. The term phenomena has come to be used of the particulars of its subject-matter; it is applied both to objects and changes. With this in view, we may for the present say that Science studies phenomena; it endeavors to relate phenomena to each other. For example, it tries to discover how the moon and the tides and their changes are related; in other words, it would find the order of their related changes. To take again our former illustration, Science undertakes to discover in what way your hearing the noise and seeing the horse and fearing and fleeing are related to one another.

To begin with, it assumes that these changes in your consciousness are related to phenomena which are external to you. Science does not ask after the nature of the reality whose phenomena, or appearances, it studies; it does not inquire as to what stuff it is made of. It merely studies the way this assumed reality behaves. Also, when Science concludes that the changes in the moon are causally related to tidal movements, it is not required to go farther and explain the nature of causal connection, to state what it is in either the moon or the sea or both that links them. It accepts that phenomena - as a running horse, or darting flames - have meaning for you, and it classifies the changes in your consciousness attendant upon your discovery of meaning in phenomena; but it does not inquire as to what must be your essential nature that you should find ideas in things and happenings, or what the nature of phenomena is that ideas should be found in them. Philosophy recognizes that reality in you finds expression in consciousness of yourself and of the external world, and that reality in the world of nature expresses itself in filling space, in being extended; and it seeks to know how it is that your reality, apparently so different from that of things, can have commerce with things. It asks after the essential nature of reality in mind and reality in matter, reality in the subject and in the object.

Science employs certain concepts in its thinking and its descriptions—as atoms, electrons, energy, space, time, etc.; and it treats them as real. It assumes that there is an external world, that changes in nature follow a fixed order, and that every event is determined by an antecedent event. Philosophy criticizes these, and all other, assumptions; and it inquires into the reality of all concepts.

Science is of course a general term for the many special sciences, each of which studies a certain group of phe-It groups, and thus classifies, its objects according to discovered likenesses. Botany, for example, groups its objects into families, genera, species, and varieties. Science also notes likenesses of conditions and results; and by its study of these likenesses and results it is enabled to state the conditions under which certain events will take place, or it can predict what will result from a given set of conditions. Thus, it is said that a low barometer generally presages a storm. These discovered relations of conditions and results, when formally stated, are known as scientific laws. Now, the findings of some of the special sciences can be to some extent related to one another; as in the instance of Biology and Physiology and Botany. But it is not the task of Science to complete the relating of the work of the special sciences; it leaves us with unrelated groups of related objects and processes. It is the task of Philosophy to relate all particulars and groups to the whole of all that is; it sets out to make it plain that all-that-is is a rational system. Each special science tests its conclusions by their consistency with all that falls within the province of the special science itself and of those more immediately related to it. Philosophy criticises all processes of thought, even its own; and it tests conclusions by their consistency with the whole of experience.

§ 56. Descriptive and Normative Sciences. — In what precedes we have had in mind sciences which give us conclusions as to what is; they describe objects and processes and are, therefore, known as Descriptive Sciences. There are Sciences, however, that do not merely describe actual objects and state the fixed order of change in nature. These other sciences come of the fact that we judge opin-

ions as true or false, and conduct as good or bad, and products — as those of nature and art — as beautiful or wanting in beauty. In these judgments, we set value on what we have under consideration; and we determine its worth by applying standards of truth or goodness or beauty. That is, we judge what is by comparing it with what ought to be. These sciences apply ideal standards to conclusions and conduct and objects; they determine the value of phenomena in respect of truth, goodness, and beauty. They seek regulative principles or rules; and these regulative principles are not statements of what occurs under certain conditions, but of what ought to be or occur. They are known as the Normative Sciences; and there are evidently three-Logic, Ethics, and Æsthetics. Science assumes that man is a moral being, and that we may discover what constitutes truth, goodness, and beauty. Philosophy inquires as to the reality of the moral order, as to the nature of morality, as to the source and validity of these concepts. Here, as elsewhere in the realm of thought, Philosophy has for its province ultimate questions respecting the validity of the assumptions of all forms of thought, the nature of reality, and the ground of Being and Change.

PART III

ELEMENTS OF GENERAL PHILOSOPHY

CHAPTER XV

EXPERIENCE

§ 57. Standpoints of Psychology and Philosophy distinguished. — I. How Psychology views Experience. — You hear a clear sound; you conclude that it is the telephone bell, not the door bell; you go to the telephone and enter upon conversation. Psychology has its own interest in this experience, and its study is determined by this interest. The particulars of special value to this science are the changes which occur in your consciousness. It analyses the experience and distinguishes the auditory sensation, the localization of the source of the sound, the fact that you distinguish the clang of the bell from that of the door bell, the motor reactions (in localizing the sound and going to the telephone and taking up the receiver), and the attendant sense of effort and tone of pleasure or displeasure in being thus interrupted. To be sure, this is only a general and partial indication of what Psychology finds pertinent to its purpose. It will be seen, however, that the Psychologist is specially interested in the changes, or processes, in consciousness. He assumes the reality and separateness of the physical world - the bell, your body and brain and nervous system and muscles, etc.; and he accepts what the physical sciences have to say of the

processes in the physical world which are more immediately related to your experience. He makes some study of these physical processes; but his assumptions and investigations have as their end the scientific study of the phases of consciousness. In order that he may pursue his study critically and thoroughly, he distinguishes these changes in respect of their characteristics; and he classifies them as sensations, ideas, feelings, attention, perception, etc. He undertakes to discover the fixed order of these mental processes; and, having discovered an order of change, he states the order as a psychological law. His purpose is a scientific description of experience. We conclude, therefore, that experience is for Psychology a phase, or mode, of change in consciousness.

In studying the procedure of the Psychologist, as illustrated above, it becomes evident that he separates, or abstracts, the phases of the experience from you, the subject of them. His immediate interest is in the phases and modes of change, not in you. Thus he notes your sensations, not you; your ideas, not you; your motor reaction, not you. These processes are necessarily regarded as apart from, or external to, each other; but you do not experience them as distinct from you, or external to each other. You and your ideas and sensations and feelings are not distinct, although you and they are distinguishable by thought. The processes thus abstracted are bare concepts; separate from you they have no reality, they cannot have any reality. Nevertheless, they are rightly treated by Psychology as reals; for every science must deal with its concepts as though they were reals. But it must not be forgotten that the concepts of Psychology, being abstracted from the subject, have no reality in themselves. They are not the subject, neither can we constitute the subject by aggregating these abstracted phases. We can

never constitute a real by aggregating abstract particulars none of which are in themselves real.

2. How Philosophy views Experience. - We will see in a general way how Philosophy would interest itself in the illustrative case given above. Philosophy notes that the sound has meaning for you. You recognized the sound as something to which you should give attention; then you interpreted it as meaning that the telephone bell was ringing; and this you interpreted as a possible call for you. Along with your finding meaning in the object of your attention and as a part of that meaning, Philosophy notes that you assigned value to the sound as first apprehended, and to the sound when distinguished as the telephone bell, and so to all the distinguishable moments of the experience. You gave them such value that you directed your attention and your motor activities with a developing purpose, up to the beginning of the conversation. In other words, Philosophy recognizes that you think and feel and will with reference to objects; you relate your entire self to them. It further notes that your experience is in all stages of it a thinking-feeling-willing awareness, or consciousness. Every moment of it involves you as subject and something as object; and there is in the whole of it a conviction of the reality of yourself and the object. The distinctive interest of the Psychologist is in the sensations, ideas, feelings, etc., quite apart from you and the objects with which you are in relation. The interest of the Philosopher, on the other hand, is in you as a thinking-feeling-willing reality and in the object as a reality which is significant for your thought and feeling and will. That is, Psychology is not distinctly interested in the subject as a subject, nor in the object as an object; whereas Philosophy studies the related subject and object. It is a critical consideration of experience, as

such; and experience only arises in the subject-object relation. Philosophy seeks to know the nature of the reality in us and the world; and it is in experience that we know ourselves and know the world of other persons and things and happenings. Experience is real, and it gives us our conviction of the reality of the world and ourselves; and Philosophy holds that a critical study of experience will open the way to a knowledge of what the world is and what we are and what is our destiny, a way also by which we may reach a rational answer to the questions of the religious consciousness.

Since Philosophy studies the related subject and object, it does not regard experience as a mere phase or mode of consciousness; it is for Philosophy a concrete whole of consciousness. Experience subsists in the subject, and can only subsist thus; but the subject only experiences when related to an object. Hence we may not abstract experience from the subject or the object, certainly not from both. To reason to ultimate conclusions respecting anything, we must think of it in its true relations. To separate experience or any phase of it from the subject is to take it out of its true relations and to relate it externally to the subject and to experience; whereas it is in and of the subject and is therefore internally related.

Summary: Psychology conceives an experience as a phase or mode of consciousness; for Philosophy, an experience is a concrete whole of consciousness. Psychology abstracts the phases of consciousness from the subject and treats these concepts as its distinctive subjectmatter; and it seeks the order of processes in consciousness. Hence, for Psychology, experiences are unrelated to the self as subject; and they are externally related to each other. For Philosophy, experiences are organically related to the subject and to each other; and the subject,

consciously related to an object, and the object, attended to by a subject, are its immediate interest. It is the aim of Philosophy to discover what a critical study of experience will yield us respecting the nature of the reality of subject and object.

- § 58. Dual Aspect of Experience. Early in our study we said that experience has two contrasted aspects; and, in the preceding section, we have noted that experience is always of a subject who is consciously related to an object, i.e. the experience has a subject-aspect and an objectaspect. As this fact is cardinal for Philosophy, we shall give it more detailed consideration here. For our present study, we recall that in considering your experience with the telephone bell, we found that it was a thinking-feelingwilling experience. All experience has these characteristics. In solving a problem, you direct your attention to the analysis of the problem and determine the whole thought-process; and this directing of the thought-process is evidently a matter of your will. During your endeavors to effect a solution, you have a feeling of satisfaction or dissatisfaction with possible methods and with results achieved. The dealing with the problem yields one experience, every moment of which has these three charac-These characteristics of experience are inseparable, nevertheless we may give special emphasis now to one characteristic, and again to another.
- I. Duality of Experience as Thinking. You see a painting say a landscape or hear music. The experience of color or tone you refer to something other than yourself, something which is relatively independent of you and your act of seeing or hearing. This is true even of perception of sound when we do not perceive any occurrence which might answer as the source of the sound. Thus, we hear what sounds like an explosion, but we do

not see a gun fired or a blast sprung. Nevertheless we refer the sound to some unperceived source which is regarded as other than ourselves. In perceptions the object-aspect is usually so distinct and pronounced as to hold our attention and thus obscure the subject-aspect; but the subject-aspect is present even though it is vague as compared with the other aspect. The subject regards the object as other than himself and distinguishes it as spatially apart from himself. This "otherness" of the object involves the reference to the self and is only possible because of the subject-aspect of the perception. We have one experience with duality of aspect.

The above holds true also for experience which is dominantly ideational — as in describing a journey which we have taken, or in demonstrating a proposition. In describing the journey, we have images for our objects. The images which we construct and in constructing which we reinstate the experiences of the journey, are for the subject who is telling the story, other than himself. So also as to the geometrical figure and axioms and mathematical principles utilized in the demonstration of a proposition. We have in both cases idea-data for object reference in the experience, and these have their objectivity through their being distinguished by the subject from himself. This last involves the subject-aspect.

2. Experience in Connection with Effort to do Something; i.e. Conative Experience. — This is experience as willing. A complete volition, e.g. that of going to the post-office, takes the form of action in which there is effort to accomplish what is purposed. The object-aspect of experience so regarded is obvious; for, in solving a problem or going to the post-office, you are directing your thought and energy toward something. You are conscious of the effort as yours; it is begun and carried through for your-

- self. You relate the principal object i.e. the end and all subsidiary objects to yourself. In the urgency of the purpose, the end or the means for securing the end may have the chief place in attention; but the effort is sustained because the subject relates the end and the steps taken to attain the end to himself. Experience as conation has duality of aspect.
- 3. Experience as Feeling or Affection. When attending to an object, e.g. when listening to the rendition of a musical composition, there is a tone of pleasure or displeasure in our experience. This tone is known as Feeling, or Affection. It arises from the value we set on this object; and feeling, or affection, may in general be described as our "sensitiveness to the values of objects." In the contemplation of an object, there is this attendant tone which lies between the extremes of pleasure and displeasure; and there must be apprehension of an object in order that there may be feeling. It may be that the object is subjective in character, as when you recall your enjoyment of a beautiful sunset or when you attend to the present discomfort of a severe toothache; but then, as always, there is an object. We conclude, therefore, that the feeling-characteristic of experience presents a subject- and an object-aspect.
- § 59. Characteristics of Consciousness and Experience. We have spoken of two characteristics of experience: that there is always a feeling-thinking-willing consciousness; and that it has two inseparable aspects. We now call attention to certain other characteristics which are important for our study.
- 1. The Objects of your Experience are Many, but the Subject of them is One. The things and persons and events to which we, each of us, direct our attention are past numbering. It is probable that no two instants of life

find any one of us with exactly the same mental content. But in the case of each of us, the numberless objects of interest and ends of endeavor are all related to one subject. I am the I that was a pupil in the primary school, the I that was passed from grade to grade, the I who am now a teacher. This I is the one subject of all the objects in the unnumbered experiences that make up my life between the first day in the schoolroom and the present moment. Those experiences were the experiences of one self, of an identical subject. Our experiences seem quite distinct and individual; nevertheless our consciousness is not many, but one. It is the unitary consciousness of one subject. We find a suggestive analogy in organisms. Varied elements are appropriated by the plant or animal. Those elements, as they are at the time of their being appropriated, seem quite apart and distinct from one another. But when they have been appropriated by the organism, they are organized into a whole which is a unit, into one plant or one body. The plant or the body is, to be sure, a very imperfect individual as compared with consciousness; nevertheless it is a unit. In the next paragraph we shall see how the apparent distinctness of our experiences is lost in the unitary nature of our consciousness.

2. The one Subject of the many Experiences of each of us is in Constant Change. — You are the identical self of the years of your boyhood; but that same self is now a very different self. Once you thought as a child, and felt and acted as a child; and now you think and feel and act, but not as when you were a child. Your conceptions of yourself and the world and life, your likes and dislikes and ideals, have so changed as to present few points of likeness with what they then were. Our moods change from hour to hour. Nay more, the consciousness of any of us in any instant is in some respect different from the

consciousness of the preceding and following instants. Every subject is the same self through all his changes of consciousness; but, although he can never become another self, he is ever becoming other than what he was. A growing organism presents an illustrative analogy. A tulip is throughout its life constantly becoming other than what it was; but it never becomes another tulip, nor something which is not a tulip. So with us, the subject is the same subject, but a changing subject. In other words, the subject is identical, but not static.

3. Experience is a Development. — We have spoken of experience as "any whole of consciousness." This would seem to imply that consciousness is made up of succeeding wholes. But our present study will make it clear that consciousness is not so constituted. When one listens to a musical presentation, his previous musical experience determines to no small extent the experience which comes with the present listening. The same presentation will have a greatly different value for a subject before he has had critical musical training from what it would have after such training. There was a time when sentences in our mother-tongue had little or no significance for us, and a time still later when this was also true of the terms and symbols of arithmetic. Now we understand our mother-speech without conscious effort; and there are those of us who readily follow processes in higher mathematics. This gain in comprehension comes of the fact that any present experience is not wholly a new experience; it has in it, as a largely determinative element, our experience up to that present. The experience of the present is a combination of past experience and of what comes into consciousness in the present. This combining of the past and present in consciousness is frequently spoken of as Apperception; and Kant would say that it comes of the synthesizing activity of reason. This much is certain: your experience in any instant has in it what is of the past and what is new. From this it becomes evident that experience as a whole is a development; it is not constituted of a series of independent experiences. Experience is continuous; it is a stream or flux, not a series in the strict sense of that term. Our apparently distinct experiences are really emphasized moments of one continuous experience.

4. Experience as the Realization of the Object by the Subject. - But how is it possible that experience should persist? Hume regarded perceptions as "distinct existences," and he confessed himself unable to "explain the principles that unite our successive perceptions in our thought or consciousness"; but he recognized that they are united. Mill acknowledged that he could not reconcile his serial view of consciousness with self-consciousness. We have concluded that consciousness is not constituted of a series of experiences, but is a continuity. If it be a continuity, the experience of any instant does not vanish with the instant; it persists. How does it persist? We appeal to experience for the answer. We think of the pianist as having mastery of the piano in the measure in which the significance of that instrument for a thinking-feelingacting being has become a part of himself. That is, the reality of the piano, as a musical instrument, has become in some measure an element in his own reality. This has come through his experience with the piano. There is in the instrument content for consciousness, meaning for a subject; and experience is the process in which this content has come to reality in the pianist. This content having become an element of a subject's reality, it persists in and with the subject. The next paragraph will continue our answer to the question asked above.

- 5. Experience as the Process in which the Subject realizes Himself. - In the preceding paragraph we have noted that experience is a process in which we organize the appropriated meaning of things into our own reality. This aspect of the process is analogous to that in which an organism sustains life and develops. The plant takes up material from the soil and the air and organizes it into root, stem, leaf, flower, and seed. The self is such an organizing principle; but there is another aspect of its organizing activity for which it is not easy to find a fitting analogy. We have called attention to the fact that extended critical experience in any department of life makes for skill in that line of activity. This is but another way of saying that the subject is developed in that particular. One says of a certain man, "He is a real mechanic." This statement means that the subject spoken of has so far realized in himself the significance of objects for mechanical thought and effort that he has developed his own reality well toward the mechanical ideal. We have each of us acquired some facility in relating objects to ourselves. We can use the pen or the typewriter with such ease that the effort required does not interrupt the course of our thought. This means that we have not only organized the reality of these objects into our reality, but that we have also organized our activities; we have organized and thus developed our own reality. The self is the organizing principle of experience and life; and experience persists because it is an element in the subject as organized.
- 6. Conclusions. In a plant and animal the unit organism builds up its own particulars and orders them in respect of each other. Thus, in a body the individual organism appropriates content and disposes the content into flesh, skin, blood, hair, etc. It builds up the mem-

bers; and, in so doing, it organizes the appropriated content and develops itself. The subject in his experience appropriates content for himself as a thinking-feelingacting unit; he organizes this content into his reality, and thus develops and organizes his own reality. The relation of the activities of an organism to the appropriated material and to the parts of the organism is internal, or immanent. The relation of the activity of the subject to the particulars of his experience is developmental and immanent. There is nothing like this in the relation of the machine to what organizes it, or to its own parts, or to the material which it works. We conclude, therefore, that the mechanical idea and mechanical relations are not applicable to experience; they are misleading. For the study of experience, we must recognize that it has its origin and its being in organic relations.

In concluding our consideration of this subject, we recall some facts noted above. Experience is a continuous whole. What appear to us to be separate experiences are emphasized, or selected, wholes of experience, selected to serve the subject's momentary purpose. In view of this, it may be well to modify our provisional definition of an experience as conceived by Philosophy and to state it thus: an experience is a selected whole of consciousness. Every whole of consciousness has three characteristics; it is a thinking-feeling-willing awareness. And every whole of consciousness has two aspects: a subject-aspect and an object-aspect. We may also, without danger of confusion, speak of any content for consciousness which we have organized into our own reality as an experience; or we may use this same term to signify the process by which content for consciousness is realized in the self.

DIVISION A: COGNITION AND REALITY; EPISTEMOLOGY

CHAPTER XVI

SCEPTICISM

§ 60. Historical. — The uncritical, or naïve, man never doubts but that it is possible to know objects. Most men are certain that they know objects and occurrences; and they would be surprised if one should seriously assert that there is no assurance whatever that any of their supposed knowledge is valid. But some philosophers have doubted the possibility of attaining valid knowledge; and others have gone so far as to declare that knowledge of what is real is impossible. Scepticism, or doubt of the possibility of knowledge, began to take form with the Sophists. According to Protagoras, knowledge of an object is only the momentary opinion of the individual knower; it is not valid, because it is not universally true, i.e. true for that individual always and for all subjects. His doctrine is, to be sure, a modified form of doubt; for he grants a knowledge of changing appearances which is, at the time of the perception, true for the individual who perceives. But Protagoras denies knowledge of reality, and he also denies that different subjects have a common content of knowledge. With Gorgias scepticism became absolute; he denied both the fact of reality and the possibility of knowledge. The Sceptics, a Graeco-Roman school, were open proponents of doubt. Pyrrho, whom

we know through his pupil, Timon, was a thoroughgoing sceptic. He taught that knowledge of things is impossible, and that the principle of doubt is itself open to doubt. Some of those who came after Pyrrho were ready to grant that we may attain degrees of probability approximating certainty. Hume seems to have been the last thoroughgoing sceptic of prominence. The prevailing form of modern philosophical scepticism is expressed in the doctrine that the objects of perception are only temporal and spatial appearances, or phenomena; that we do not, and cannot, know reality. This view takes various forms; but in general it would mean that in seeing or touching this desk — i.e. in perceiving it — you do not perceive the reality itself, but the appearance of a reality, the reality being itself unperceived. The doctrine just described is known as Phenomenalism.

- § 61. Our Purpose. We do not purpose in this chapter to establish the validity of knowledge; neither will we undertake a detailed examination of Phenomenalism at this point. That will come later. We wish to set forth the irrationality of general philosophic doubt, to indicate the inherent inconsistency and intellectual folly of asserting or assuming that we cannot attain to such a degree of validity as will satisfy the demands of reason. In other words, this chapter is merely a general criticism of philosophic scepticism.
- § 62. Grounds of Doubt. Why have thoughtful men doubted the possibility of knowledge? Facts of common experience seem at first sight to justify their questioning.
- I. The sun appears larger at some times than at others; a tree appears blue at a distance, near at hand it is seen to be green; a man appears larger when standing by a small boy than when he stands by a large man; a stick which is straight in the air will appear broken if part of it be thrust

obliquely into water. These experiences show that the same object appears different at different times, from different points of view, and in different relations. Other examples abound. Thus, a weight seems heavier and a road longer when we are weary than when we are in full vigor; an object may feel cold to one hand and warm to the other hand of the same subject; and persons do not agree as to the size of the full moon. That is, the same object will be differently perceived by different persons, also by the same person in different moods. Now, the sun and the man cannot be both large and small, the tree both green and blue, the stick both straight and broken; and the same may be said of the other differing perceptions of the same object. Such experiences, it is said, indicate that our knowledge is a momentary and individual knowledge of appearances and does not have validity for all subjects and all experiences of the same subject. The man who would be rational must, therefore, be sceptical respecting knowledge.

2. In our study of Experience, we found that every present experience is largely determined by past experience. The farmer concludes that the soil and exposure of a certain field are such that it would be well to use it for the culture of grapes. The geologist says that the valley he is studying has been greatly affected, if not caused, by glacial action. They both base their judgments upon opinions which they, at the time of their viewing the field and the valley, assume to be true. This is true of all of us in our attaining knowledge; we all begin with something which we accept as true. If we are asked to prove that these basal judgments are true, we must argue from other judgments which are yet more general. To justify these more general opinions, we must find premises that are still more fundamental. From this it is evident that the

ultimate basis of our knowledge is some principle which is taken to be true without proof. In view of this, it is claimed that what we call knowledge rests upon an unproven basis, and that our knowledge must in consequence lack validity.

- 3. Much of our knowledge is incomplete and imperfect; it is not certain that our knowledge of anything is complete. We are constantly supplementing and revising what we know or think we know. This is so notably true in the realm of science that examples need not be given. Our knowledge of the external world comes to us through sensation and is, therefore, subject to this limitation. The blind do not know colors, and the deaf do not know sounds; and some who have vision and hearing do not see and hear all that is visible and audible, because their sensibility in these respects is not sufficiently acute. We have reason to believe that animals can see and hear and smell what we cannot. In addition to this, it is not certain that we are so furnished with sense-organs as to give us a complete knowledge of things and happenings. We are far from having made a complete account of the knowledge possible through our normal sensibility; and the foregoing considerations would indicate the possibility that what we perceive is but a very small fraction of what exists and occurs. The sceptic insists that this fact puts our present knowledge in doubt.
- 4. We have spoken of thoroughgoing scepticism the nature of whose doubt is so radical as to call for special mention. It is frequently called Pyrrhonism after the founder of the ancient school of sceptics. This name is, however, sometimes applied to views which are by no means so consistently extreme as those of Pyrrho and his followers. For a Pyrrhonic sceptic, this universe is a universe of unreason, "a chaos of unrelated phenomena." Objects,

events, and experiences cannot be reduced to order. This disorder and unreason is even a characteristic of mental operations, and as a consequence we ought to doubt our doubts. Hume's scepticism is related to that which we have just described. He held that "a true sceptic will be diffident of his philosophic convictions," and that "in all the incidents of life, we ought still to preserve our scepticism." He also says that "all who reason or believe anything" are guilty of folly. From this it is evident that he felt bound to doubt the validity of his principal doctrines, and among these doctrines we find his doubt of reason.

§ 63. Scepticism Examined. — We are not at liberty to reject a doctrine simply because its logical consequences are alarmingly destructive. But if it involves conclusions which are grave and revolutionary, this fact should put us on our guard; and we should submit the doctrine to exacting criticism before accepting it. Now, the logical consequences of scepticism are revolutionary. If the sceptic is right, the assertions and procedure of ordinary life are irrational, for we make assertions which imply a valid knowledge of things, events, and persons; and we base our life activities upon the certainty that we have knowledge which will hold true. Scepticism likewise robs the processes and findings of science of all value. The reasoning which leads to such destructive conclusions must be itself without flaw. If there is no knowledge which is valid, no knowledge upon which we may confidently rely, none that will stand the test of reason, then all thinking and all speech are folly. We cannot know that there is anyone to whom to express thought, or anything to think about, or anyone to think. To accept this, would be the suicide of reason; and the argument in support of such a conclusion must be unimpeachable.

- I. As to the sceptical argument which is based upon the asserted variant perceptions of the same object by different subjects, or by the same subject in different moods and relations. A study of Appearance and Reality will best discover for us how differing perceptions arise and what their significance is for Philosophy; and that study comes later. We shall then see whether variant perceptions furnish ground for concluding that we know appearance only, and not reality. At this point, however, we call attention to two facts. First, despite these differing perceptions the object is somehow and to some extent known; for it is known to be the same object. The doubter grants this fact; indeed he bases his argument upon it. It is evident, then, that our knowledge in such instances is not wholly invalid; it has some worth. The second fact is this: the sceptic affirms knowledge — that the object is the same - and he makes this assertion of valid knowledge a premise for his argument that there is no valid knowledge. His premise and his conclusion cannot both be true.
- 2. As to the argument based upon the fact that the ultimate basis of knowledge must be some principle which is taken to be true without formal proof. This statement is not open to doubt. All science assumes the uniformity of nature. It postulates that, as nature now acts under any given conditions, so nature has acted in the past and will act to-morrow. Our fundamental assumption in practical life, in Science, and in Philosophy is that the universe, including man, is intellectually reliable. This implies first that reason is self-consistent. That is, in fact, simply saying that self-consistency is essential to right reasoning. If any view includes two particulars which are inconsistent with each other, that is of itself an indication that further thought is required. We will

not have come to complete rationality respecting the matter in question until we have found what reconciles the conflicting particulars or what gives ground for the rejection of one of them. The assumption that reason is self-consistent is really no assumption; it is merely another way of saying that reason is what it is. Selfconsistency is of the nature of rationality. Our assumption that the universe is universally reliable implies, secondly, that the universe is intelligible. To question the intelligibility of the universe, to doubt whether it has a discoverable meaning is to begin our study with a presupposition which renders investigation fruitless. The assumption that the universe with which we have intercourse has a discoverable meaning, is essential to the study of the experience which arises from our dealings with persons, things, and events; hence it is a reasonable assump-The self-consistency of reason and the intelligibility of the universe justify us in holding that any characteristic of thought which is essential to the self-consistency of reason and the intelligibility of the universe, may be taken to be true.

We will now apply the test of self-consistency to the reasoning of the philosophical sceptic. The sceptic is a sceptic because he is unwilling to accept mere assertion as valid knowledge. He holds that that only is knowledge which has for its ground an assignable reason, that an affirmation which is not so grounded is without value. But this holds also for his doubt; for his doubt is an affirmation of the invalidity of knowledge. His affirmation of invalidity must, therefore, be based upon an assigned reason. But to assign a reason is to declare that he has some valid knowledge, and this is inconsistent with his assertion that there is no valid knowledge. A reasoned scepticism is inherently self-contradictory.

3. As to the incompleteness and consequent imperfection of our supposed knowledge. It is true that our knowledge is incomplete; but incompleteness is not to be confounded with invalidity. Our earliest geometrical knowledge was valid although it was the mere beginning; our later advanced mathematical acquirements do not put in question the first facts acquired in arithmetic. What we came to know in the study of the first proposition of geometry made possible what came after; it in fact constituted a part of the later knowledge. Mere extension of knowledge does not prove the initial forms of it invalid. The discovery of the law of gravitation did not render invalid previous knowledge of physical facts; it simply gave more adequate explanation of them. Incomplete knowledge only becomes untruth when it is taken to be the whole truth. A being endowed with a sense not had by us might have elements in his knowledge which are not in ours; but that does not force the conclusion that ours is without value. The blind and the deaf are cut off from knowledge which we have; but blindness does not invalidate the knowledge which comes through hearing and touch, nor deafness that which we attain through touch and vision. Knowledge obtained through the senses which we have would still be truth, even though it were but a part of the truth.

There will always be a possibility that our judgments will need correction. The Copernican theory led men to correct some of their astronomical ideas; but the observed facts of eclipses and the lunar month and the like remained, and these facts constituted a body of knowledge. This theory did not make it necessary that any astronomical facts should be discarded; it opened the way to a new and more adequate explanation of known facts. We call attention to an important fact in this connection: Thought

corrects itself. The latest conclusion, that which is free from some particular of error, has come by way of knowledge; and the extension and completion of knowledge must necessarily come thus. This puts in evidence the authority of thought to sit in judgment on itself, and its efficiency in so judging. Cognitive experience is its own lawgiver and judge. This is to be seen also in the fact that the denial of knowledge involves an affirmation of knowledge.

4. From what precedes it is clear that reasoned scepticism is irrational. All thinking assumes the competency of thought, it assumes that reasoned thinking will lead to valid conclusions. Scepticism itself makes this assumption in presenting reasons for its doubt. In addition to this, the scepticism which we have thus far examined, bases its doubt upon what must be valid if its objection holds. Its thesis and its argument are inconsistent. So much seems evident; but thoroughgoing scepticism requires further consideration. The radical sceptic doubts his doubt; and in this his scepticism differs from that which we have thus far examined. According to radical scepticism, it is useless to ask that reason be self-consistent. Hume accepted the fact of the unity of consciousness, and along with this he insisted that perceptions are absolutely distinct existences. He declared that both these were for him assured principles, although he at the same time recognized their inconsistency with each other. And this was not strange, for he also asserted the falsity of reason. To state it briefly, the thoroughgoing sceptic consistently refuses to be bound to self-consistency; he takes this position in order that he may be consistent. Such a scepticism cannot be refuted by its own principles. It will not accept what is not proved, and it holds a conception of the world and life which makes it impossible to frame a cogent argument. There is that, however, in the preceding statement which makes the case clear to us. Radical scepticism refuses to be bound to self-consistency; such a doctrine proclaims itself irrational.

§ 64. Conclusion. — As previously indicated, the logical consequences of the doctrine we have been examining are so destructive as to forbid its acceptance unless the reasons proffered in its support are unimpeachable. fails to meet this test; it is inherently inconsistent. philosophical sceptic is irrational in his attitude and procedure. The process and activities by which we examine and judge knowledge must be the processes and activities of cognition itself. If we deny the reliability of cognition or put it in doubt, we deny or put in doubt the validity of our scepticism; for the doubt must itself come through the knowing process. We may with reason doubt particulars of knowledge; but, in doing this, cognition is judging itself. The cognizing activity of reason is also the explanatory and critical activity of reason. nature of the case, there can be no explanation or criticism of knowledge except upon the assumption that the knowing activity is reliable. "The validity of knowledge as such is an ultimate and inevitable assumption."

CHAPTER XVII

SOLIPSISM

§ 65. The Doctrine Stated. — The world of persons and things seems to us to be very real. In our normal experience, we never appear to ourselves to be the only reality. On the contrary, each of us thinks of himself as a single reality among an incalculable number of realities; for the world in which we are and the particulars with which we have to do, are taken by us to be real as we ourselves are. It is the task of Philosophy to criticise any view which may possibly be open to doubt; but this element of experience - assurance of the reality of things and other persons - is so accordant with the whole of experience that Western Philosophy has accepted it as a true account of the world. It is doubtful if any Western thinker has ever seriously insisted that he was himself the sole reality; but some philosophers have propounded views which their critics declare involve the strange doctrine that nothing but the individual self exists. This doctrine is known as Solipsism. But, while it would be difficult, if not impossible, to find a Western thinker who would deny that there is any reality other than himself, there have been philosophers who insisted that we have no evidence that anything else than the self exists. According to them you know that you yourself are; but the reality of all else, of the persons with whom you have intercourse and of the objects you handle, is for you only problematical. A few seem to hold to the reality of other

persons as indubitable; but they either deny the reality of things, or hold their reality to be doubtful. insist that our supposed knowledge is not knowledge of things as they are. They assert that the world you know is no more nor less than an idea in your mind; and it is by no means certain that the external world, granting that there is one, is what you take it to be. The term Solipsism has also been applied to this doctrine. Solipsism in this, its epistemological, reference takes various forms; but it may be said in general to stand for the doctrine that, granting that there is trans-subjective reality, what any of us knows is not that reality, it is rather the projection of the subject's own subjectivity. In other words, the world which each subject knows has its existence solely in that subject's consciousness. It is evidently a form of Subjectivism.

§ 66. Our Purpose. — We do not purpose to examine Solipsism, using that word rigorously as signifying the doctrine that the individual subject is the sole reality. That view has no standing place in the province of reason. Neither will we at this point give a detailed study of Subjectivism with a view to establishing the actuality of knowledge of objective reality; that study comes later. In this chapter we examine the doctrine that the world of our experience is the construct of the individual subject. For example, in the instance of the book which you think you are holding in your hand and reading; granting that there is some reality other than your own self in a certain conscious state, you do not apprehend that objective reality. In connection with your relation to that reality, you have certain sense-impressions; what these are in detail is determined by what you are. You project them out from yourself; and, thus projected, they become for you the symbol of an unapprehended reality. You call it a book; but its details as a book it has received from you. A study of this form of Solipsism will show that it is inherently inconsistent.

§ 67. The Doctrine Explained. — Professor Karl Pearson gives a very able, reasoned statement of this doctrine. It has the form of a scientific description; but it is in effect an argument in support of this thesis: Granting that there is an external world, even then the world as known to us is merely a projection of our individual subjectivity. He says: —

"How close then can we get to this supposed world outside ourselves? Just as near but no nearer than the brain terminals of the sensory nerves. We are like the clerk in the telephone exchange who cannot get nearer to his customers than his end of the telephone wires. We are indeed worse off than the clerk, for to carry out the analogy properly we must suppose him never to have been outside the exchange, never to have seen a customer or anyone like a customer - in short, never, except through the telephone wire, to have come in contact with the outside universe. Of that 'real' universe outside himself he would be able to form no direct impression; the real universe for him would be the aggregate of his constructs from the messages which were caused by the telephone wires in his office. About those messages and the ideas raised in his mind by them he might reason and draw his inferences; and his conclusions would be correct — for what? For . . . the type of messages that go through the telephone. Something definite and valuable he might know with regard to the spheres of action and of thought of his telephone subscribers, but outside those spheres he could have no experience. . . . He could never have seen or touched a telephonic subscriber in himself. Very much in the position of such a telephone clerk is the conscious ego of each

one of us seated at the brain terminals of the sensory nerves. Not a step nearer than those terminals can he get to that 'outside' world. . . . Messages in the form of sense-impressions come flowing in from that 'outside world,' and these we analyse, classify, store up, and reason about. But of the nature of 'things-in-themselves,' of what may exist at the other end of our system of telephone wires, we know nothing at all." . . .

"So it is with our brain. The sounds from [the] telephone . . . correspond to . . . sense-impressions. These sense-impressions we project as it were outwards and term the real world outside ourselves. But the thingsin-themselves which the sense-impressions symbolize, the 'reality,' as the metaphysicians call it, at the other end of the nerve, remains unknown and u knowable. Reality of the external world lies for science and for us in combinations of form and color and touch - sense-impressions as widely divergent from the thing 'at the other end of the nerve 'as the sounds of the telephone from the subscriber at the other end of the wire. . . . As his [the telephone clerk's world is conditioned and limited by his particular network of wires, so ours is conditioned by our nervous system, by our organs of sense. Their peculiarities determine what is the nature of the outside world which we construct. It is the similarity in the organs of sense and in the perceptive faculty of all normal beings which makes the outside world the same, or practically the same, for them all. . . . It is as if two telephone exchanges had very nearly identical groups of subscribers. In this case a wire between the two exchanges would soon convince the imprisoned clerks that they had something in common and peculiar to themselves. That conviction corresponds... to the recognition of other consciousness."

§ 68. Examination of the Preceding Exposition and

- Argument. 1. The foregoing exposition affirms and implies certain realities and relations; and these are made the basis of the explanation and argument. The nerves, the brain, the flowing in of messages from without, the similarity of sense-organs, the situation of the ego at the brain terminal of the nerves, and the likenesses of our experiences are regarded as settled facts. If the nerves, the coming of messages along the nerves, the situation of the ego, and other stated and implied actualities are not as Pearson says, the exposition and argument fail, and his denial that the realities of the external world are known fails also.
- 2. If, as he says, the ego is no nearer the external world than the brain terminal of the nerves, then the nerves are external to the ego; so also are other persons and their experiences. But, by his own admission, the nerves, and the work which the nerves do, are all known. This would indicate that we do know the external world as it is. If his thesis is true, his affirmation of knowledge respecting nerves and sense-impressions is without warrant. If he is warranted in these affirmations, his thesis is false.
- 3. He accepts the fact of the practical agreement in experience of different subjects. He must account for this agreement; for his view that our knowledge is purely subjective and personal would seem to preclude such agreement. In stating the ground of this agreement, he says that the organs of sense and the perceptive faculty of all persons are the same. Here again he affirms exact knowledge of what is objective not merely knowledge that something is, but knowledge of what it is. But this does not agree with his thesis, for his thesis denies the fact of such knowledge.
- 4. His assertion that the ego is seated at the brain terminal of the nerves, is crassly materialistic and without warrant. It conceives mind spatially. Science gives

no warrant for such a statement. We have reason to conclude that *physiological* processes related to sensations—as of color, sound, taste, etc.—are located in the brain. But the *psychical* processes—the color, the sound, or the quality of the taste—have never been found there.

- 5. If the Subjectivism which we have just examined would be consistent, it must go further and assert that the reality of all except the individual subject is in the highest degree doubtful. Pearson says, "The field [of science] is essentially the contents of the mind." According to this, the subject-matter of geology, botany, and chemistry is the consciousness of the individual student. students and the contents of their consciousness are for each of us simply states of our own individual consciousness. We have no warrant for asserting that rocks, plants, animals, and other persons have an existence apart from our personal and private consciousness. We have seen in what precedes that the Subjectivist cannot assume the reality of the external world in order to explain his consciousness; for the assumption and the explanation involve him in inconsistencies. To be consistent, the Subjectivist must also hold that the house in which I am, the grounds on which it stands, the chair on which I sit, the pen with which I write are for exact knowledge mere states of my consciousness. In a word, the only reality for each of us is his own states of consciousness: but all thinkers agree in rejecting this extreme doctrine.
- § 69. Conclusions. Our study of Philosophical Scepticism led to the conclusion that rationality requires us to assume that experience gives us valid knowledge, and that we must leave to cognition itself to fix the degree of validity of particular cognitions. Whether you are right in concluding that the telephone bell rang, that the unsigned letter is from a certain correspondent, that the

markings on Mars are canals, or that Chemistry is right in treating radium as an element — the validity of these or other particulars of what you hold for knowledge, can only be determined by assuming the validity of knowledge as such. We are not free to doubt the validity of knowledge. Our study of Solipsism forces the conclusion that, if we would preserve self-consistency in thought, we must accept that there is other reality than states of consciousness and that the individual subject knows what is not purely subjective. Your world of other persons and things and events is not a mere projection of your consciousness. In dealing with the world known to you - in thinking about it, feeling with respect to it, handling its objects, and taking part in its doings - you are dealing with what is not merely your states of consciousness or the reflection or representation of those states. Following upon these conclusions, two questions call for answer. Granting the validity of knowledge and that we may have knowledge of what is not purely subjective, granting also that the world of each of us is not a mere expression or projection of the self, we have still to determine whether what we know is the reality of objects or merely appearance. Thus, in apprehending a chair or a portrait, do I apprehend the reality in each of these or merely the appearance of a reality? This is one question. The other arises out of the Solipsistic view that knowledge is purely personal. You and I see a house. Is the house known by you the same with the house known by me? Are the objects of your external world objects for all subjects as they are objects for you? Or to make it more general, granted that the individual subject knows what is not purely subjective, is there in objects as known by the individual subject that which is common to the cognitive experience of all subjects? These questions will occupy our attention in a number of the chapters which follow.

CHAPTER XVIII

APPEARANCE AND REALITY

- § 70. The Question Stated. In answering the question, Do we know reality? we will first consider experiences which seem to support the doctrine that we know Appearance only, and not Reality.
- I. We are so impressed with the reality of persons and things, there is such a general agreement between the world as we think of it and the experiences which we have in dealing with it, that it scarcely occurs to us to question whether the world as we know it is the world of reality. We uncritically accept that we know the world in its reality, that what we see and hear and smell and taste and touch is reality, not appearance. But certain experiences have led men to doubt the correctness of this common conviction. A piece of cloth may have a different color in lamplight from that which it has in sunlight; and this is also true In the shadow of the bridge, the clear water of the brook is a dark brown. From some points a round disk is seen as oval, and the parallel rails of the railway seem to meet in the distance. Such experiences have led men to distinguish between appearance and reality. Many have conceived of reality as that which is back of appearance; and they have also concluded that what we know is the appearance of things, not the reality of them.
- 2. Besides these common experiences there are facts which the analytical study of perception forces us to take account of. We commonly think of the red or pink color

of the rose as being in the rose, of the sound which comes of the plucking of the harp string as being in the harp. For the uncritical man, the taste quality of his experience in eating an orange is in the fruit, independent of its being experienced by him or any other person. But very early in the history of Philosophy, men began to question whether color, sound, smell, and taste are qualities of the object considered apart from the subject. These and other qualities were put in a class by themselves as qualities which are not actual qualities of objects, but marks rather as to how objects affect us. Many, if not most, thinkers now hold that all the qualities which we assign to objects are not purely of the object, but that the qualities which objects have as we perceive them are conditioned by the subject. They hold that at least two factors enter into the determination of the qualities which objects are perceived to have — the nature of the object and the nature of the subject. From this some would conclude that we perceive the appearance of objects, not their reality.

- 3. It is likewise urged that this conclusion would follow from the scientific conception of the constitution of matter. According to that, the top of this desk is not continuous as it appears to be; it is constituted of atoms no two of which are in actual contact. That is, the appearance of the desk, and of all other objects, is quite other than the reality of the objects; they appear to be continuous, but are in reality discontinuous. We do not perceive them as they are really made up; we perceive them merely as they appear to us, and the appearance is not identical with the reality.
- 4. From the preceding it is evident that we cannot answer the question, Do we know reality? until we have determined the relation of appearance and reality. Those who answer our question in the negative generally assume

that appearance and reality are separable in fact just as they are in thought, and that one may know appearance without at the same time knowing reality. In fact they are regarded by many as actually exclusive of each other; to cognize appearance is not to cognize reality, and to know reality would be to know it apart from its appearance.

- § 71. Criticism of the Doctrine that Appearance and Reality are, for Cognition, mutually exclusive. The doctrine which we are to examine in this section regards appearance as a seeming, back of which there is a reality. For this doctrine, appearance is not mere illusion.
- 1. As to the Argument which is based upon the Fact that the Qualities which we assign to Objects are Phases of our Consciousness. — That experience which you interpret as a bird flying is a phase of your consciousness; but such a statement is not a complete account of the experience. We have examined the doctrine that the objects of experience are only modifications of the individual consciousness, and have rejected it because of its irrationality. The doctrine under review also rejects it. It recognizes that your experience in seeing a bird or hearing the door-bell is not purely subjective; it is experience with respect to something which is actually other than yourself. What the doctrine under consideration holds is, that the perceived qualities and relations which you interpret as a bird or a door-bell are appearances; and, being appearances, they are other than, and exclusive of, the reality of the object. This view declares that we know that the object is, but we do not know the nature of the reality of the object. In reply we say that, in knowing how the object appears, we know something of the nature of the reality. We know that the reality-which appears as a bird presents certain marks which enable us to identify it. So with all objects of perception, they present certain qualities in certain

relations to one another. The related qualities which constitute the appearance of an object to a subject are the expression (literally, the thrusting out) of the reality itself as it is related to a subject. In knowing the appearance, we know something of the nature of the reality; for we know how it expresses itself to a subject. Appearance is not exclusive of reality; it is, on the contrary, expressive of reality.

- 2. As to the Varying Appearances of the same Object in Varying Relations. We have such experiences in the case of lavender-colored cloth which appears gray in lamplight, the circular disk when viewed otherwise than perpendicular to its plane, the moon in its changes, and a straight stick thrust obliquely into water. What was urged in the preceding paragraph holds here. In the instance of each of these perceptions, we not only know that a reality is; but, in knowing its varying appearances, we know how it behaves in certain relations. But knowledge as to how a reality expresses itself in certain relations is knowledge of the reality; and this knowledge is obtained in the perception of its appearances. Knowledge of appearances, then, is not apart from knowledge of reality; the appearances are expressions of reality to a perceiving subject.
- 3. As to the Scientific Doctrine that the Constitution of Objects is not what it appears to be. Sense-objects e.g. the leaf of a book, or the top of a desk—appear to be continuous; but it is said that science has discovered that they are really made up of atoms no two of which are in immediate contact with each other. That is, the matter of sense-objects is discontinuous, not continuous. From this, it is concluded that perception yields us knowledge of appearance only, not knowledge of reality. In reviewing this argument, we should first note that the atomic conception of the constitution of matter is regarded by

many as an hypothesis rather than a determined actuality. But if the atomic constitution of matter should come to be accepted as incontrovertible, that would not make against the doctrine that we know reality in perception. If the top of that table is known to be discontinuous, it is known to be so constituted by inference from knowledge obtained through sense-perception. That is, the doctrine of the atomic constitution of sense-objects is reached through inference from observed facts. Inference has supplemented and extended the knowledge obtained by direct observation. This fact does not prove that we do not know reality in our perception of objects; it simply shows that there are some facts respecting reality which we obtain, not in perception, but by inference from knowledge of reality attained in perception. In other words, it would show that the knowledge of objects which is attained through sense-perception is incomplete; but incomplete knowledge is valid if we recognize its limitations and do not regard it as complete. The revelations of the microscope supplement the knowledge of unaided vision. What we attain through aided and unaided vision is in both cases knowledge obtained in perception of appearances. All our knowledge of sensible objects is knowledge of reality; for it is knowledge obtained by interpreting the behavior of reality in various relations. Appearances are modes in which reality manifests itself; they do not exclude reality from cognition, they express it to the knowing subject.

§ 72. The Doctrine that Appearances are Illusory. — It is obvious that whatever knowledge we may have of objects is obtained through perception of appearances; i.e. it is mediated by appearances. If, then, it be true that appearance is illusory, it follows of necessity that reality cannot be known. This doctrine is based upon a conception of the nature of reality which makes it im-

possible that reality should be known. From these considerations, it is evident that the doctrine which we are now examining differs essentially from that which we reviewed in the section preceding this. That doctrine regards appearances as expressions of a reality which is back of them; according to this doctrine appearances are illusory. This latter view has been clearly stated and ably advocated by Bradley in a work entitled Appearance and Reality. A full examination of this teaching does not fall within the scope of this Introduction; we will merely present certain features of it which are pertinent to the question now before us.

I. General View. - According to this doctrine, appearances are "illusory," "self-contradictory," "irrational," and "essentially made up of inconsistencies." This condemnation of appearance and consequent denial of the possibility of attaining knowledge of reality is based upon a distinctive conception of the nature of reality. A doctrine which is so revolutionary in its conclusions as this ought to have an assured basis; and we naturally ask, What is the warrant for a theory of reality which leads to such conclusions? The argument which sustains this doctrine is grounded on two postulates; one of these is explicitly stated, and the other is persistently applied. The first of these postulates is, that the one criterion of reality is self-consistency; no exception can be taken to this. The second postulate is, that Identity and Diversity, and Unity and Plurality are inherently contradictory. It is clearly shown that in all appearances we have Identity and Diversity, Unity and Plurality; and, if Identity be contradictory of Diversity, and Unity be contradictory of Plurality, it would follow from the self-consistency of reality that appearance misrepresents reality. From this it is concluded that we must get beyond appearance if

we would attain reality. The doctrine is as old as the Eleatics, and the line of argument by which the writer seeks to sustain it is virtually the same with that used by the Sceptics.

- 2. These Postulates applied to Experience. Every known object is known as having various qualities. For example, we speak of the piece of marble as "white with party-colored veins," "partly smooth and partly rough," "square," "heavy," "beautiful." That is, it is many in one. But how can we constitute one out of many? If we had all the qualities and added them together, we would still lack the characteristic of wholeness. How shall we account for the wholeness of the whole? We are told that to affirm that many are one, or that one is many, is to affirm the identity of contradictories. By a similar argument change is condemned. The plant full grown is diverse from the plant partly grown; yet we speak of them as the same plant. It is for appearance one plant; but it also presents different appearances. To say that that which is after a change is the same with that which was before the change, is "to assert two of one"; but this is inconsistent. Hence what changes is not reality; and, so far as we know change, we do not know reality. This analysis is also applied to relation, cause, and other modes in which we cognize; and a similar conclusion is drawn in each instance. Bradley likewise insists that we do not know a real self; for the self we know is many states of consciousness in one, a diverse unity; and this inconsistency shows that we have only apprehended appearance. Reality is not presented in appearance: this is the conclusion. Hence we cannot know reality.
- 3. Law of Identity Misinterpreted. This doctrine has its origin in a misinterpretation of the logical law of Identity. According to this erroneous interpretation, if I

should say, "An Italian is a European," the statement would not accord with reality, because "Italian" and "European" are not absolutely indentical; each idea is in some particulars diverse from the other. But to require that the subject and predicate shall be absolutely identical would bring thought to a dead stop. There can be no progress in thought unless subject and predicate are identical in some particulars and diverse in others. of the form A is A and B is B would meet the requirement of absolute identity; but thought confined to such judgments cannot move. It cannot connect A and B with each other, or with anything else than A or B. This interpretation of the law of Identity condemns all thought, for thought is impossible except as we apprehend Plurality in Unity and Identity in Diversity. In thus making progress in thought impossible, this interpretation condemns the argument by which it is sought to sustain the doctrine under consideration. Thought is "illusory," it does not deal with reality; it would follow, then, that the thought of this argument is "illusory." What does the law of Identity demand? For example, what does it demand in the judgment, "An Italian is a European?" It requires that the concept "Italian" shall include marks which are identical with marks included in the concept "European." In respect of the concrete Italian and European, it demands that an Italian shall have some characteristic which is identical with a characteristic found in all Europeans. This law requires that the subject and the predicate have a common ideational content; and thought requires that each shall have ideational content that is not had by the other. In a word, Identity and Diversity, Unity and Plurality are not contradictories; they are complementaries. There can be no thought except as we apprehend Identity and Diversity, Plurality and Unity,

and as we recognize that each member of these pairs is complementary to the other. We are unready to accept a doctrine that makes all thought "illusory."

4. Is Reality Alien to Thought? - According to the doctrine under consideration, reality is alien to thought. What, then, is its conception of reality? Reality is for this view "mere sentient experience," an experience in which "all distinctions lapse"; it is an experience of allalike sentience. No such experience is known; it could not be known to the subject of it, for it is purely sentient. That reality is all-alike experience, is an assumption following a course of reasoning in which another postulate is introduced. This postulate is that "there is no being or fact outside that which is commonly called psychical," i.e. experience is the only reality. The argument condensed runs thus: Reality is self-consistent; Identity in Diversity and Plurality in Unity are inconsistent; hence reality must be absolute Identity, simple Unity. There must be in it no diversity and therefore no distinctions. But reality is experience; hence reality is experience in which there is no diversity. It is assumed that mere sentient experience meets these requirements; it is experience, and there are no distinctions in it.

Two objections present themselves. This conception rests upon the assertion that Identity and Diversity, and Unity and Plurality, are contradictories; and the assertion that they are contradictories rests upon an interpretation of the logical law of Identity which invalidates all thought and which logic refuses, in self-defence, to accept. Since logic refuses to accept this interpretation of the law of Identity, the claim that reality must be absolute Identity fails of justification. The second objection has respect to the assumed "mere sentient experience." It has been suggested that we may find such

experience in the instance of the infant before consciousness of the distinction between self and not-self has been developed. Is there experience where there is no consciousness? Such sentience, if it be possible, has no right to the name experience; for surely there is no experience apart from consciousness. By what right do we take that to be the reality in experience which lacks the essential characteristics of experience as known to us? But leaving this aside, mere sentience is not experience; no more can be said of it than that it is the material out of which the subject constructs experience. Further, what warrant have we for assuming that the earliest and simplest experience of the infant is absolutely unorganized, that there is in it no distinction of quality or relation? If we speak of the little chick pecking at a seed as having an experience, even that has distinction and relation in it. The seed is distinguished from other objects, and its position is distinguished from other positions. We have no warrant for asserting that there is an experience of absolute Identity, an experience in which there is no distinction of quality or relation. We decline to accept the conception of reality propounded in this doctrine; and we discover no reason for holding that the nature of reality precludes its being known.

§ 73. Shall we discard the Concept Reality? — Some have suggested that we discard the concept "reality." If we should adopt this suggestion, we would have no need to solve the problem of the relation of appearance and reality. The most cogent reasons urged for our ceasing to inquire as to whether we can know reality are (I) That the search for reality is fruitless, because what we seek is, and always must be, beyond us; (2) If we could arrive at reality, it would have no special value for us, because it could only be known and stated in terms of appearance;

- and (3) We do not need the concept. This view is not a distinct philosophical doctrine; it is an attitude.
- I. It is true that reality is always beyond us and is, because of this, elusive if we separate it in thought from appearance and then try to image it. Those who make this suggestion seem to be seeking an intelligent grasp of reality apart from appearance. That is, of course, impossible; for we can only conceive what is not present in senseperception, by an ideational production of appearances. It is thus we present to ourselves a triangle, a house, a city, or any object which may be apprehended through senseperception. The imaged appearance makes it ideationally present. To image a pure concept — as justice, goodness, time, or reality - by itself is impossible. We can only have it present ideationally by imaging an object or occurrence whose qualities and relations — i.e. whose appearances - express the concept. Concepts have their reality in objects, and cannot be imaged apart from them; but we do not discard concepts because of this. We cannot think without them.
- 2. It is true that, if reality could be known, it could only be known and stated in terms of appearance. An object can only be known when it is in presentation to a subject; and the form in which it is presented to the subject is its appearance to that subject. Thus, the pen with which I am writing is known by me in the forms in which it has been presented to me; and these apprehended forms are its appearances to me. What I know of it and what I may state of that knowledge is known and stated in terms of appearance. So likewise as to reality; our knowledge of it and our statement of that knowledge would be in terms of appearance. But, is the appearance an actual presentation of reality? This is the important question. Are the appearances in and through which

you have come to know the house in which you live, actual presentation of the house reality? If they are not, and if appearance in general is not actual presentation of reality, this fact might be urged as a reason for discarding the concept of reality. But, if an appearance is an actual presentation of reality,—and we shall later argue that it is,—when we know appearance, we therewith know reality, for appearance is in that case reality's own presentation of itself.

- 3. To the assertion that we do not need this concept, we reply that Philosophy cannot solve the problem set it if it shall refuse to seek the nature of reality. That has been its quest from the beginning. If we give up our endeavor to determine whether we know reality, we forsake our task. This quest is a persistent element of experience. We are constantly asking, "Is it real?" and we subject to this test all that is proffered as knowledge. "That bridge appears to be safe; is it really safe?" We put such questions every day. The all-around sceptic, the man who doubts scientific and philosophic statements, takes this attitude because he wants to know the reality of things. He doubts because he can only be satisfied when he is made certain he has attained the reality of things. He demands, all of us demand, that seeming or appearance shall be related to reality. This question will not down. This persistent call for reality and refusal to be satisfied with mere seeming is an abiding element of experience; and philosophy may not ignore it.
- 4. The search for reality cannot be satisfied short of assurance that we have intercourse with what is objective, with reality which is other than the individual self. We have a common conviction that the world of persons and things and events which we know and with which we have dealings, is a world of realities. Is this conviction un-

justified? That with which we have dealings, is it other than that which we know? Are these objects, as we know them, realities or only appearances? It will not do to wave this question aside. Our life loses its ethical quality if we cease to recognize that we are dealing with what is real; it becomes pretence.

- § 74. Conclusions.—1. If we were cut off from knowing reality, we could not know that the objects of our knowledge are only appearance and not reality. For to know that they are appearance and not reality, we must be able to distinguish them from what is not mere appearance, i.e. from reality. In other words, reality must be known in order that we may know that an object of cognition is not reality.
- 2. There are two facts which we hold fast: (1) That we know ourselves; (2) That we are reality, not mere phenomena. Introspection shows that we do not know Self apart from a phase of consciousness. You know yourself as hearing something, as feeling disturbed by uncertainty as to what caused the sound, and as determining to find out the source of the noise. Your Self always appears to you in what you call a phase of consciousness. Phases of consciousness do not exist by themselves. They have a relation to the Self similar to that which the varying qualities of objects have to objects. The Self reality comes to expression in these phases; that is, the Self becomes an object of cognition in your apprehension of yourself as willing, feeling, and knowing. Your moods, attitudes, and longings are not apart from your Self; neither are they separable from the Self. We do not, and cannot, know the phases of our consciousness without at the same time knowing the Self.
- 3. We also recognize that these phases of the Self vary, that consciousness changes; but this does not lead to the

conclusion that the Self is phenomenal. On the contrary, the continuous change in consciousness makes for our assurance of our reality. If our consciousness were without change, if it were an all-alikeness, we could not know it. To know any object we must distinguish this of it from that of it. For example, in knowing a watch, we distinguish one side from the other, the dial from the works, the hands from the dial, etc. This is true of the simplest object, as a piece of wood. If there were no distinction in an entity, it could not be an object of knowledge. We distinguish one phase of our experience from other phases of our experience, and we apprehend these phases and moments as phases and moments of a whole experience which is the experience of an identical Self. The phases and moments of my experience are also phases and moments of my Self. Our changes of consciousness together with our experience of self-sameness, the fact that I am I through all my varying phases of consciousness, this is the ground of my assurance of my own reality. Each of us in respect of his phases of consciousness is many; our consciousness is many in one. This is only possible if there be some common principle in which the many are grounded. The Self which is the subject of these phases is such a principle. The Self being unitary, our experience is unitary; and its phases and moments are, for knowledge, appearances of Self as object to Self as subject. These conclusions follow: (1) The Self is diversity in unity, the unification of apparently contradictory elements; (2) In knowing the phenomena of consciousness, we therewith know the Self; (3) In knowing the Self, we know reality; (4) Variability of appearance is consonant with reality.

CHAPTER XIX

APPEARANCE AND REALITY (continued)

- § 75. Appearance is Reality Expressed.—Another view of the relation of appearance to reality remains to be discussed; viz., that appearance is reality expressed. Your knife as seen by you is the reality of the knife presented to vision; the roughness or smoothness of the surface of the stone is the reality of the stone present to tactual sense; the clang of the bell is the reality of the vibrating bell present to audition. Appearance as thus conceived is not mere semblance or seeming; it is not thrown off from the reality; it is the reality itself present to perception. The appearance of any object is the nature of the reality of that object as it presents itself to rationality. If we should accept this account of the relation of appearance to reality, it would follow that when we know appearance, we therewith know reality.
- 1. Appearance cannot arise from nothing; it must be an expression of what is actual. To appear is to become an object of perception; appearance is always to a subject. To constitute an appearance, an object reality must be in presentation to a subject reality. That is, appearance is always in the subject-object relation; and it is the expression of an object reality to a subject reality.
- 2. From the foregoing it follows that appearance and reality are correlatives in cognition. They are not mutually exclusive; they are inseparable, neither can be without the other. Apart from the subject-object relation, there is no appearance to be related to reality; in

that relation the reality becomes object in the appearance which is the expression of its nature in the particular relation in which it appears. Of course there cannot be an appearance except there be an appearing reality.

3. We have insisted that appearance and reality are correlatives for cognition, and that there is no appearance apart from the subject-object relation. Does it follow that there can be no reality apart from that relation? In answering this question, we must keep in mind the fact that we are not studying the nature of reality, we are considering reality in respect of cognition. With this in view, the question may be stated thus: Can there be somewhat for experience which is not in present experience? There may assuredly be reality apart from human experience of it. We do not say that nothing exists apart from relation to a human subject. The objects discovered in scientific research and unscientific endeavor do not come into existence in the instant of their discovery. What we say is that reality is more than mere existence. The significance of reality will be considered more fully later; it is sufficient for our present discussion to note that, for cognition, reality includes expressibility to a subject. There are, doubtless, many realities which are not in present presentation to a human subject; but, by so much as these realities are, they are expressible to and perceptible by a subject. They are possible presentations; and this is included in the idea of their reality. A subject can relate them to himself as objects; and, in this relation, they express their reality in appearances. The fauna and flora of an unexplored region are realities for human experience; when discovered, they become realities in human experience. Reality is possible, as well as actual, content of consciousness. Appearance is reality in presentation to a subject.

§ 76. The Apparent and the Real. — I. Why Appearance and Reality have been Conceived to be Mutually Exclusive. — There must be some reason for the persistency with which many have urged that reality is not present in appearance. This urgency has its origin in those experiences in which the apparent and the real are not in accord with each other. We find such experiences in the case of the straight stick which is apparently broken when it is thrust obliquely into water, the apparent converging of the parallel lines of the railway track, and the varying color of objects in varying lights. Such experiences are common; and they are so intimately related to practical undertakings that they have led men to conclude that the reality of an object is not necessarily the same with what the object seems to be. In situations which we believe to be critical, we are given to asking, "Is it real, or does it only seem so?" Even in the lowest stages of human existence, man is compelled to distinguish between what is apparent and what is real. The preservation of life is dependent upon ability to make this distinction. The primitive fisherman would strike in vain for the coveted fish if he did not distinguish between its apparent and its real position in the water. It was necessary that primitive man should learn the nature of the objects with which he had to deal, the objects essential to the support of life; and for this, he must distinguish between what they might seem to be and what they really were. This necessity is upon us also. Experience has taught us that the apparent is not always the same with the real; and this has not unnaturally led to the virtual acceptance of a world of appearance distinct from the world of reality. Appearance has been conceived as uncertain and inconstant semblance; reality is thought of as reliable and unchanging. This is, at least, the Plain

Man's view of it; and in these experiences and this conception we find that which commends the doctrine that appearance and reality are mutually exclusive.

2. Appearance and Perception. - An appearance is related to the object and the subject. In the former relation, it is the expression of the object reality; in the latter, it is the subject's interpretation of this expression. The former is for the perceptive activity of the subject; the latter is the perception. You sat at your desk writing with your attention centered upon the work at hand. You came to a halt in your writing and heard an insistent noise. You listened attentively and then said to yourself: "There is a game of ball on at the park; and some one has made a good play." You interpreted what was presented and concluded that it was a sound, and you continued the interpreting until you had assigned to the sound the meaning indicated; and the interpretation was an essential part of the perception. There is no perception without thought; and the simplest thought is an interpretation, a judgment. In discussing those experiences which seem to indicate that an appearance is a changeful and unreliable semblance rather than an actual presentation of reality, it is essential that due value be given to the interpretive activity of the subject. This makes it necessary that we distinguish between appearance as the expression of object reality and appearance as expressed in the subject's perception. They are not separate in experience; but confusion will be avoided if we at this point distinguish them in thought. For the remainder of this chapter, we shall narrow the meaning of the term Appearance and shall apply it to the object-reality's expression of itself for experience; and the term Perception will signify the appearance as interpreted by the subject, the expression of reality in experience.

We have learned that our judgments respecting objects do not always accord with the reality. You saw something in the gloaming and concluded that it was a large dog in a threatening attitude; but closer inspection showed that it was only a bush. We thought it was a street-car we heard: but when it came around the corner, we saw that it was an automobile truck. The development of our knowledge of the external world has been attended by constant correction of conclusions which we have formed; and it has been greatly aided by our consciousness of the fact that we must exercise care if we would avoid error. But the element of error in these judgments is not due to the unreliability of appearances as expressions of reality for experience; it arises from our misintrepretation of these appearances. The error is in the perception as we constitute it. The disagreement is not between the appearances and the reality; it is between reality and the element of error in our interpretation.

§ 77. Sources of Error. — 1. The experience of any instant is not a wholly new experience; it is a combination of past experiences and the experience of the moment. Past experience greatly affects our perceptions. Lack of the experience had in acquiring a particular language say the French - would make an address in that language seem an unmeaning jumble of sounds; whereas one who had had experience which had given him mastery of the French would find significance in every sentence of the address, and meaning in the gestures and the facial expression of the speaker. The man who is expert at detecting counterfeit bank-notes is thus expert because his extended experience conditions his perception and so enters into his judgments. In a word, when we perceive an object, our perception is conditioned by our previous experience with that object or objects like it. We know by the laws

of perspective, that the rectangular top of the table is a rhomboidal presentation to the percipient; but we rightly judge it to be rectangular, not rhomboidal. We are accustomed to seeing such an object, and we judge correctly without hesitation. From certain points of view, a circular disk is apparently oval; but that will deceive few persons, because most of us have seen like objects in a similar relation so often that we are not likely to frame an erroneous judgment respecting their shape. Previous experience, or lack or paucity of previous experience, affects judgments and so conditions perception.

2. An object is not known by itself; it is known in relation to the subject and to other objects. Turner's Venice, if viewed from a proper distance and in the right light, is definite in outline, and the lines and colors of the painting have significance; but, viewed close at hand, it is to most persons a mere jumble of colors. Our perception of objects and our judgments respecting them are conditioned by the relation in which they come to presentation. A radical change in the attire of one whom we know may lead us to think him a stranger. One who is expert at spearing or shooting fish will judge correctly as to the position of the fish, even though the line of direction to the fish is broken to vision, just as the straight stick is when thrust obliquely into water. But to most of us this presentation of the fish is in relations to which we are relatively unaccustomed, and we are not sufficiently experienced to judge aright. The difficulty does not arise from disagreement of appearance with reality; it arises from our erroneous judgment, and this is due to insufficiency of experience. The appearance is a true presentation of reality in those relations. The laws of refraction require that the straight stick shall seem broken in those relations; it must, if it shall be a true presentation

of the reality when so related to a subject. The hue of the cloth and the gem should vary in varying lights. In none of these instances is there any falsity in appearance, or any disagreement between appearance and reality. We standardize the color of objects by their color when seen in relatively colorless light. As this is the standard, one is liable to misjudge the color of an object when he sees it in lamplight or gaslight; for this is not the standard relation for color. But this error is not due to unreality in appearance; it is constituted by us in judging, and it comes of want of such experience of these objects in these unusual relations as is necessary to a correct perception of them.

3. The principles above stated and illustrated hold true for illusions in general — as those respecting the size of objects. They also hold true for those experiences which are, by way of distinction, called hallucinations as when we think we hear some one speak, although no one has spoken within our range of hearing; or when a man thinks he feels the movement of the fingers of his amputated arm. In our hallucinations, we are dealing with reality; there is at least a real cortical change, an event in the central nervous system. Our accompanying judgment respecting it is erroneous. When we wish to decide as to whether our perception is correct, we try to set the presentation in other relations. Thus, we may test the stick by passing the hand along it or by taking it out of the water. We make certain of the color of the cloth or gem by putting the object in the sunlight or where disturbing shades may not fall on it; and we test the spectre by trying to touch it or photograph it. That is, we determine the correctness of our perceptions by so relating presentations that our experience may be most effectually utilized in judging them.

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4. Conclusion. — Every appearance is a true expression of reality in the relations in which the subject-object relation is constituted. All seeming disagreement between appearance and reality is constituted by the erroneous judgment of the subject. In knowing appearances, we therewith know reality.

CHAPTER XX

REALITY

§ 78. Kinds of Reality. - This chapter deals with our conviction of the reality of the things we handle, the persons with whom we have intercourse, and the happenings in which we are interested. The book you were reading to a friend last evening, that friend and those with whom you are acquainted, and the incidents in their lives and yours of which you spoke, are realities. The colors in the illustrations of the book are real; so also are the relations of the lines of the drawings, and even the thoughts which you interchanged respecting the illustrations. furnishings of the room were in actual position-relation, and there was an actual passing of time. Things, events, and persons are concrete object-realities in the world which we know through sense-experience. "loud," "hard," "soft," etc., are quality realities. "Here" and "there," "then" and "now," are relational realities. Qualities and relations have no reality by themselves: but there is no known reality that does not have some quality and exist in some relation. There is no experience that does not include experience of quality and relation; they are in experience and are as real as the experience itself. Notions - as space, time, and number - and qualities have a reality different in kind from that of objects. Hence in affirming or denying reality, we should keep in mind the world of thought in which we are moving and the kind of reality under consideration.

§ 79. Degrees of Reality. — Whatever is, is in some sense real; but all objects do not express reality in the same degree. Our moods are real. My present joyousness is as certainly real as the objects of the external world. This joyousness may have ceased by to-morrow, and a mood of sadness may take its place; but my present mood is a reality, and that of to-morrow will be a reality. We are as certain of the reality of our feelings and our ideas as we are of our own reality. But our moods as such do not have the concreteness which we take to be a characteristic of reality; they are not so content-full, so substantive as is the self. Then, too, our moods and our ideas are thought of as having their being in us; they have no existence by themselves. They come to be in us, and they cease to be when they cease to be of us. Comparing our moods with our self, we note that the moods are inconstant and their duration uncertain; whereas the self has a quality of permanency which is revealed in our consciousness of self-sameness. Reality in its perfection would be content-full, concrete, self-existent, and unvarying in its nature. It is evident that no finite self is a perfect expression of reality; but it is also obvious that a self expresses reality in a higher degree than do the moods of the self. The self has a greater relative independence; it is manifestly concrete and content-full, and it has the characteristic of permanence. What is true of our moods compared with the self is also true of the qualities and relations of objects. The color of the flower, the tone of the bell, and the taste of the apple are real; their reality is as certain as the reality of the flower, the bell, and the apple. And the relative positions of the objects which we see and touch are as assuredly real as are the objects themselves. But these qualities and relations do not give so full an expression of reality as do the objects.

Compared with the objects, they are relatively dependent and changeful and are wanting in content-fullness; they do not express so high a degree of reality. The subject expresses a higher degree of reality than the moods of the subject; the object as a whole, a higher degree of reality than the qualities and relations of the object. If we would deal accurately with experience, we must recognize different kinds and degrees of reality.

- § 80. Reality as the Common Content, or the Universal, in Experience. In our sketch of the views of the Sophists, we stated that they held that a subject perceives merely a particular appearance, one that is particular and individual in all its characteristics. Thus, according to their teaching, when I see a horse, I only perceive that momentary and changing appearance. What I perceive is an isolated and independent element of my consciousness; it has its complete being, whatever that may be, apart from all else. In this section, we purpose to examine experience with a view to determining whether the Sophists are right in this contention.
- I. Particular Experience in Respect of Extent. In the simplest form of experience, the object is "this thing" or "that thing"; it is in "this place" or in "that place." It is distinguished as "this" or "that," and as being "here" or "there." The qualifications "this" and "that," and "here" and "there," seem to be separative and particularizing; they apparently serve to separate the qualified object or place from other objects and places. And they doubtless are expressions of separating and particularizing thought; they denote an isolating and separative experience. But they are not merely separative; they conjoin. When we think of any object as "this thing" or "that thing," we set it apart from all other objects; but the thought which sets it apart rec-

ognizes the actuality of other objects. There can be no setting apart without such recognition. In the statement, "I prefer that cane," the thought expressed in the word "that" includes recognition of the existence of other canes than the one which is designated. In any experience of "this" or "that," there is a real, but possibly undefined, consciousness of a whole in which the selected particular has its being and with all the particulars of which it is conjoined. Similarly in the expression, "You will find him there," there is consciousness of the whole of space; the place designated is simply the centre of attention for the moment. This much is evident: we qualify a particular thing or quality or relation by such particularizing and separative terms, because that which we thus qualify does not exist in our experience apart and by itself: it is of the universe, and the universe is in the background of our experience when we particularize. When we individualize an object — a thing, an event, a quality, or a relation - we actually conjoin it with all else in the very experience in which we distinguish it from all else. Every object of your experience has its being in the universe of your experience; it is a part of the universe as you conceive it and is organically united in your experience with everything with which you have had commerce. An arm has its being and its meaning as an organic part of a body. When we think of a man's arm, our thought involves an implicit recognition of his body. So every particular of your experience has its being and its meaning for you in its organic union with your experience as a whole; and when you think that object apart from the whole, there is involved in your thought an implicit recognition of the whole. No portion of experience can be particularized without implication of the whole of experience. No particular experience is merely a particular

experience. No experience is simply an experience of the particular object.

2. Particular Experience in Respect of Time. - Our experience of events gives a time element to consciousness. For us, every event occurs "now" or "then." The element of experience which we express by such terms as "now" and "then" separates the time of that event from the whole of time. A statement is made in your hearing and you say, "I have heard that before." that thought you separate a portion of time from all the rest of time. But in so isolating that moment of time, you recognize that the previous experience did not have its being apart and by itself, but in the whole of experience regarded temporally. Every experience derives its temporal being and meaning from its being included in the total of experience. An experience has its origin in what is "past" to the experience, and it has its completion in what is "future" to it. That is, the experience of each of us is in reality one developing experience. The total of your experience is not a sum of experiences; it is a whole from which you separate particulars and so think of them as isolated and independent experiences. But these so-called separate experiences are incomplete if separated from what precedes and what follows. This indicates that no experience selected from the total of a subject's experience is a mere particular in respect of time; it has that in it which is common to all the subject's experience.

But this is not all. "Now" and "then" are common to your experience and mine. "Now" is the same for both of us; any moment in the past of the world's changes is the same for both of us, the same in respect of time however much it may bring us that is different content to us in other respects than temporally. This temporal unity in

experience is internal and organic, not external and mechanical. The parts of a chair are made separately and are put together afterward. The parts of an organism—as the body of a plant or an animal—come into being in the whole body; they are united in their coming to be. That is, they are united in the ground, or source, of their being. So the experiences of all individuals have their temporal unity in their coming to be; and the moment of their occurrence is an essential element of time. In respect of time they are organically related. As to the time element, the experiences of all individuals have a ground unity.

3. Particular Experience in Respect of the Subject. -Is there complete experience which is wholly that of the particular subject? In other words, is there a purely "private" experience? The question is not as to whether there are elements of experience which are the "private property" of the individual subject. It is this: Take any moment of your experience, is such a moment ever made up of elements which are entirely yours, in which there is no element which you have in common with others? It would appear from the preceding paragraph that there is no experience which is wholly that of a particular subject; in the matter of the time element, our experiences have a common content. But this is not all; there are other elements of experience which are had in common. They enter into all human experience. Experience is largely effected by language; our meditations are mediated by unuttered speech. Our apprehension of our own pleasure or displeasure, our purposing, and our knowledge of ourselves - all these activities are carried on with the aid of language. Now, language is not a collection of mere vocables. The experiences of men have been a factor in the coining of words and phrases; for

language has come of endeavor to express experience. Words and phrases are a living embodiment of a common experience. They express attitudes toward the universe and life; they affect and reveal our experience. Hence, in acquiring our mother tongue, we acquire a content of experience which is not merely ours as individuals. Language, attitudes toward life and its great questions, and forms of thought become ours as members of society. There is in them a common inheritance of experience, and they affect our thought and feelings and purposes somewhat as they affect the thinking and the life of others. How much of our knowledge of the world is our individual creation? Can we truly say that any of it originated with us and is purely our own? By far the greater part of the experience of each of us comes to us from a common source of human experience; much of it is universal. Our individual experience points beyond us to others; it has in it elements which are not individual and "private," but common and "public."

4. Conclusions. — We find that every experience of an individual subject is organically related to all that subject's experience. To separate any moment of experience from the whole is to lessen its significance, to sunder it from that in union with which it has its life. When we give attention to any part of our experience, the whole of experience is the necessary background of such particularized experience. We find, further, that the experience of any one subject includes content of the experience of other subjects. There is experience which is common to all men — as the rising and setting of the sun, the changes of the moon and seasons; the distinguishing of positions and time; counting and measuring; longing, fearing, and purposing; a sense of opposition between right and wrong; a sense of the reality of self and other persons, of things and events.

This much at least may be said of this universal in experience: it is subjective reality, and it comes of experience with objective reality. It is reality. We may not question this fact; for to do so would be to land in scepticism with its destructive contradictories. This reality is not merely subjectively real. It must arise from commerce with what is objectively real, with what is possible object for all subjects. Only thus can we account for its being in the experience of all. We have already seen (§ 59, 4 and 5) that experience is the realization of objects by the subject. In his experience, the artisan obtains mastery of the tools of his craft; what those tools are for thinking, feeling, and doing has become a part of his own reality. We have each of us in our experience thus realized within ourselves what the common objects of life are for our doing, thinking, and feeling. The common object-realities thus realized become a common subjective reality, the universal reality of experience.

- § 81. The Nature of Reality. We discussed the nature of reality in §§ 42, 2; and 75, 3. We now purpose to give it fuller consideration.
- I. Few will controvert the statement that whatever is, is real; but we too readily conclude from this that to be real means to exist. Reality, however, is more than mere existence. Mere being is impossible; to conceive mere existence would be to conceive nothing. Whatever is, has some quality; it is being of a kind. In keeping with this, Idealists have regarded reality as being with meaning; and they have insisted that we may not strip being of meaning or sunder meaning from being. In separating them, we lose both. Since reality is being of a kind, it is being with a nature. Men have felt this, and they have sought to know what that nature is. That has, in fact, been the quest of Philosophers from the beginning. The

earliest of them sought to know what the world is made of; and in that they were inquiring after the nature of reality.

2. If we inquire of the Physical Sciences - Physics, Chemistry, Mechanics, and Biology - we shall find that they agree in conceiving reality as active. The atoms, electrons, and ions of Science are centres of energy. When the sciences have reduced the reality with which they deal to its lowest terms, they find that they have being with energy. The Biologist's irreducible unit is also being with energy. That is, the ultimate of reality as conceived by Science is active being. This conception determines its descriptions of objects and processes and is the import of its conclusions. When we speak of reality as active being, "active" is not used as signifying in motion; neither is it to be taken as the synonym of "dynamic," as though it meant having the property of producing motion. These conceptions are mechanical and would relate the activity externally and mechanically; and we wish to avoid spatial and mechanical suggestions so far as possible. In characterizing reality as active being, the activity we have in mind is such activity as is present in the growth of plants and animals. The activity which effects and determines the growth of a body is in the body and of the body; it is, in a word, the immanent activity of the body. This activity serves to give expression to the nature of the reality. The result is in one instance a rose, in another a geranium, in another a sheep, in yet another a dog. Stating it generally, we may say that the growing body is a developing expression of the nature of the reality which is thus embodied. Hence, in characterizing reality as active being, we have in mind activity which is immanent and developmental. This conception of activity has its best illustration in the changes in our own consciousness. The self is reality; the self is active being, and the changes in the self are immanent and developmental.

This conception accords with what we have previously said respecting reality. We have held that it is being with meaning. That being true, it is in its nature intelligible; it may be known if it shall come into presentation to a subject. We have also concluded that reality is active being. That being true, it can express itself. As to nature, then, reality is expressible and intelligible; it can be presented to a subject and it can be known. This is what is meant when it is said that "the reality of an entity is in its perceptibility."

- §82. Reality comes to Expression and Development in the Subject-Object Relation, and only in this Relation. —
- 1. Reality as Object. Reality is being with meaning. But meaning implies an intelligent perceiver, and it is obvious that the meaning of reality cannot be developed except there be a subject to whom the object has meaning. The full significance of an axe or a gun can only be realized when it is related to a man. . It is generally agreed that there can be no color, taste, or sound apart from sensation. We may not affirm them or other qualities of an object except as it is in presentation to a subject. The color of the painting, the flavor of the fruit, the smoothness and hardness of the marble, and the tone of the harp are not realized, do not come to full expression, unless the painting, the fruit, the marble, and the harp are related to a sentient being. Their meaning can only be developed when they become objects for an intelligent subject. When the activity of the object and the subject are interrelated, then the reality of the object is developed, then and then only does its nature find completed expression. It is, of course, impossible to conceive a reality or

to think intelligibly of any reality except as it is set in the subject-object relation.

2. Reality as Subject. - Rationality - i.e. thinking, feeling, and purposing — is one mark of reality as subject. We too often think of ourselves as first being rational and then becoming conscious of objects; whereas we must be conscious in order that we may be rational. To be rational is to think and feel and will; and we only think and feel and will when we think of some object and feel concerning some object and will respecting some object. Our rationality is developed and finds expression in experience and through experience; and we have no experience except as we are related to an object. In a word, it is in our conscious relation to objects that the rational nature of each of us comes to realization. Consciousness of self is another characteristic of subject-reality. We only know an object as we distinguish it from what is not itself. You can only be conscious of yourself as you distinguish yourself from what is not yourself. That is, we come to consciousness of ourselves in the experience in which we become conscious of other objects. Hence the nature of our reality, in respect of consciousness of self, is developed, and so finds expression, in the subjectobject relation.

CHAPTER XXI

IS THE COGNITIVE EXPERIENCE RESOLUBLE?

§ 83. What the Resolution of Cognitive Experience Signifies. — A card is handed you, and you perceive that it is a photograph. This may be taken as an illustration of cognitive experience. It has been held that this experience yields two factors upon analysis - a mental factor and a physical factor. Speaking in general terms, the physical factor includes the photograph and your physical organism, with special reference in the case of the latter to your sense-organs of vision and touch, and your nervous system. Thus conceived, the object is thought to act upon your sense-organs and, through afferent nerves connecting the sense-organs with the cerebral cortex, to cause effects in the cortex. These effects are that particular of the physical factor which is most directly related to the mental factor. These two factors - the mind and the affected cortex - are set over against each other; they are conceived to be independent realities, each being thought to be complete in itself without regard to the other. Those who follow this method insist that Epistemology must begin with such an analysis and must undertake to construct the cognitive experience out of the action and reaction of these two factors.

The analysis of experience which we have just described, regards experience as a result, *i.e.* as an accomplished fact. Experience may also be conceived as a process, and there are those who prefer so to regard it. Many who conceive

experience thus, insist that we must follow the genesis of perception if we would construct a theory of Knowing. In order to trace the genesis of Knowledge, they analyze the cognitive experience into a physical process and a psychical process. In the instance of the illustration used above, this analysis would give us stimulation of the retina by the card, consequent excitation of the optic nerve, transference of this excitation to the occipital lobe of the cerebrum, and consequent changes in the cortex. This method also discovers psychical changes - known as sensation and ideation; and these conclude in the judgment that the card is a photograph. These psychical changes are concomitant with the cortical changes. Here we have the outline of a scientific description of the process in cognition. It is held that an acceptable theory of knowledge can be had if we shall study perception in its genesis, and that such an analysis as we have roughly sketched presents perception in process. It will be noted that the two factors of the former conception and the two processes in the latter are in mutually exclusive realms; and they — the factors and the processes — are represented as having a distinct apartness in nature and in operation.

§ 84. Why Cognition is thus Analyzed. — Can Philosophy forward its work and interest by trying to resolve the cognitive experience? This is the question we have to answer. The interest of Philosophy in the study which we now have in hand is distinctly practical. It is a mistake to assume that Philosophy is moved by mere curiosity in any of its investigations. We will note the practicality of its interest at this point. Suppose I say, "The telephone bell just rang; I heard it." That is an assertion of perceptual experience and knowledge on my part. What about the reality of the bell? and what does this experience mean for that reality? Philosophy asks these

questions. The earliest, and the abiding, desire of Philosophy is to determine what the world is made of and what we ourselves are. Or, to state it briefly and comprehensively, Philosophy wishes to know the nature of reality. In trying to satisfy this desire, men have thought it necessary to justify our certainty that our world of persons and things and happenings is real. We doubt the philosophical value of this inquiry. All thinking and all intersubjective intercourse assumes the reality of ourselves and our world; it cannot do otherwise. But the question of the reality of the world has been raised; and, in seeking an answer, men have been led to inquire respecting the validity of knowledge. Is my knowledge of the world valid for you? Does cognition put us in possession of reality? Nothing else than commerce with reality can meet the demands of thought and the requirements of life. Now, it has been held by many that, if we would satisfy this desire, our first step is to resolve the cognitive experience as indicated above. Can the resolution of the cognitive experience into two factors or two processes forward this interest? We think not.

§ 85. The Resolution of Cognitive Experience criticised. — This method would seem to commend itself to us, for it is in keeping with the method usually followed by Science. In scientific investigations, we believe that we can best understand a complex reality if we shall break it up into its elements and then discover how these combine. This is the method of Chemistry, Biology, and Psychology; and, in our Historical Introduction, we have called attention to efforts made to apply the analytic method in Philosophy. (See especially §§ 18, 2; 36, 2-4; 40; 41.) Why do we decline to adopt it?

I. It has proved Ineffective and Unsatisfactory. — After we have separated the mental and the physical factors,

we have to decide which of these shall be accepted as the controlling factor in any given case. Was it the card or your mind which determined what you saw when the card was handed you? The Plain Man will say that it must be the card; and not a few thinkers will agree with the Plain Man. The thinker who holds this view will probably refer your perception to the physical factor as a whole - the card and your body, with special reference in the instance of the body to your organs of vision and your nervous system. Similarly, it would be said that the vibrating bell and my reacting physical organism determine what I perceive when I hear the bell. Empiricists take this view; and the more pronounced would substantially agree with Locke's theory, and he would say that ideas are impressed on our minds when you see the card and I hear the bell. This approach regards the particulars of our knowledge as a contribution of the object to the subject, a contribution made through senseexperience. But this is unsatisfactory. Whether we conceive perception as resulting from the interaction of physical and mental factors or as resoluble into concomitant physical and psychical processes, there is one fact that renders this method ineffective. That fact is, that conditions of the cortex and changes in the cortex bear no resemblance whatever to knowledge; they and knowledge have no discoverable community of nature or similarity in expression. Such conditions or changes have no definable likeness to our consciousness of color or sound, or taste, or to our feeling of satisfaction or dissatisfaction. But if this method shall advance our thinking, it must find such likeness there. We have separated the physical and psychical factors, but we cannot so construe their combination as to show how knowledge results. Analysis yields two processes; but these processes are in spheres

which are conceived as radically different in nature, and we cannot logically connect them so as to show how knowledge arises. Why should a process in the cortex be accompanied by the perception of a photograph? The method under consideration does not help us to answer this question. We have the knowledge previous to the analysis; but we cannot construct the knowledge from what the analysis discovers. This method is ineffective; in the hands of Empiricists it yields nothing which makes for or against the validity of knowledge. It separates subject and object, and it cannot unite them.

Rationalists begin with the mental factor. Some, Kant for example, believe that the mind determines form and contributes matter of knowledge. According to Leibniz, all there is in knowledge is contributed by the intellect. They agree in recognizing a fact overlooked by extreme Empiricists - viz., that your perception (of the photograph) and my perception (of the ringing of the telephone bell) are accomplished through thinking. According to those who hold that the subject determines the form of knowledge, you perceive a photograph because you have given photographic form to material furnished you in sensation. So also as to my perception of the bell. For them, the form which is given by us to the sense-data is not a purely individual, or personal, construction; it is determined by principles of thought which are common to all subjects. Hence all normal subjects give the same form to the same material of experience.

The doctrine just stated is unsatisfactory; it raises a question which it cannot answer. Is that which stimulated sensation in your instance really a photograph, just as it is known to you? Is it in my instance actually a bell, constituted as it is known by me? If this doctrine be true, we have no warrant that the world which we know

is the world of reality. This question demands answer of those also who hold that the mind contributes content and form to knowledge, and who at the same time sunder subject and object in their study of cognition. The analytic method cannot meet this demand. We have found that Empiricism cannot pass from object to subject; it is also true that the Rationalist who thus analyses cognition, cannot pass from the subject to the object. This method fails to connect the knower with reality which is other than himself. In resolving the cognitive experience, we sunder the subject and the object; and we cannot, from the sundered subject and object, reconstruct the knowledge which we broke up in our analysis. The sundered subject and object cannot testify respecting the validity of knowledge; but they were separated in order that we might obtain such testimony. This method is ineffective.

- 2. In this Resolution of Experience, Knowledge Vanishes. This treatment of cognitive experience gives us changes in consciousness instead of knowledge. When you hear the door-bell, there is doubtless a change in your consciousness; but that change is not knowledge. The knowledge is the apprehended meaning of an occurrence, the occurrence being an object in the external world. So when I see the morning paper, there is a change in my consciousness; but the item of knowledge is not this change. The knowledge is the meaning of an object external to me. A process in consciousness or a state of consciousness is not meaning and is not to be taken for knowledge. In the proposed analysis of cognition, knowledge disappears; and no reflection upon the resulting factors or processes can recall it.
 - 3. The Analysis leads to incorrect Views respecting Knowledge. Many who follow this method have con-

cluded that the primary object in cognition is a state of consciousness. For example, I see this book. According to this view, the action of the object, the book, on my retinæ has caused a change in my cortex and there occurs a resultant or attendant change in my consciousness; and I have, in consequence, a mental picture of this book. The term "picture" is, of course, not to be taken too literally. What I know primarily is thought to be a mental representation or symbol or presentation of the book, not the book itself. This state of consciousness, describe it as one may, is held to be what is primarily cognized. Among those who accept this doctrine, there is great difference of opinion as to how this ideational object connects me with the book; i.e. how I arrive at knowledge of the book through knowledge of the state of consciousness. But the essential fact for us here is, that I am said to have a state of consciousness for my immediate object.

Others who adopt this analytic method tend to the doctrine held by Kant: that the known world is a construct of the subject. According to this view, all that you are conscious of when you see, handle, or taste the orange is supplied by you and is determined by what you are. You have no rational grasp of the reality of that which you call the orange. We do not know the reality of objects, the things-in-themselves; we know the appearances of thingsin-themselves, and we impose the known appearances upon unordered material which is given us in sense-perception. What we know is the appearance (constructed by the understanding) of something which does not itself appear. We cannot, upon the ground of knowledge, affirm that this non-appearing reality exists; we posit it, i.e. we affirm that it is, although we do not, and cannot, know that it exists.

The resolution of cognitive experience shuts us up to one

or the other of the two views just described. They are both open to serious criticism; but they have been so extensively held and are so important as to call for separate study.

§ 86. Is the Primary Object in Cognition a State of Consciousness? — I. Logical Consequences of this Doctrine. - If it be true that the primary object in cognition is a state of consciousness, then the only world which any one can know is the world of his own consciousness. This is Subjectivism; and we have rejected Subjectivism because it is incurably inconsistent as well as destructive. (See Chap. XVII.) It shuts the subject up within himself; he and his knowledge are enclosed in a sealed chamber, a chamber that is without door or window or skylight. No way is left by which we can get into knowing relation with anything outside ourselves. We cannot know that there is an external world or that there are any other selves. You cannot know that you have a body; what you think you know as your hand is, so far as your knowledge of it goes, merely a state of your consciousness. You may assert that there is an external world; but your belief that there is anything beside your conscious states is either fantasy or groundless assumption. According to Subjectivism, there is no way by which to test the validity of my assumption that there are other realities than my conscious states; for I can only know that there is something else by knowing what is not of my consciousness, and such knowledge is held to be impossible. If the doctrine under consideration be true, I cannot argue from the fact that I have a certain consciousness to the conclusion that there must be something else than myself. from the fact that I see a tree to the conclusion that there is a real object external to me; because, so far as we know, this consciousness may have its origin in me. This doctrine makes attempt at social intercourse folly; it converts conscious life, the great reality for each of us, into an illusion; and it is the death of Science. Subjectivism is, however, the logical consequence of resolving the cognitive experience into a physical and a mental factor, or into psychical and physical processes. This analysis affirms knowledge of an external world. It does so in teaching that there is a physical factor or process, and in stating what that factor does or what is the course of the process. This affirmation cannot be reconciled with the doctrine which follows from the analysis. We are unready to accept any theory or procedure which is inconsistent with itself and which commits us to intellectual despair.

2. It Misconceives the Subject and Object and their Relation to each other. - The subject and the object are conceived to be independent of each other and are thought to be in a purely external mechanical relation, such a relation, for example, as a hot stove and an iron lying upon it. We speak of the stove as causing the iron to become hot; and in this we are describing an event in terms of cause mechanically conceived. Similarly, the stove as an object is regarded as causing certain sensations in the subject, and the subject is thought to react upon these sensations. From this it would seem natural to conclude that a state of consciousness - whether it be known as idea, impression, or sensation — is the object first perceived. This account appears at first sight to be reasonable; and it would be conclusive if the subject and object were independent of each other and if cognition were a purely mechanical process.

Cognition is not, however, a mere mechanical process; and the subject and object are not complete apart from each other. The relation of the percipient to the stove is not the same with that of the stove to the iron lying

upon it. The stove and the iron do not exist for each other; neither knows that the other is. In this respect, they are independent. But this is not true of the stove and the individual subject. The stove exists for a subject; its characteristic qualities — those which we have in mind when we speak or think of a stove - are not realized except when it is object for some subject. A subject must consciously relate it to himself if its significance shall come to realization. Not only is the object dependent upon its relation to a subject for the expression of its reality, but there is no subject reality outside the subject-object relation. We are real subjects only as we think, feel, and will; and we cannot think, feel, and will except we are related to an object. Subject and object have no such independence as is assumed in the resolution of the cognitive experience; for neither is complete apart from the other.

Another fact shows that the relation of the subject to the stove is very different from that of the stove to the iron which lies upon it. When one looks at a stove or thinks about it, he, the subject, determines the relation in which they stand to each other. He may relate his thought to its appearance, its value on the market, its weight, its usefulness, or any one of a number of particulars which give the stove meaning for life. Beside this, the experience is on another and higher level than any that may be conceived respecting the iron and the stove. In the latter, we have two objects; in the former, we have a subject and an object, and the subject consciously determines the relation. The relation of the iron and the stove is determined for both of them; the relation of the subject and the stove is determined by one of them, by the subject. Resolution of experience errs seriously in treating the subject as an object. A subject relates himself and objects; an object is related. We note still another fact: the reality of the object, its meaning for life, becomes content of the subject's consciousness; it becomes a part of the subject's reality. The relation thus constituted is not external, like that of bricks in a wall; it is immanent and organic, like that between a plant and what it appropriates from its environment and assimilates to itself. We conclude, therefore, that the doctrine under consideration misconceives the subject and object in regarding them as independent and complete apart from each other; it errs in treating the subject as an object; it errs also in assuming that the subject and object are mechanically related.

3. It misconceives Idea and the Relation of Idea to Subject and to Object. — This doctrine interposes ideas between subject and object, and it has the subject cognize an idea of the object. That is, the idea of the external object is the subject's primary object. This idea is also regarded as a state of consciousness. But an idea is not a mere state of consciousness; it is the conceived meaning of an object. Your idea of a house is not a mere state of your consciousness; it is your conception of the meaning of a house in the system in which we are. It is not an image of a building; it is the significance of the building for thought and feeling and action. So far as it is your idea, it owes its being to your mental activity. Ideas have no being in themselves; they come to be, and they continue to be, through the mental activity of a subject. Failure to recognize this fact is certain to lead to erroneous conclusions. Now, those who hold the doctrine which we are examining conceive the mind as something apart from the idea and as possessing the idea; whereas the idea is the subject judging. Your idea of the house is yourself giving intelligent form to the meaning of that object. This is the idea as related to the subject. The idea abstracted from the subject ceases to be a fact. But the doctrine under consideration does just this; it abstracts the idea from the subject, and it treats the idea as a mere state of consciousness and regards it as externally related to the subject. Having done this, it makes the idea the directly perceived object. The idea is, however, not a mere state of consciousness, and it is not externally related to the subject; it is the subject judging.

What is the idea as related to the object? This doctrine conceives the idea as purely subjective; it would separate the idea from the object of which it is the idea. We have seen that my idea of a clock is not simply in and of myself. An idea is the conceived meaning of an object; if you abstract the object, I will have no idea. I see a certain object and conclude that it is a clock having some features which are novel to me. My idea is not purely subjective; it has an objective relation and aspect. If this objective relation is broken up, the idea vanishes. No idea is purely subjective. An idea is not a mere state of a subject; it is the significance for the subject of something else than himself, and he can only apprehend that significance as he apprehends that something else.

This misconception of the relation of the idea to the subject and the object, has led in this instance to an absolute distinction between objects and ideas. This distinction and the resolution of cognition yield a dualistic conception of reality. The physical and the psychical are set over against each other. What we have taken to be a universe, what reveals itself as a whole with all its parts organically related, is cloven into two portions each of which is complete apart from the other. If we undertake to relate these realities — the psychical and the physical — in respect of their nature, we can only say that each is what the other is not. This would resolve the universe into a "duoverse" of orders which are mutually exclusive,

being independent of each other and opposed in nature. If such a "duoverse" were possible, there could be no meaning in one order for the other. Our one certainty is the reality of the mental world; we know that we think and feel and will, and this is in the psychical realm. This certainty explains the tendency of those who hold a doctrine of dualism to make a state of consciousness the primary object in cognition; and this theory of cognition has reacted on the dualistic doctrine of reality and has tended to confirm the dualism of those who accept it. We conclude, however, from our study, that the attempt to resolve cognitive experience is due to a misconception of idea and of the relation of idea to subject and to object.

4. The Primary Object is not a State of Consciousness. — A state of consciousness is not perceptible. A conscious state has no existence by itself; it is in the subject's experience. It is not something which the subject possesses; it is the subject himself experiencing. If I undertake to make my feeling consciousness my object, what introspection gives me is not my feeling, but myself as feeling. If I seek a state of cognitive consciousness, what I get is not a knowing consciousness, but myself as knowing. That is not all. When we undertake to attend to our consciousness at any time, the attempt to do so effects a change. That is, the consciousness which we sought has ceased to be, and what we have for our object is ourselves remembering. A concrete state of consciousness can never be made an object. When one perceives a knife or a pen, the primary object of his cognitive activity is the knife or the pen, not a state of consciousness. We know nothing about states of consciousness in perception until we have reflected upon the process and have submitted it to analysis. When you see a blue book, touch a rough surface, or hear a creaking sound,

your object is the blue book, the rough surface, or the creaking sound, not a process in consciousness nor a state of consciousness.

The resolution of the cognitive experience favors the doctrine which we have just examined and rejected; but we cannot give a final answer respecting the resolubility of cognition until we have examined a kindred doctrine, the doctrine that the known world is a construct of the subject.

- § 87. The Kantian Limitation of Knowledge. 1. The Doctrine Stated. - We have given an extended statement of Kant's doctrine in § 44, and we refer to that for particulars. A brief statement, relating his view to the question now under consideration, will be found in § 85, 3. The gist of his doctrine for us at the present is, that we only know appearances and these appearances are the construct of subjective activity. The appearances are not fantasy; they are not conjured up by the individual subject. The material of knowledge is given us through sense-experience; it comes to us unordered, and order and meaning are given it by the mind. Knowledge is limited to what is received through sense-experience and has form and meaning given it by the understanding. The real world, the world whence the material of knowledge comes, is not known by us; and its reality cannot be inferred from what we know. We posit, or affirm, its existence; and we are to act as if it really were. This positing activity is apart from, and quite other than, the knowing activity of the subject; it is an act of faith. Kant thus sets faith over against knowledge.
- 2. This Doctrine cuts the Subject off from Objective Reality.

 His doctrine is in this particular open to the objection urged at length in § 86, 1. Its logical consequences are virtually the same with those of the doctrine criticised

in that sub-section. To be sure, he held that the individual subject does not fix the form and meaning of the objects which he perceives, for he taught that the forms of the objects are constituted by a super-conscious self which is the ground of the self of experience. By this, he made the world which is known truly objective in one respect; it is object for all. But knowledge remains subjective, for we do not apprehend reality. We only know the world as subjectively ordered, not as it is objectively real. He acknowledges that his view sets this limitation. That being the case, it commits us to Subjectivism; and we have definitely rejected that form of epistemological doctrine.

3. We object to his Sundering of Knowledge and Faith. - He says we do not know, and we cannot know, that the external world is; but we are to affirm that it is and that it furnishes material for knowledge of the world of Science. He has man as will affirm that something is, although man as intellect does not know it to be. This would destroy the subject's psychical unity. It cleaves the unitary self into two parts which function in quite different ways and independently of each other. To tear the self apart thus would be the death of both intellect and will. He could not have constructed such a theory but for the defective Psychology of his day. The faculty Psychology was prevalent at that time. It conceived the mind as constituted in three departments - intellect, feeling, and will; and these were regarded as separate activities, independent of each other and externally related. It is now recognized that the subject's activity is unitary, and that the subject is in every moment a thinking-feeling-willing subject. Kant's conception of the subject refusing to affirm as a knowing subject and, at the same time, affirming as a willing subject is irreconcilable with man's psychical unity. Faith and knowledge may not be set over against each other thus; there is no knowledge apart from rational faith, and no rational faith apart from knowledge. Kant's view would commit us to internal conflict. According to him, we must treat that as true which we do not know to be true; and we must regard the world of appearances as though it were a true expression of the world of reality, although we have no ground for so regarding it. Philosophy cannot rest in this; and, as a consequence, those who followed Kant sought to connect the subject with objective reality.

Kant's doctrine of the limitation of knowledge owes its origin, in part at least, to his conception of the relation of the subject and object. He conceives the subject and the objective world as externally related; and cognition was for him the result of the mechanical action and reaction of the subject and the thing-in-itself. Elsewhere in his teaching he acknowledges the inadequacy of mechanism as an explanatory theory. We can scarcely imagine what it would have meant for Philosophy if the great Kant had recognized that the subject and the object are organically related, and that cognition is not a purely mechanical process.

§ 88. Summary. — Resolution of the cognitive experience has been found to be ineffective and unsatisfactory. It results in the sundering of the subject and the object; and no acceptable interpretation of the resultant factors or processes will give the subject rational seizure of the object. Knowledge vanishes in the analysis and cannot be reconstituted. This method shuts us up to Subjectivism. This is shown in two doctrines which have been the logical outcome of its application to the problem of knowledge: the doctrine that the primary object in cognition is a state of consciousness, and the Kantian doctrine of the

limitation of knowledge. We conclude that the cognitive experience is irresoluble. Knowledge is for Philosophy a primal and ultimate fact; and we shall so regard it.

It has been thought that this analysis would aid in establishing the validity of knowledge. But analysis of cognition does not help to answer the question raised; it creates difficulties which cannot be overcome. We must assume the fact and the validity of knowledge; we cannot think or speak rationally unless we make this assumption. We have seen that those who express doubt of knowledge or of its validity assume its validity in their doubt, and in the reasons they assign for their doubt. (See Chap. XVI.) Fortunately, we do not need to demonstrate the validity of knowledge; cognition determines its own validity. We may err in particular judgments; but knowledge must discover and correct the error if it shall be corrected. Knowledge passes judgment on itself; it is at once the court of original jurisdiction and the court of last resort in all controversies respecting validity.

CHAPTER XXII

THE TRI-PHASAL CHARACTER OF COGNITIVE ACTIVITY

- § 80. Historical. All experience is reducible to three elemental modes of consciousness — thinking, feeling, willing; or intellection, affection, volition. Thinkers have tended to give unequal emphasis to these three phases of experience; many, if not most, philosophers have assigned preëminence to some one of them. This followed not unnaturally from the earlier conception of them as independent elements of consciousness. From this differing emphasis there have arisen three philosophic attitudes. These attitudes are so marked and so determinative of philosophic conclusions as to furnish a principle by which we may classify philosophies; and Intellectualism, Voluntarism, and Affectionism are now recognized as terms which characterize distinctive forms of philosophic thought. Although these terms are virtually self-defining, we add something by way of more specific description, limiting our statement to the consideration of the terms as they are related to cognition.
- I. Pure Intellectualism would regard Reason as Solely Intellective. According to it, so far as reality may be known, it will be known because the intellect, acting by itself, apprehends it. Not all, however, who give a primacy to thought in cognition, hold a doctrine of pure intellectualism; on the contrary, most Intellectualists of the present assert that all rational activity, the cognitive not excluded, has volitional and affective aspects, as well as an intellective aspect. The primacy which Intellec-

tualists of to-day assign to thought is really an aspectal primacy. For them, this phase derives its aspect of primacy from the fact that in the study of cognition they are regarding experience from the intellective point of view. Greek philosophy gave preëminence to the intellective factor of rational activity. Averroës, the Arabian philosopher, was an Intellectualist; and Albertus Magnus and Thomas Aquinas are representative Mediaeval Intellectualists. The Substantialists and Kant belong here.

- 2. Voluntarism gives Primacy to the Will. It holds that consciousness is under the control of the will, that experience originates in the determination of the will, and that will determines what shall be the content of experience. According to this doctrine, thinking is only for practical ends, and thought is merely an instrument of the will. The Romans and the Hebrews were Voluntarists. They gave greater significance to what we commonly call practical considerations than to theoretical; and with them the personal will takes precedence over the intellect. As earlier representative Voluntarists, we may name Avicebron (a Jew who came into intimate relations with the Arabian philosophy), Augustine, Duns Scotus, and William of Ockham; as later, De Biran, Fichte, and Schopen-Lotze had a voluntaristic tendency. Personal Idealists and most Pragmatists are also Voluntarists.
- 3. Affectionism gives Primacy to Feeling. For the present, this attitude is more prevalent in Psychology than in Philosophy. Some psychologists would derive intellection and volition from feeling; and this comes of their undertaking to construct all forms of consciousness out of sensation. We speak of this psychological doctrine because philosophical conclusions are involved in it. Affectionism holds that reality enters experience through feeling, not through thought. Neo-Platonists and most

Mystics belong here. With them the highest form of knowledge, the only true knowledge, is little else than "uninterrupted feeling." Their "super-rational" mode of cognition is immediate appropriation of reality through feeling. There have been few teachers of philosophy who have held a definite and declared doctrine of Affectionism. Nicholas of Cusa and the Victorines — Hugo and Richard — are representatives. We believe that Jacobi and Fries may be so classified. Pragmatism as held and stated by James seems to be Affectionism; for he insisted that Philosophy comes through "passionate vision," and that logic follows and furnishes reasons for the doctrines thus obtained.

§ 90. Consciousness is Unitary. — 1. The older Psychology regarded intellect, feeling, and will as departments of mental life independent of one another. keeping with this conception, you might be active intellectually without attendant feeling or volitional activity. Each of these faculties was even conceived as a thing-initself; and a distinct office in mental life was assigned to each of them. This faculty psychology has no acceptance at present, nevertheless expressions are to be found in the philosophic literature of to-day which indicate that thought has not wholly freed itself from bondage to this discarded conception. Consciousness is unitary; man, in his rationality, is a unit. He has one rationality, not three; and that one rationality has three inseparable modes. do not think and only think in one moment, and will in another, and feel in yet another. There is no experience which is now intellective, now volitional, and at another moment affective. The unitary experience may not be broken up thus. Any portion of concrete experience, select it by what rule we may, is a thinking-feeling-willing experience.

2. No One of these Modes is Complete in Itself. - We cannot think without feeling and willing, neither can we will without thinking and feeling, nor feel apart from thinking. Feeling is the agreeable or disagreeable tone attendant upon our thought of a person or thing or event. One cannot have a feeling - say of sympathy for the suffering or scorn of evil-doing or dislike of what is ugly unless some person or thing or act be an object of thought. That respecting which we have the feeling, must have some meaning for us. In a word, feeling involves thought. The feeling in any instance may be instinctive, or it may follow upon careful reasoning; but, in either case and every case, thinking is essential to feeling. Volition involves feeling. Of several objects proffered me or several courses open to me, I choose one, preferring it to the others. This preference comes of my feeling respecting the objects. Taking all things into consideration, I am more favorably disposed toward the chosen object or course than toward the others. In other words, there is no volition apart from feeling, for feeling has to do with the directing of volition. It is obvious that we cannot will except we have thought of some object, the object respecting which we will. These considerations force the conclusions that feeling and volition involve intellection, and that volition involves feeling. In the next section we shall attend to facts which show that every moment of intellective activity is feeling- and will-directed. It will suffice here to take note of one fact; interest and attention are essential to thought. We must give attention to that about which we think, and we only give attention to that in which we have interest. The interest may be only momentary, but for that moment we have interest in it. There can be no sustained attention without volition, and feeling is essential to interest. These modes of experience are inseparable; each is dependent upon the others, and can only be if the others are.

- § 91. Feeling and Will are involved in Cognition. We have insisted that knowledge cannot be a mere datum to consciousness. In concluding that the rumbling you hear is caused by an automobile, not a street-car, you relate the object to yourself and make mental seizure of it; the knowledge that it is an automobile, is not a mere gift to you, but becomes yours through your rational activity. The discussion which follows will bring to notice the volitional factor of cognitive activity and will therein support our contention that knowledge is not a gift to consciousness.
- 1. Will and Feeling are present in the Inception of the Cognitive Effort. - Our activity in perceiving an object or in seeking exact knowledge of it, is not a mere general awareness of the object; it is a selective awareness. Thus, my perception that an object is a book, is not a general undefined awareness; it is an awareness in which this object is selected out from all-that-is and is made the obiect of thought. This selection is due to present interest in that object; and where there is interest, there is feeling. Having selected this object, my further interest in it may be due to my seeking information, mental recreation, first editions, beautiful typography, or any one of a number of other ends. This interest will lead to a selective apprehension of the book, the selection being made in keeping with my special interest and purpose. Interest and purpose determine the initiation of the cognitive process. We give thought to objects because we believe that they may, or do, have present or future value for us, and because of our assumption or assurance of their present or future adaptation to our purposes. That is, considerations of interest and purpose determine cognition at its

inception; and interest and purpose involve feeling and will. The purpose of cognitive effort may be the acquirement of knowledge for purely personal satisfaction, quite apart from what are commonly called practical interests. We find this often in those who are highly cultured; it seems to be present also in the wonder and the intellectual curiosity of the child. But whether we enter upon cognitive endeavor with a view to the attainment of knowledge, or in order that we may better further some of the innumerable practical interests to which we give attention, we are seeking to satisfy the self. This end involves feeling. We conclude, therefore, that feeling and will are involved in the initiation of the cognitive process.

2. They are present in the Cognitive Process. — The activity which directs our cognitive effort is the same with that which initiates it. We too often regard the cognitive process as consisting in the bare relating of ideas; and we think of it as void of feeling and undirected by any purpose other than the attainment of some truth which is as yet wholly undefined. Not so; the process is directed to an end. By so much as we are rational, we are seeking something in particular. It is this which sets us upon the endeavor to know; and we hold our attention to the selected object, and direct our thinking, in view of the selected end. Volition is essential to the continuance and completion of the cognitive process. This is illustrated and confirmed in our experience in study and in scientific investigation.

But feeling is just as essential as thinking and willing. The simplest cognition issues in a judgment; a judgment is the unit of thought. Aristotle perceived this truth (§ 15, 7), and Kant recognized that cognition is completed in a judgment (§ 44, 2). When we attain knowledge of an object, that knowledge affirms or denies something in

respect of the object. You conclude that a certain building is a school-house. If you were asked why you take it to be a school-house, you might point out the perceived particulars in the building and the grounds which lead you to this conclusion. If further pressed, you can only reply that these characteristics of the building and grounds are for you a sufficient reason for your judgment in the case. In other words, you are satisfied with that judgment. But an experience of satisfaction involves feeling. What is true in this respect of so simple a cognitive process, is true also of more elaborate processes, of extended processes of reasoning. In our thinking, we are constantly applying this law of Sufficient Reason; and that means that we reject what dissatisfies us and accept what satisfies us. Feeling is always present in logical processes. So also as to judgments of value; as when we are determining the value of a certain object or course of action for the securing of an end which we have in view, or the relative worth of two or more objects or courses of action from which we have to make choice. In answering the questions which arise in such relations, feeling is attendant upon intellection and has an important part in determining our conclusions. Our experience in judging fact or value may be stated thus: "I have a conviction that that is right." Such a conviction is implied in every judgment; and conviction is, in its nature, a feeling-thought. It is also a determination of the subject to accept a certain conclusion as final for that time; and this involves volition. In judgment we have a feeling, and a volitional, as well as an intellective, factor.

§ 92. Cognition is characteristically a Thought Process. — The process is a process of feeling-directed and will-directed intellection. Practical ends beyond the present activity are often, if not usually, sought; but the present

activity is for knowledge. Therefore we speak of the whole as "thought." The objective world is realized in our consciousness through the thought factor of rational activity; the reality of the external world is thus appropriated by us. By this we mean that what the world is for beings that are intelligent and emotional and capable of bringing things to pass — all this becomes ours through that factor of rational activity which expresses itself in intellection. For this reason also, we call cognition a thought process when we wish to speak of it in general terms. Hence, when we use the term "thought" in speaking of rational activity, it is not to be taken as implying that such activity is a purely intellective process; on the contrary, thinking is regarded as an intellect, feeling-, and will-directed process.

CHAPTER XXIII

A CONSTRUCTIVE STUDY OF COGNITION

(See Chapters XVI, XVII, XIX, and § 80)

§ 93. Review. — Thus far in our study of Cognition, we have given special attention to the consideration of defective views and inadequate methods which have developed in the course of philosophical inquiry. We discussed Scepticism and found it to be inherently selfcontradictory, as well as untrue to experience. From this we concluded that criticism of knowledge always assumes that cognition is reliable, even when the criticism expresses doubt of the possibility of attaining valid knowledge; in other words, we cannot avoid accepting the validity of knowledge. The discussion of Solipsism led to the conclusion that Subjectivism cannot be self-consistent, except at the cost of denying that there is any other reality for knowledge than the individual subject's own states of consciousness. As a consequence, "the Solipsist refutes himself by beginning to prove his doctrine to others;" for he recognizes those whom he addresses as real and thinks them to be other than himself. Hence, the world of things, events, and other persons with which we have daily commerce, is a world of realities; and these realities are not mere copies or material embodiments of our individual states of consciousness.

Phenomenalism — the doctrine that we know only appearances — was our next study. An extended consideration of this doctrine led us to conclude that appearances

are modes in which reality expresses itself; that every appearance is a true expression of reality in certain relations; and that, in knowing appearance, we therewith know reality. In our study of Reality, we endeavored to discover whether a cognitive experience is ever an experience of a mere particular object, also whether it is ever merely the experience of an individual subject. We concluded that no experience is ever of a mere particular, that a universal element is always present; and that no experience of any subject is complete apart from the whole of that subject's experience. We likewise discovered that no subject has an experience which is entirely "private"; every experience of each of us has that in it which is "public." There is in every experience that which is common; that is, it has that in it which is possible experience for all subjects, that which is actual experience for all who are in conscious relation to the same objects.

§ 94. The Universal in Experience. — Our present study connects immediately with the fact to which we reverted at the close of the last section — the fact that every experience has a universal element in it.

If a number of subjects — say five — look at the moon, no two will have exactly the same experience in all details; nevertheless their perceptions will so far agree that, if any one of them shall speak of the moon, all the others will know what he means, and they will attach the same general significance to what he says. In the consciousness of each of these five men, there is that which is common to the consciousness of all. This common experience respecting the moon makes it possible that they shall have intelligent intercourse with each other concerning it. You and I could not understand each other if it were not that we have some experience in common. Whenever either of us begins to speak of something in respect of

which the other has had no definite experience, the speaker can only be understood if he shall connect what he says with the previous experience of the hearer. As a matter of fact, we do understand each other. We hold intelligent intercourse about the world of happenings and persons and things, the world as it is presented to us in sense-experience; and we find that this intercourse is dependable. If you make statements to me respecting an object, statements which are the result of a critical study of the object, I will find upon trial that my own experience with it will have a measure of agreement with yours.

Our previous study led to the conclusion (§ 69) that the world in which we find ourselves and with which we have to do, is not a projection of our individual consciousness. We concluded thus, because the assumption that the world which I perceive is a projection of my individual consciousness, is found upon examination to be inherently selfcontradictory. The fact of experience to which attention is called in the paragraph preceding this, takes us a step further. That fact may be stated thus: The perception of an object gives a common thought-content to those perceiving it. It follows from this that the being and meaning of the object perceived are not dependent upon the individual subject's perception of it. Your experience in respect of an object arises from your being related to it; and the experience of other subjects arises from their being related to it. Since you and they acquire a common thought from perception of the object, it must be that the object is common to you and them. It is truly obiective.

In our consideration of Appearance and Reality, we discovered that, in knowing appearance, we therewith know reality. From this it would follow that the common object of the five men who perceive the moon is an ob-

jective reality. This objective reality, as realized in the common thought-content of those who perceive—e.g. the moon as realized in what is common to the experience of all who perceive it—is trans-subjective reality; and this reality is known. We know trans-subjective reality.

- § 95. Concepts and Objective Reality. A study of concepts and their relation to reality leads to the same conclusion as that reached in the preceding section.
- I. An Illustration. We apprehend a number of animals as having, each of them, four legs, a wool pelt, like anatomical particulars, and the same general import for thought and for practical life. No two of them are exactly the same in all particulars; but all of them have the four legs, the wool pelt, and they are alike in certain particulars of anatomy and in respect of their place in the world and their relation to our life. Although they are distinguished from one another in many details, in their likenesses and their significance for our thought and our activity, each has that which is common to all. Their common import for our thought and our practical life i.e. the idea which is common to them is what we mean by concept. A concept is the idea which is common to a number of objects.

By common consent, a word is accepted as representing this idea. In the illustration we have just used, that word would be "sheep" in our language; and its equivalent would be found in the languages of all peoples who have experience with such animals. This word, or name, helps to fix the idea and makes it, the idea, available for thought and intercourse. The word is the conventional symbol of the concept and is often called a concept. For example, the word "sheep" would be frequently spoken of as a concept. But it is well to remember that the common idea or meaning, the common import for thought and activ-

ity, is the concept proper; the word is simply the spoken or written symbol of the idea-concept.

- 2. A Concept is a Condensed Judgment. When we group a number of objects and assign them a common name, we judge that they have a common significance for our thought, for our commerce with the world of sensible objects, and for our intercourse with other persons. In fact, as we shall see just below, a concept is generally, if not always, the result of many judgments. The word by which we designate it, is the expression in language of this concentrated judgment. It is thus language has developed. Even proper names had at first a meaning and use beyond the mere designation of the individual person or thing; they were significant of some attribute of, or some circumstance respecting, the person or thing. Thus. Jacob meant "supplanter" and was thought to express a personal characteristic; similarly Esau signified "hairy" and was given him because of his hirsute appearance. Among primitive peoples names express judgments respecting the persons or things named. This is exemplified in the name which the natives of Central Africa gave Stanley - Bula Matari, breaker of rocks. It occurs with us to-day in the naming of places and things; e.g. Bridal Veil Falls, Hell Gate, Bartholdi Statue. The connecting of characteristics with objects is an act of judgment. We have seen above that concepts arise thus. In reality, every concept is the result of a series of judgments. concept "man" is for you and me an idea which includes many particulars, all those characteristics which we take to be common to all men; and each of these particulars comes of a separate judgment.
- 3. Dependence of Thought on Concepts. We employ concepts in all cognitive activity. Take for example a simple perception, the perception that a certain flower

is a rose. It would be stated thus: That is a rose. The ideas expressed by "that" and "rose" are concepts. "That" is notably general. It expresses the idea of objective specification and is applicable to any specified object. It is common to all specified objects. "Rose" is an idea common to a certain group of plants or flowers, according as it is used with the more general botanical, or the less general floral, significance. Thought, as activity which seeks meaning, is effected through concepts. Kant recognizes this. He says, "All thought is nothing but conception by means of concepts." This is true of perception as well as reflective thought. "Perception without conception is blind." Since concepts are condensed judgments, many of the commonest being the concentration of many judgments, if follows that thought and concepts develop together.

4. Dependence of Thought and Concepts on Each Other .-An examination of experience makes it evident that concepts and thought are dependent upon each other and develop together. It is seen in individual experience. When we first became conscious of ourselves and the world, our stock of ideas was very meagre. During the earlier period of our life, preceding our entering school, we were constantly enlarging our knowledge of objects, our grasp of their import; that is, our concepts were developing. augmentation of our stock of concepts continued through all our student life and will not cease until our mental vigor begins to decline. It is manifestly true of the race. The intellectual development of any people is attended and effected by their acquirement of new concepts. Some of those more lately developed will be recognized in the following word symbols: "automobile," "aëroplane," "wireless." Each of these concepts embodies thought. Not only are new concepts developed; but the concepts

themselves develop significance with enlarging experience and thought. When the child first appropriated the idea which we express by the word "school," the concept did not have so full a content as it did after he became a pupil; and it has a much larger content to the young man graduating from college than to the same student while in his preparatory course. When Morse sent his first message, "telegraphy" meant much less than it does today. They mistake who speak of concepts as imprisoning or petrifying thought; on the contrary, concepts are the product of the life of thought, and they are essential to the being and development of the thought-life.

5. The Ground of the Concept. - Objects which differ in detail are apprehended as having likeness in appearance and in significance for life activities. The concept is the common idea, or import, of the objects which exhibit such likeness; and it is objectively expressed in the characteristics common to these objects. For example, the concept which has its linguistic expression in the word "sheep," has objective expression in the characteristics which are common to the animals thus grouped and named. So with other concepts. The ground of the concept, or common import, of a number of objects will be the same with the ground of likeness of appearance or characteristics of these objects. What, then, is the ground of likeness, or phenomenal oneness, of the objects of which a concept is the common idea? The characteristics of an appearance express the nature of the reality that appears; and likeness in appearance implies likeness in nature of the realities which appear. Phenomenal oneness, or likeness, of objects must be grounded in oneness of nature, in oneness of reality. These objects are embodiments of a common reality. Concepts are objectively grounded in the common reality of objects.

We have found that the objective ground of a concept is the common reality of the objects to which it is applicable. But we have not fully answered our question; for there is no concept without thought, and the concept must be subjectively grounded. It has its subjective ground in the cognitive activity of the subject. This has become evident in our discussion of "The Concept as Condensed Judgment" and "The Dependence of Thought and Concept on each other." So much, then, for the concept as idea: it has its origin in cognition of objective reality which is common to a number of objects.

We now seek the ground of the word-concept. The word "oak" is the speech symbol of the idea-concept which is grounded objectively in the reality which is common to all trees of that class. This idea has come into our experience in our cognition of this common objective reality. But this word "oak" passes current in intellectual intercourse; and it passes current, because the object which it names has, in some measure, the same import for all who have had experience with it. It is accepted and used for the expression of thought, because men have acquired a common thought-content in their experience with reality which is common to a number of like objects. We have seen (§ 94) that such a common element in experience comes of cognition of trans-subjective reality - reality which is object for all subjects. From this it follows that word-concepts are grounded in knowledge of trans-subjective reality. They testify to the fact that we have such knowledge; for they owe their being to it.

§ 96. "Identity in Difference." — In the last section, we recognized that the individual animals classed as "sheep" differ in particulars; no two of them are identical in all respects. Now, if their likeness in appearance comes of

their being expressions of a common reality, how is it that such differences appear? Would not their identity in nature demand identity in characteristics? This raises a question as to whether identity and difference are incompatible and hence mutually exclusive. We give it a brief discussion here because of its bearing on our conception of the relation of knowledge of an object to the object known.

I. What Identity Signifies. - The term "identity" is confessedly ambiguous, and much confusion has arisen from its use; but we cannot avoid employing this term and the kindred term "same," despite the ambiguity which attaches to them. "Identity" sometimes signifies "individual sameness"—as when we say of two men, "They attended the same college." In "the same college" we have numerical identity, an instance of a single object which is the same with itself. But, if one should say of the same men, "They have the same mode of thought," the statement would express "distinguishable likeness" in two objects - the modes of thought of the two men. When we speak of the identity of reality, or nature, in all "sheep," it is obvious that we do not mean that the same individual real is in all; we simply affirm likeness of reality in all. However much sounds may differ, every sound is a sound, whether it be the filing of a saw or the singing of a mocking-bird. In respect of their likeness, they are the same, they have identity; for they are, all of them, sounds. So always with what is common to any group of particulars, i.e. with universals. Thus the apple and the peach are rosaceæ (of the rose family); they and the common rose have likeness which the botanist recognizes. To that extent they are identical with each other and with the common rose. We regard those objects as identical which present distinguishable likeness.

2. Concrete Identity is "Identity in Difference." -

We know, as a matter of fact, that the particulars of every group present differences. We are conscious of selfidentity; this is for each of us indubitable. But in my consciousness of self, I have experience of identity through differencing changes. Your consciousness of your own identity is of an identical self that is different from your former self. There cannot be experience of identity apart from difference; for identity can only be apprehended when different terms or relations are compared. The Secretary of State says, "That is the pen with which the bill was signed." In this statement he affirms identity; but he also implicates difference - a difference in time relation and a difference in that the pen is not now being used for that purpose. The identity is identity in difference; and it is in the contrast that the identity gets its significance. There cannot be any bare distinctionless identity; for identity is a relation, and there can be no relation except between different terms. Hence reality is unity in diversity; and the reality common to a group includes both the likenesses and differences of the individuals which embody it. What we are here insisting upon — that identity is always "identity in difference" - is conceded by most, if not all, philosophical writers of the present.

3. "Identity in Difference" of Knowledge and the Object. — We have said that experience is the realization of the object as content of consciousness; that the object, as somewhat which has import for the subject, is realized in the subject. That being true, we may affirm the identity of knowledge of an object and the object. Our individual and finite knowledge is, to be sure, incomplete and imperfect; but there is, in this incomplete knowledge, some appropriation of the reality of the object, and our knowledge and the object are to that extent identical. Liszt

had a remarkable conception of the reality embodied in the piano, of its significance for thought and feeling and will. The extent to which this was realized in him, was the extent of his knowledge of the piano; and, in that respect, his knowledge was identical with its object. But while it is identical with, it is also other than, and different from, its object. Cognitive experience is a consciousness of "identity in difference" of knowledge and object.

- § 97. The Particulars of Experience are organically Related. If this be true, it follows that the factors of cognition are organically related, for cognition is a process in consciousness.
- I. Characteristics of Organic, as distinguished from Mechanical, Relatedness. A mechanical whole as a machine or a brick wall is constituted by putting its parts together. We have the parts before we have the whole, and we construct the whole by combining the parts. The construction is accomplished by a man or some men; i.e. by what is other than the whole. In the constitution of an organism, as a plant or an animal, a radically different procedure presents itself. The parts of an organism are constituted in and through the whole; and this is true of an organism in all stages of its existence. The trunk, the branch, the leaf, the bud, and the flower are products of the activity of the whole. So with the parts of the body.

Organic activity is developmental. The full-grown plant, in its typical and essential characteristics, is the realization of what was implicit in it from the beginning. Thus, an oak and a horse are, in their typical characteristics, the developed expression of what was implicit in the cells from which they sprang. The reality in the original cell of an organism comes to explicit embodiment by an inner and developmental process. The oak itself determines

the being and typical characteristics of its parts. So the unit whole, *i.e.* the organism, determines the being and the character of the parts; and, in so doing, it reveals its own character. In respect of the way in which they are constituted and of the relation of the whole to the parts, the organic and the mechanical differ radically. As mechanically conceived, an object is constructed from without and according to an ideal which is external to the incomplete object. As organically conceived, an object is developed through the activity of the object; and it is at every stage the expression of an ideal which is implicit in the object.

If we wish to make an intelligent statement as to how a machine is constituted, we may begin with the parts. By noting the significance of the various parts for the machine and the purpose it is to serve, we shall be able to obtain a conception of the machine. But this is not the logical procedure in the instance of a plant or an animal. We cannot give a satisfactory account of the genesis of a plant by beginning with its developed parts, for the plant itself constitutes the parts. If we sum up the various parts of a plant, we will not have the living plant; for we shall yet lack that unitary whole by reason of which the parts have their being and typical characteristics.

The primary reality in an organism is protoplasm, the physical basis of life. Most, if not all, biologists are unready to speak of protoplasm as organized, because the term "organized" is reserved by them for what is, by ordinary vision or with the aid of a microscope, perceptibly constituted of differing parts each of which has its own office. But all agree that it is complex, not simple. If this complex be broken up, we no longer have what will develop into an organism. It is the primary reality in organisms. We cannot tell how the elements of this com-

plex when thus combined, constitute what will, under proper conditions, develop into a plant or animal. For a description of the processes by which organisms come to be, this complex reality is a primary and irresoluble reality.

2. All Particulars of Experience are constituted by and in the experiencing Self. - The particulars of your experience - your judgments, memories, images, emotions, purposes - are not made ready apart from you and then imparted to you. On the contrary, they come to be through your activity in your commerce with objects. Their origin and their relation to you, as an experiencing self, are radically different in kind from the origin of the parts of a machine and the relation of the parts to the machine. The origin and relations of the particulars of your experience are of a kind with the origin and relations of the parts of an organism to the organism. The parts come to be through the interrelated activity of the plant and its environment; just so the particulars of the experience of each of us come to be through the interrelated activity of each of us and our individual environment. Any selected experience, also every selected part of an experience, is organically related to the self, and to all the particulars of that self's experience.

The subject develops his potential reality in experience (§ 59, 5). We come to consciousness of self only in our experience of what is other than self. This is the law of self-consciousness: one is conscious of self only as he is conscious of some object. It is in experience, with its duality of aspect, that self-consciousness develops. But self-consciousness is an essential element of subject reality; and it is through experience that we come to the realization of the reality which is implicit in us. We are rational; and we too often think we have spoken the whole truth when we say that, being rational, it is possible that we

should know. But it is also true that we develop our rationality in experience. Without experience we would not be actually rational; and, if we were not implicitly rational, we could not have human experience. Further, it is in our experience of persons that we come to know that we are persons, not things. The apprehended distinction between persons and things and the consciousness that we are persons, and quite other than things, develop together. This development makes explicit what was implicit in the subject, and it is effected through the immanent activity of the subject. A process in which what was implicit is thus realized, is an organic process; it is of a kind with what we perceive in the development of organisms.

Experience also reveals its organic character in this, that we cannot obtain a satisfactory account of it by studying its factors apart from each other, and thus apart from the experience as a whole. We have learned that, if we undertake to find knowledge in the psychical and physical factors regarded apart from each other, the attempt ends in failure. Reflective thought cannot discover the cognitive experience in these processes or factors, abstracted from the experience. We may find the factors in the experience, but not the experience in the factors. We have simply to accept knowledge as a primary irresoluble fact; in this respect, we have to accept it much the same as the unreflective accept it. These facts support our contention that the particulars of experience are not mechanically related, and that cognition is an organic process and knowledge is an organic product.

§ 98. Conclusions; Questions. — In closing this constructive study, we restate some of the more important conclusions, and suggest answers to certain questions of fundamental import.

- I. Conclusions Restated. Our constructive consideration of cognition leads to conclusions which are in full agreement with what we discovered in our earlier study of experience (Chap. XV) and our examination of defective theories of knowledge. Concrete experience is complex, however simple and primary the experience may be. It is unitary; but its unity is the unity of diverse particulars, the coherence of differents. Any selected whole of experience presents duality of aspect; and to separate the subjective from the objective, is to destroy the experience. We have to accept the validity of the conviction that the world of persons and things and occurrences is real, and that the objects of that world are not dependent upon our individual perception for their being and meaning. We do not constitute the objects of that world, neither do we constitute the relations in which we perceive them. We apprehend the objects in their relations, and our knowledge is our report respecting the objects and their relations. We know them as they appear. Their appearance is the expression of the reality - i.e. of the nature - of the objects; hence our knowledge is knowledge of objective reality.
- 2. Questions. We have found that the subject and the object are organically related. The subject is other than the object, and the object other than the subject; nevertheless they are indissolubly united in knowledge. These conclusions raise questions which call for answer.
- (1) Some have asked how it is possible that mind and object should be thus intimately related, seeing that the object remains other than the mind. Or, the query may be stated thus, How is it that mind, which is unextended, apprehends what is apart from the subject? We frankly confess that we do not know how the mind becomes conscious of the object; but we know that it does become

aware of it. All experience testifies to this, for there is no experience in which there is not awareness of an object; and, in addition to this, we have shown that we know trans-subjective reality. This question is, in effect, a demand to be shown what constitutes the subject a thinking-feeling-willing self; it is a request that we indicate what gives the mind capacity for determining the meaning and value of things, events, and persons. The only possible reply is that experience yields the fact that mind does just this; experience itself comes of this functioning of the mind.

(2) Although the question just considered cannot be answered in the terms in which it is stated, something remains to be said respecting the ability of the mind to apprehend what is other than the mind. In the beginning of our study, we assumed that the universe is intelligible. This is an inevitable presupposition if our thinking shall settle anything. To begin with denying intelligibility to the universe, would be to invalidate our conclusions previous to entering upon study. Neither can we leave the question open; for the study of experience assumes that the world which is presented to us in experience, may be understood and will give response to intelligent inquiry. This presupposition is also justified by experience. predictions of Science, - e.g. of eclipses and comets by Astronomy, and of reactions by Chemistry, - the certainty which attends our every-day activities, all advance in knowledge, and the great body of indubitable facts which are in the possession of the race, all testify that the universe is intelligible. The universe as a whole and persons, things, and events have meaning and value.

We hold that both subject and object contribute to the knowledge of an object. We have also insisted that the reality of an object only comes to expression in the subject-object relation. In illustration and enforcement of this last statement, attention was called to the fact that color, sound, taste, etc., are not, and cannot be, wholly objective. The color of the violet, the acid of the vinegar, the perfume of the rose, and the tone of the violin come to realization only when they are objects for a subject. It would seem, then, that when you see a flower, hear a bell, taste an orange, or feel cloth, you contribute something to the perception. But this is not all. If knowledge be an indissoluble union of subjective and objective elements, it follows that the subject contributes to knowledge. These facts make it necessary that we determine whether the subject's contribution to knowledge introduces an element which is foreign to the object. If it should introduce anything foreign, that foreign element would vitiate the report which knowledge gives of the object.

We grant that the knowing activity of any finite individual is imperfect; our knowledge is certainly incomplete, and much of it calls for correction. But the question before us concerns the knowing act as such, and not our finiteness and imperfection. The question is not, Does my imperfection, my finiteness, so affect my knowing as to render my knowledge of an object imperfect? This is the question, Is there in the knowing act as such that which introduces into the knowledge of an object what is foreign to the object? In answering this inquiry, we revert to our initial assumption: that the universe is intelligible. If the universe is intelligible (and, in consequence, the objects in the world-system), it must be because the modes in which objective reality reveals its nature are at one with the laws of the mind's functioning. If the mind should function after one order and objective reality should express its nature after another order, the world would not give intelligent response to the mind's inquiries. That the order of rational activity and modes of object-expression are at one, is really implicate in our fundamental and inevitable assumption. And we repeat here the contention which we urged above: The experience of man at large shows that the assumption is accordant with actuality. Since the mind functions after an order which is identical with that of the object's expression, the judgments of the mind respecting the object are one with the modes of the object. Mind does not contribute to knowl-

edge any element which is foreign to the object.

(3) We have insisted upon the distinct "otherness" of subject and object. Now, if the object be distinctly "other" than the subject, how can they come into the intimate relation indicated by the term "organic"? We reply that they can, because the subject is the complementary "other" of the object, and the object is the complementary "other" of the subject. Instead of thrusting each other away or holding each other at a distance, each is essential to the other. Experience is necessary to the development of the subject. The personality implicit in each of us at birth becomes explicit through experience, through commerce with objects, and only thus; that is, we come to our own through intercourse with the objective world. On the other hand, the object needs the subject for the actualizing of its potential reality. The instrument is dumb if it be untouched by the musician; and this is true of those objects which we call "natural." Their perfume, color, strength, potential usefulness, and beauty are for a subject; and their nature cannot find its complete expression apart from a subject. The object exists for the subject as the subject does not for the object. The object as such does not know the subject, but is known by the subject; it does not relate itself to the subject, but is related by the subject. The object is not dependent

upon the individual subject for its being and nature; it has a being that is its own. But the object finds its completion only as mind directs both the use of the object and its own activity in keeping with the activity of the ultimate reality, and thus in keeping with the fundamental order of the universe. The world of persons and things and events in which we find ourselves, is a universe of objective reals; and the world we know and with which we have commerce, is this objective world of reality.

DIVISION B: THE CATEGORIES AND REALITY; ONTOLOGY

CHAPTER XXIV

GENERAL VIEW OF THE CATEGORIES

§ 99. Introductory. — You think of a house as occupying space, of a train as arriving at a certain time, of a table as larger than a hat, of an orange as yellow, of velvet as soft and marble as hard, and of a fire or an explosion as having a cause, of a man running as having a purpose in so doing. To make this more general, objects as thought of by you are set in space, they have quality and they exist in quantity; events are thought by you to be caused; and in your conception of objects they are regarded as related to one another in position, order of occurrence, by comparison of quantity or value, or otherwise. That is, our thought of objects sets them in space and time; it ascribes to them quality, quantity, motion, rest, cause, etc.; and it relates them to one another. We also think of persons as having motives, as acting with purpose, and as seeking ends.

Space, time, quantity, quality, relation, and purpose are obviously not things; neither are they persons or events. They are modes according to which we think of things, events, and persons. We cannot form an image of space, time, or relation as such; but the notion of space is always present in our thought of sensible objects; and the notion of time is present in our thought of changes or events. Similarly with respect to quality, quantity,

relation, change, permanence, cause, etc.; we cannot image them by themselves. They are notions, or pure conceptions. To repeat what we have already said, these notions are present in our thought of what is existent.

Since the unit of thought is a judgment, we may speak of these notions as general forms, or modes, of judgment. These conceptions, or general forms of judgments, are known as Categories; and, for the present, we may describe the Categories as modes in which Being is thought of, or modes in which reality is known. This may be accepted as a provisional definition of them. Our purpose in the study of these elements of experience is to discover what information they may yield as to the nature of Reality.

§ 100. Historical. — 1. Aristotle recognized the fact that there are general modes in which men think of objects, and he introduced this conception and the term "category" into Western Philosophy. The Greek term used by him, from which we have the word "category," had been previously used to signify an accusation; but in his use of it, the word acquired a philosophical reference. Interpreters of Aristotle have differed as to the significance he attached to this concept. Is a category for him merely a general mode in which we think of objects? That is, Is it wholly of the thinker and, hence, purely subjective? Did he regard the categories merely as modes of thought. modes to which the subject is shut up, and so leave it an open question as to whether Being is itself thus limited, or determined? We agree with those who hold that Aristotle conceived the categories (1) As general modes in which Being is limited, or determined, as an object of thought; and (2) As general modes "in which Being may be expressed." With him, quantity, quality, relation, place, time, etc., are not merely forms which limit

thought. They do not simply determine how the subject shall think; they are also modes in which Being manifests itself. They are not merely subjective modes, but are also modes of objective reality. The Stoics, Plotinus, and Augustine utilized the conception of the category; but for some time previous to Kant it had virtually dropped out of philosophical discussion. He restored it to reflective thought; and part of the large and valuable inheritance which he bequeathed to students of Philosophy is his demonstration of the importance of this conception. This much must be granted, even though we are forced to conclude that his doctrine of the categories is defective.

2. Kant. — To give a full account of Kant's doctrine of the categories would virtually require the presentation of the entire Kantian philosophy. So full a discussion, however, is not necessary since it is our purpose merely to relate his conception of the categories to reality. What is given in § 44, 2 and 3, and the partial statement which follows, will suffice. Kant held that the space and time elements of experience are forms which the sensibility gives to the material of knowledge which is furnished by the senses; and the understanding contributes the quantity, quality, relation, and other non-sensational elements. categories were conceived by him to be modes of the understanding, -i.e. forms of the conceiving or judging activity; because he held that the understanding is the faculty of conception, and that the categories are general concepts. Consistent with this, he did not regard space and time as categories; for he insisted that these elements of knowledge are contributed by "sense," and not by "thought." From this it appears that, according to Kant, space and time and the categories - relation, quality, quantity, cause, etc., - are simply forms of the

mind's activity. In his system, these modes of experiences are related to the subject, and not to the real external world. He argued that our objective world, the world which we know, gets these forms from the mind; that the mind gives spatial, temporal, quantitative, qualitative, and causal character to the unordered sense-data with which it deals. Hence we may not say that the world of reality is in space and time; neither may we affirm quality, quantity, relation, or cause and effect of things in themselves. In other words, space and time and the categories are modes of the phenomenal world or world of appearance, not of the noumenal world or world of reality.

Kant's refusal to regard space and time as categories came of his sharp and overwrought distinction between "sense" and "thought." He himself recognizes that there is no spatial or temporal perception apart from the activity of the understanding; from this it follows that the space and time elements enter cognitive experience through the judging activity of the mind. He was not wholly consistent, then, in refusing to list space and time with the categories. It is also evident that he gave the categories an external, or merely mechanical, relation to the material of knowledge; for he has the material of knowledge ordered in keeping with these forms. The forms are imposed upon the material; they are not an expression of the nature of the material itself. He limited the categories to the province of sense-experience. could not do otherwise; for the understanding, in his system, only deals with material which is furnished by the senses. As a consequence, Kant's doctrine of the categories leaves them unrelated to the moral order and to judgments of value and purpose. Having limited cognitive experience to the phenomenal world, a world formally constituted by the mind out of sensuous material, he was

obliged to assign the moral order and judgments of value and purpose to a realm beyond experience. His refusal to recognize space and time as categories, the extreme subjectivity of his conception of the categories, and their inapplicability (as conceived by him) to the moral order and to judgments of value and purpose, lead us to conclude that his doctrine is inadequate.

- 3. Hegel. The doctrine of the categories has central place in Hegel's philosophy. In his Logic, he undertakes to set forth their nature and the mode of their development. Our present interest in his system does not require that we make an extended statement of his doctrine of the categories; we only seek at this point to emphasize his conception of their relation to reality. For Hegel, all-that-is is a "unitary world of thought and things"; and the categories are principles that obtain in this unitary world. They are principles of thought and at the same time principles of things. With Kant, they are "forms imposed by thought on sense;" with Hegel, they are expressions of reality, of both subjective and objective reality. Hegel held that the relation of the categories to the material and product of thought is organic, not external; and he also argued that the categories are so related to one another that they form a perfect system. Unlike Kant, Hegel includes in the categories those forms of thought under which we experience Personality. As a consequence, the moral order and judgments of value and purpose are not assigned by him to a world beyond, and other than, the known world. This is a distinct advance beyond the Kantian doctrine.
- § 101. The Categories and Reality.—1. Kant was clearly right in teaching that the categories are subjective. You see a bird flying, lighting on a branch, and later taking wing again as a boy throws a stone at it. So far as mere

sense is concerned, you have a series of visual impressions; but you judge that you have seen three objects, each of which remained identical with itself while it or a part of it was changing place. You have combined the different impressions and have given unity and identity to certain of those impressions - the bird, the boy, the tree, and the stone; and you have distinguished motion and rest. Apart from rational activity, no instant of sense-impression lives beyond itself, neither will any of the impressions remain after that instant. But motion and rest and identity involve a continuity; that is, there is a continuity in experience of identity and motion and rest. It is evident that mere sense-impressions cannot contribute this continuity; for, as we have said, they are only for the instant of their being. It is the combining, or synthetic, activity of the mind that gives you the experience of unity, identity, motion, and rest. This simple experience illustrates a number of categories; of these we name a few - individuality (of the bird, the tree, the boy, the stone), rest, motion, change, permanence, space, time, cause, purpose (of the boy). Mere sense does not give your thought these forms; they are modes of your activity as a rational being. These and other categories are fundamental forms in which we think of persons, things, and events. In other words, they are primary forms of subject activity, fundamental forms in which subject reality expresses itself.

2. The Categories and Objective Reality. — According to the paragraph preceding this, the categories are elements which the subject contributes to experience. Does our mind contribute to our knowledge of an object any element which is foreign to that object? Are the spatial, causal, relational, qualitative, and quantitative elements of our knowledge of objects foreign to the reality of the ob-

jects? Does my mind, in giving these forms to its thought of objects, impose upon the world of reality what is alien to reality? Are space, time, relation, etc., only subjectively real? We have considered this question in § 98, 2 (2); and we there assigned reasons for concluding that the mind, in its cognition of objects, does not contribute what is foreign to objects. In the course of that discussion, we concluded that the modes in which objective reality expresses itself are at one with the laws of the mind's activity; our judgments respecting objects are identical with the modes of the objects. We may err, and it is certain that our knowledge is incomplete; nevertheless the act of knowing as such does not give to knowledge content which is foreign to the object. In respect, then, of the object, the categories are fundamental forms of the object's expression to rational activity. From this it follows that the categories are not limits set to the attainment of knowledge, as Kant thought; they are, on the contrary, expressions of the nature of reality.

3. The Categories of Themselves give Content to Thought.

— We have spoken of the categories as forms or modes; but it must not be assumed that they are, therefore, without content in themselves. Kant conceived them to be mere forms; and Hegel seems to have followed him in this misconception, for he regarded the categories as mere unities in our consciousness, having no content which is their own. They, on the contrary, contribute specific and important content to our thought of the world. In making this statement, we do not have in mind the mere concept — say quality, quantity, relation, or change — abstracted from experience; we refer to the category as it comes into experience. The categories are forms of thought in which we connect and relate objects. Thus, a stone is thrown against a pane of glass, and the glass

breaks. Here we have two incidents; but, to think of the former of the two as related causally to the latter is to add content to the thought of these occurrences, a content not present in the incidents considered apart from this category. To think of one event as occurring "before" or "after" another gives a content to thought which is not present in the thought of the events without this relating idea. There is specific content in that special form of the temporal notion. To relate objects is to think them together. The thought, or idea, which connects them has meaning in itself and so presents content to thought. The categories are forms of thought; but they are not themselves without content. The form itself has significance, and that significance is material for thought; it has in it content for knowing, valuing, and purposing activity.

§ 102. Characteristics of the Categories. — 1. They have an Inner and Principial Unity. - The inner structural unity of the categories has been generally recognized; and not a few of those who have given them special study, have sought to reduce all of them to one. But this undertaking has failed; for thought, they are primary laws or principles. Although all efforts to reduce them have failed, they give evidence that they are at core one; for no one of them can be rightly described without reference to, or implication of, others. In our further study, we shall discover that space involves position relation, and time involves relation of sequence; that change implies permanence; that motion involves space and activity; and that purpose involves individuality and activity. In short, "the course of reflective thinking permits and requires free movement from each one to every other" of the categories; "but the path is not equally direct between them all." We conclude, therefore, that they are forms of a principle common to all of them. Since they are expressions of reality, that common principle must be in the nature of the ultimate and highest reality, the Ground Reality of the universe.

- 2. Classification. No complete list of the categories has been given. Aristotle named ten, Kant found twelve, Hegel listed one hundred and fifty. It is also difficult to effect a wholly satisfactory classification of them.
- § 103. Conclusions. The categories are non-sensational elements of experience. They are the primary modes of our thought of objects of things, events, and persons; and they are also the fundamental modes of Being. In other words, they are the fundamental forms in which reality, both subjective and objective, expresses itself. Since they are the modes in which objects are related, they proffer content for thought. They are harmonious forms of a common principle, and that principle has its being in the nature of the Ground Reality of the universe. Their harmony and structural unity indicate that they constitute a system, and that the activity of the Ground Reality is coherent, orderly, and systematizing. We will not attempt to classify the categories and will only discuss those which are most usually considered.

CHAPTER XXV

RELATIONS IN GENERAL

§ 104. Characteristics of Relation. — The word "relation" is in frequent use, and we have no difficulty in recognizing its significance in every-day intercourse. In this study, however, we are not dealing with a word, but with an element of experience, an essential element of the experience of each of us; and what we seek is a satisfactory conception of this experience.

I. I have an experience which I express in the judgment, "The chair is in the room." In this experience, "the chair" and "the room" are known in relation to each other. We have one fact of relation, and the relation itself has two terms - "the chair" and "the room." You say, "The son is taller than the father." Your thought relates "the son" and "the father," and the one relation has two terms. It is obvious that a relation is necessarily of more than one term. Further, "the chair" is related to "the room" as content; and, in relation to "the chair," "the room" is that which contains. This single space relation has two aspects - the space which contains and that which is contained. In "The son is taller than the father," we have a number of relations -- • the parental, the filial, quantitative, etc.; and it is evident that each of these has two aspects. The parental involves the filial; and the filial involves the parental. In the quantitative relation, "taller" involves "shorter" as its correlative. We may state the characteristic of relation to which we have here called attention thus: A relation has two terms and duality of aspect.

- 2. Referring again to the illustrations given above, it will be seen that "the chair" qualifies our thought of "the room," and "the room" qualifies our thought of "the chair." So also in the instance of "the son" and "the father." Each object in these related pairs contributes something to our thought of the other. When we relate objects, the relating contributes content to our knowledge of the objects; we know something respecting them which we would not know if we apprehended them apart from each other. To think of "the son" by himself in respect of height, would not give the experience of "taller," which is had when "the son" and "the father" are conjoined in relating thought. We may state this characteristic of relation thus: Each of two related objects contributes content to our knowledge of the other; and that content is mediated by the relating idea.
- 3. From what precedes it is evident that we relate objects by thinking them in connection with each other. The relation is not itself an object of sense-experience; it comes into experience through our thought of the objects when we take them in connection with each other. We perceive the two persons; we think the relation of parent and child. We perceive each as having height; we think the relative measurements. We perceive the chair and the room; we think the "withinness" and "aboutness." The perception contributes sensational elements to experience; the relating introduces an ideational element. We may state this fact thus: Relation is an ideational, not a sensational, element of experience.
 - § 105. All Thought is mediated by Relation. Relation is essential to thought; there is not, there cannot be, any thought in which relation is not present. To think

is to relate. The unit of thought is a judgment; and a judgment, in its simplest form, is a thought in which an object and a characteristic or determination of the object are related to each other. For example, "The book is new." This thought relates "the book" and "newness." Again, in the judgment, "The boat carried many passengers," "the boat" is related to "passengers." It is obvious that relation is an essential element of thought. "Relation is the mother of the categories" — a commonplace of Philosophy - is justified, because all thought has its origin in the relating activity of the mind. As a consequence, all other modes must come of this same relating activity. Some have even thought to reduce all categories to this one. But it is one thing to recognize that other categories — e.g. space and time — are forms of relation; it is quite another thing to identify them with relation. Relation is indeed the mother; but the children are themselves, and each of them has its own place and function in thought. We cannot afford to ignore the irreducible differences which distinguish the categories, nor the shading of thought which is present in the other categories (change, quantity, quality, identity, etc.), but is not distinctly expressed in relation, as relation.

§ 106. Relation and Reality. — We have discovered that relation is an ideational element of experience; and this would seem, at first sight, to make it purely subjective. But we have also insisted that the categories are expressions of the nature of objective reality; and, if this be true, relation must be objectively real. The intelligibility of the universe involves the objectivity of relation. Philosophy, science, and inter-subjective intercourse proceed upon the assumption that the world and its particulars — things, persons, and events — are intelligible. We cannot avoid this assumption — that objects have meaning and

that we can, to some extent, discover their meaning. What is it that gives meaning to an object - say a house, an apple, or an occurrence? A building which we know as a "house" has meaning, first, because the different parts of it are so related to each other that they express an idea, the idea which we symbolize by the word "house." And second, it has meaning for life, because it is related to the world system and thus to us. An event is intelligible, it has significance for us, because its particulars are related to the whole of it and so give it meaning; and also because the event as a whole is related to the system in which we are. The relation of an event and its particulars to the course of events gives it significance for life. To make it general, an object is intelligible (1) Because its particulars are related in idea, and their relation to one another and to the whole constitutes the object a system, though it be but a limited system; and it is intelligible (2) Because it is itself a particular in the world system and is thus related to us. In a word, the universe of persons, things, and events is intelligible, because its particulars are related to one another and to the whole. To assume that we give to the world the relations, and hence the intelligibility, which we find there, and to assume therewith that the world of reality is possibly unrelated, is to go back to the Kantian Phenomenalism; and this we have found reason to reject. In fact, Kant actually related his unknown world of reality to us; for he held that it is the cause of sensible experience, that it sets the boundaries of knowledge, and that it is the world of the unities of reason and reality. In holding thus, he related that world specifically to us, and he conceived it as a unit of related Relation is real objectively; and, in knowing, we think relations which are objectively real.

§ 107. Is Relation External or Internal to the Related

Objects? — The question of the externality or internality of relations has acquired special importance of late by reason of the discussions which New Realism has instigated.

- I. The facts seem at first glance to favor the view that relations are external. Suppose we take, as examples, instances of relation to be found in the page of a book. The page number, the page title, and the text are related. They certainly appear to common-sense to be independent of the relations which they sustain to each other. At first thought it seems obvious that the page number is itself, whether it be related to this text or not. Would it not be in another book just what it is in this book? So also as to the page title. If it were at the head of some other page in this book, or if it were by itself and not at the head of a page, would it not be just what it is here? Some students of Philosophy would answer these questions in the affirmative. They insist that the number, the title, and the text, if unrelated, would not be different from what they are as related. If related objects are independent of the relation, it follows that relation is external to the objects related. This illustration would seem to close the inquiry. But the case is not so simple as the doctrine of externality would imply; for some facts which should be considered, have been overlooked.
- 2. An instance of relation is a case of Many in One. For example, "The chair is in the room." In judging thus, we do not think "chair" and "room" and "withinness," and then adjoin them. We perceive a whole, the-chair-in-the-room; and in this unitary whole, we distinguish "the chair," "the room," and the relation expressed by the word "in." In judging, we apprehend a whole; and in this whole, we distinguish the subject and predicate and their relation to each other. In "the

book is new," we perceive the unitary whole, the-new-book; and thought analyzes this unit and expresses in the judgment, both the unitary thought and that thought analyzed. An instance of relation is a unitary whole in which thought discovers related objects and a relating idea. A judgment—hence also a case of relation—is not a mere conjunction of ideas; it is one idea in which analyzing thought finds ideas synthesized. It is a case of Many existing in One, and not a case of One constituted by the adjoining of Many. The One is for it the ground of the Many; for a unit is "an original one, not a total."

Those who insist that relation is external, misconceive the nature of that with which they are dealing. They regard an instance of relation as constituted by the adjunction of independent particulars. Take the instance of "the chair in the room." According to this teaching, we have "the chair," "the room," and the relation, all of them independent of, and external to, one another. The result is a mere adjunction of these particulars; and, inasmuch as the relation (of "withinness") is somehow related to both the objects and is also external to them, it really separates them. A relation is a unitary thought; and a collection of independent ideas would not be a unit idea. The mere adjunction of particular ideas cannot constitute a unitary whole; and the relating of objects does constitute a unitary whole. Hence, the relating of objects is not the linking in thought of independent particulars through that which is external to what is related. Relation, subjectively regarded, is not external.

3. In the instance of "the chair in the room," the relation of "withinness," objectively regarded, is dependent for its being upon these objects thus related. We may have an abstract relational idea apart from objects. We may, for example, have the notion of "withinness" when

no objects are in presentation. But in such case, we have merely a notion of relation, not an actual relation; and Philosophy is safe only when it keeps in touch with the concrete. There is no real relation apart from experience of related reals. Thus, the relation which we express by the word "greater," is not objectively real except when objective reals are related in respect of quantity; but when such reals are so related, it is objectively real. When you conclude that "the book is new," you relate "the book" to your standard of "newness," this standard being for you an objective real. Relation, then, as an objective fact is dependent upon related objects; it has no being apart from them. Beside this, relation derives its specific character in each instance from the nature of the related objects. Since relation has its being in, and derives its character from, the nature of the objects related, it must be internal to them.

What has just been said holds for relation as an objective fact. An analogous conclusion follows from a study of relation as a subjective fact. "The room" is a room in which "that chair" is; and "the chair" is a chair which is in "that room." It is obvious that the relation of "withinness" has its being in, and derives its character from, the significance of each of these objects for the other; "the chair" is content for "the room," and "the room" is space for "the chair." A relation has its subjective origin in the subject's apprehension that one of two perceived objects gives some meaning to the other, when they are thought together. It derives its being and character from the subject's conception of the meaning of each of the objects for the other. It is, therefore, internal to the objects as apprehended by the subject.

§ 108. Does the Relating of Objects modify them?— We have called attention to the fact that objects are modified by their relations. This has, however, been denied; and the question has acquired such importance of late that we think it well to give it fuller consideration.

I. Are the page number, the page title, and the text of a page modified in their being related? We have said that they seem to be independent of the relations in which they are found; but, if objects are modified by their relations, they would not be the same if they were in some other book or were apart and by themselves as individual objects. What are the facts in the case? In this relation, the page number is an ordinal and signifies the place this page would have in the make-up of the book. Unrelated, it is a certain term in our series of cardinal numbers; it would not imply pages or any other collection of objects. The page title by itself would express an idea; here it signifies that this idea is discussed in the text. In this relation, the text is not merely a number of connected statements; it is an elucidation of the idea expressed in the page title. The page as a whole is a unit; and this unitary character cannot be accounted for if we regard it as made up of conjoined particulars. If we aggregate the significance of the particulars, the "oneness" of the page, i.e. its unitary quality, will still be lacking; and the "oneness" is essential to it as a page. This "oneness" qualifies the whole and thus modifies all the particulars of the whole. The significance of every particular is in some respect dependent upon the significance of the page as a unit. A change in relations does effect a change in the significance of the related terms. We recognize this in life. In interpreting documents and the utterances of public men, we take into consideration the relations in which the documents were drawn up and the words spoken. What we have said respecting the modifying of objects by relations, holds true even of spatial relations. Whether

a man lives on the east or west side of the street, would probably make no difference as to his character or peculiarities of speech; but it would qualify him in respect of his place of residence. Objects are modified by their relations.

- 2. The view set forth above is further sustained when we consider chemical and organic changes. The action and meaning of chlorine and sodium are both changed by their coming into such relation as to produce common salt; and the same is true of hydrogen and oxygen when they are so related as to form water. The modifications to which the constituents of plants and animals are subjected when they enter into organisms, are myriad.
- 3. A question. How is it possible that a change in the relations of objects should be accompanied by a change in the objects? The following answer suggests itself. If the world is a system, — and it must be a system if it be intelligible, - any change in one or more objeets would be accompanied by an adjusting change in others. This would be necessary that the harmony of the system might be preserved. We find this to be true in systems established by us - as in a machine or a system of classification; any change in one particular forces change in other particulars. Those who have undertaken to elaborate systems of thought, have often found it necessary to effect such readjustments. Again, objects express their nature in relation, and only in relation. It follows, then, that a change in relation involves another expression of the meaning of an object. From this it would appear that an object is not fully known if it be known in only one relation; and this we find to be true. The meaning of an object is only adequately known when we study it in many relations. In every new relation, it gives a report of itself which is not given in other relations.

§ 109. The Ground of Relation. - Relation is an expression, first, of the cohering and orderly activity of object reality. The cohering orderly activity of reality constitutes all its particulars in relation; it cannot do otherwise. In other words, reality, by reason of its systematizing activity, presents to the subject a world which is intelligible. Relation is an expression, second, of the rational activity of subject reality. The rational activity of subject reality expresses itself in an effort to understand the meaning of persons, things, and events. Subject and object reality are organically related; for they are of the one world system. Object reality is the complementary "other" of subject reality, and the relating activity of the one is complementary to the relating activity of the other. (§ 98, 2 (3)). Relation, then, is grounded in the Ultimate, or Absolute, Reality which is the ground of the being and activity of all subjects and objects.

§ 110. Conclusions. — Every case of relation is an instance of Many in One. We can recognize the Many in One; but we cannot construct the One out of the Many; for, if we should conjoin the Many, the "oneness," that which makes the related terms a One, would still be wanting. Each of a number of related objects gives significance to all the objects with which it is related. There is no relational experience apart from experience of objects; nevertheless, relation is an ideational element, and not a sensational element, of experience. Although relation is ideational and is, therefore, a subjective real, it is none the less objectively real. It comes into experience through the interpreting activity of the subject; and, in this interpreting activity, the mind reports what is real objectively. Relation is obviously internal to the unit which the relating thought apprehends. Certain facts go to show that it is internal to the related objects. (1) The objects

of a relation are not merely adjoined. Thought does not constitute a relational unit out of unrelated particulars; it perceives the particulars in the relational unit. (2) Relation, objectively regarded, is itself an expression of the nature of the related objects and is, therefore, dependent upon them for its being and character. As it effects an expression of the nature of objects, it must be internal to (3) Different relatings effect different expressions of the nature of an object. This would indicate that relations are internal. The changes in the modifications of objects which accompany changes of relation, result from the new adjustments in the world system which necessarily follow when a particular of the system is subjected to change. Relation is grounded in the systematizing activity of the Ultimate Reality, the ground of being and activity.

CHAPTER XXVI

PERMANENCE AND CHANGE

- § 111. Introductory. I insist that this dog-eared discolored book is the same with the beautiful book which I purchased some years since. That garden all aglow with bright flowers is, you say, the same plot of ground and collection of plants that gave no show of leaf or flower last January. That dilapidated old house in the alley is identical with the attractive mansion that stood fifty years ago well back in spacious grounds. In giving expression to our experiences with these objects, we affirm both change and permanence of the same things; and this is true of all persons and things with whom we have to do. It is also paralleled in our consciousness of self. Consciousness is in constant change; and we are each of us certain that these changes are changes in an identical self. Our experience of self and the world is experience of change and permanence.
- § 112. Historical. The earliest Philosophers recognized the seeming stability and changefulness of the world; and this led them to assume that the world-stuff is a substance which readily changes its form (§ 11, 1). But permanence and change appear to be mutually exclusive; how can anything change and still be the same? The Eleatics felt this antithesis, and they undertook to solve this apparent contradiction in experience by denying the reality of change. They argued that change is incomprehensible and, therefore, impossible; and they insisted that our experience is an illusion. Heracleitus opposed the

doctrine of the Eleatics and taught that all is subject to change, except reason (which he regarded as the order of the world). The Sophists took an extreme opposing position; they declared that we have naught but change. Empedocles, Anaxagoras, and the Atomists held that all is changeable except the elements, and these are subject to change of place. Few, if any, moderns have openly accepted the view of the Eleatics; but many thinkers have unconsciously regarded the world as static. It is easy for uncritical thought to conceive the world thus. Many of the changes in nature are so slow as to escape our attention, and much of the world seems to have a fixed form. Reflective thought is also liable at times to adopt this conception of the world; it is specially liable to treat an object of study as static. Whatever we study must be held steadily in attention. Hence in our study of the world or some phase of experience, we tend to fix the world or halt the experience while we examine it. Change is, however, generally accepted as a fact; whatever doubt is raised, is as to the actuality of permanence.

§ 113. Is Permanence Actual? — As against the reality of permanence, it is said that we never have experience of an unchanging content. That is true; but it is also true that we never have experience of mere change. Experience of change is always of change of what persists. In our consciousness of self, we are not simply conscious of change or of changing states; we are conscious of an identical self in changing states, i.e. of self as the persisting subject of changing states. We have experience of change through relating the experience of some moment with that of some preceding moment. For apprehension of change, there must be two related terms which have something in common. There must be something common to this house in ruins and the beautiful mansion

that once stood here, if we may truly say of the ruins, "These ruins are that mansion." That somewhat which is common to them has persisted through the changes; it is a permanent. There must be some permanent that abides through all stages of change, somewhat that identifies the present object with that with which it is compared; or we would not be justified in saying, "This is that." If there were no permanent, we would not have a case of change, it would be an instance of different objects. In addition to this, we know that the difference in two moments of consciousness has more in it than can be expressed by "then" and "now"; there is a difference of make-up. But despite this difference of make-up, or content, there is something common to the make-up of those moments, common to all moments of our experience. According to Hume, experience consists of discrete momentary impressions; in his Philosophy there was no persistent self, and our successive judgments were not in any way linked in consciousness. He felt the need of some principle which would "unite our successive judgments in our . . . consciousness"; and he acknowledged that his system was defective for want of it. In other words, Hume saw that an adequate construction of experience requires the recognition of permanence as actual. There can be no change except in what persists. The reality of change involves the reality of permanence.

§ 114. Change, Permanence, and Reality. — Reality is active Being. Since it is in the nature of reality to be active, what is real will be in constant change. Changing relations and consequent adjustment constitute the history of reality. We become aware of change in objects by comparing different stages in their history. These stages are in fact different moments in a continuous process; they are stages in an unbroken change, stages which our in-

terest leads us to select for comparison. These stages are different expressions of the essential nature of the one individual real. The new book which I bought some years ago, has passed through changing relations; and these relations have — according to the teaching of the preceding chapter — conditioned, and therefore modified, the expression of its reality. It now appears old and worn. The barren garden of the winter and the resplendent garden of the season of flowers are the same garden in different relations, with continuously changing relations and consequent readjustments between these two stages. It is the same real in different stages of its history.

The essential nature of any reality is necessarily unchanging; and its essential nature will, of course, determine the law of its changes. For example, we have the law of gravitation in material reality. This is the law, or general order, of change in objects in respect of mass and distance. What the change shall be in any particular case, depends upon this law and the relations in that case. The difference in any two or more instances arises from the difference in the relations. The law of change in matter, in respect of mass and distance, is not subject to change. This law is an expression of the essential nature of material reality. Permanence and change are both of them expressions of the nature of reality.

§ 115. Conclusions. — Experience has its subjective origin and being in change which occurs in subject reality. The continuity of experience comes of continuity of subjective change. We do not have experience of mere change, but of change of some real which persists through all stages of change. If there were nothing permanent, there could be no change. In such case, what we take to be change in any object, would be the presentation of a

series of objects. Such a series, however, could not be known; for cognition of the series would require that there be an identical subject experiencing the terms of the series. That is, there must be a permanent subject. The essential nature of any real and its law of change are unchangeable. Permanence is grounded in the unchangeableness of what is essential to reality. Change is grounded in the nature of reality as active.

CHAPTER XXVII

INDIVIDUALITY

WE can only give a partial treatment of Individuality at this stage of our study, because this category finds its completion in Personality and we are not yet prepared to take up the consideration of Personality. The establishment of certain facts respecting individuality will, however, be of great assistance in our study of categories whose consideration we are now ready to undertake; and we think it best to avail ourselves of such assistance. Personality will be taken up later, and we will then complete what is begun in this chapter.

- § 116. An Individual Object. 1. Our experience comes of intercourse with individual objects things, persons, and events. Thus far in this Introduction, we have spoken of objects when thought of singly as particulars, particular objects, or individual objects. We have refrained from calling them "individuals," because custom has reserved the term "individual" for use when speaking of persons. If it were not for this limitation set by custom, "individual" would signify any single object, whether it were a person or a thing or a happening. We shall freely use the term "individuum" and its plural "individua" when speaking in a general way of individual objects of any kind whatever.
- 2. When you perceive an object, say a dog, you perceive various parts, having various qualities and sustaining various relations. That is not all you apprehend; but you do apprehend those many parts, qualities, and

relations. What you perceive is not primarily the diversified Many; you apprehend the Many as One. Your individual object, the dog, is a complex unit. Further, the dog is not perceived by itself, as though it were all that is; it is perceived in a surrounding, or context, and as distinguished from that context. An individuum may, therefore, be described as a unitary complex, conceived as distinct from all else that is. The relatively independent oneness of the individuum is what we mean by individuality. Every object of thought is an individuum. Hence individuality is a fundamental form of cognition.

§ 117. Individuality as determined by the Subject. — A college may be, and often is, an individual object for thought and speech. So, too, may any particular element or combination of elements of collegiate being or activity - e.g. the faculty, a student, or an examination - be treated by thought as an individuum. Whatever is thus regarded is, for the time, conceived as having a distinct, if not an independent, being. This book is an individuum; so likewise is any leaf or page or smaller portion to which I may give attention. This last gives us the key to the subject's relation to the object, as an individuum. It is found in the expression, "to which I may give attention." We give attention to that which serves the interest of the moment. Our object is a selected portion of all that is present. For the surgeon, it may be the arm or the hand or some part of a finger. The army as a whole may be the object of thought of the general in command or of the historian; or it may be a small detached force. Whatever acts as a unit from the subject's point of view, whatever thus satisfies his interest and serves his purpose, is for him an individuum. In a very true sense, the subject determines what shall be his individual objects; he gives this form to objects. The fact that categories have a subjective origin would lead us to expect just this.

§ 118. Individuality as determined by the Object. — I. From the common-sense point of view, that is an individuum which stands apart by itself and has an apparently independent existence. If the Plain Man were asked to designate an individual object, he would probably choose something which stands out obviously separate from other things — e.g. a horse, a tree, or a stone. This agrees with what we found to be one characteristic of the subject's determination of an individuum; the subject separates the individual object in his thought from its surroundings, or context. So regarded, an individuum is an object conceived as distinct from other objects and as having a relative independence; and the more marked its independence, the greater the degree of individuality which we ascribe to it. We deem that man most distinctly individual, who is least determined by his social environment. His apparent independence of his time and associations is accounted by us a mark of individuality. The arm has a lower degree of individuality than the body, because it subsists in the body and has, therefore, relatively less independence. Thus we find ourselves assigning degrees of individuality to objects; and the measure of their apparent independence or self-subsistence is for us the measure of their individuality. From this point of view, inorganic objects have a low degree of individuality; and individuality increases as we pass upward through plant and animal life to man, in whom we find the highest finite individuality. Of course, nothing finite is wholly self-subsistent; for whatever is finite is a part of a system and is dependent upon the system. The perfect individual would be self-subsistent; and the all-inclusive system would be the expression of the activity of the perfect individual reality.

2. Organic objects are constituted of parts which are perceptibly different in structure and which serve different ends. The root, trunk, branch, leaf, and flower of an apple tree differ in structure and functions. This is notably true of parts of the human body — as the eyes, ears, and arms. Each has a form which is its own, and it fulfils an office in relation to the body, which no other can fill. The leaf or flower of an apple tree cannot be replaced by anything else. Neither of the arms or hands of a body is identically what the other is, in respect of structure or functional relation. This distinctness of structure and function in parts of a highly complex organism gives a high degree of individuality to such parts. The quality of irreplaceableness has its fullest exemplification in the self-conscious individuum. No other person's consciousness can replace yours. The consciousness of each of us is unique. Uniqueness is a characteristic of individuality.

§ 119. Conclusions. — An individuum is Many in One; the Many so cohere as to embody one idea. It is comprehensive, including many; it is coherent, the Many functioning as One. As determined by the subject, i.e. as a mode of rational activity, it is a selected portion of what is objective, the selection being determined by the subject's purpose. The individuum, in relation to the subject, is an expression of the activity of the subject reality. Individuality is also a mode of object reality. Here we find degrees of individuality, the measure of it being determined by the object's approximation to self-subsistence and uniqueness. Self-subsistence and uniqueness are marks of objective individuality. Selfconsciousness is individual, being unique. The perfect individuum would be the wholly self-subsistent, selfconscious individual.

CHAPTER XXVIII

SUBSTANTIALITY

§ 120. Origin of this Category. — 1. We have experience of permanence in change. The clematis which you planted by the arbor, was a small slip; and it had no flower bud on it. Now it covers the arbor and is itself covered with flowers. A few months since, it was bare of leaf; now it is clothed with foliage. Year by year there have come to it seasons of barrenness and seasons in which it beautified the arbor with its foliage and flowers. You declare it to be the same plant through all these changes. A framed canvas was found in the garret. The head of the house recalled having taken something of the kind some years before as security for a loan, and that it was said to be a painting of merit; but when found it was impossible for the eye to trace a painting. In the hands of an expert restorer, it proved to be a marine view which had been done by a master. It was the same painting through all the changes. The persons and things whose history, or a part of whose history, is known to us, are in constant change; but they are, nevertheless, identical with themselves all through their history. We recognize them as the same; and we can only do this, if in every stage of our acquaintance with them, there is that in them which was in them in all our previous experience of them. We recognize a house as our former home, because there is that in it which gives us ground for assigning to it experiences of home life which we once had. It has greatly changed; but there is that in it which was in it years

before. All experience of change involves the notion of a permanent persisting through change. This fact is so obvious that Heracleitus, "the philosopher of flux," recognized an underlying principle of permanence. We have experience of self persisting through change. In every present experience of ours, there is that which was in all our past experience. We can each of us say, "I am the self that had certain experiences last vacation." The subject of those past experiences and the subject of the present experience are the same. Much of our experience at the present is very different from what it was then: but those experiences and this are experiences of the one self-conscious self who has persisted through all the intervening changes. We think of that which preserves its identity through changes, as being substantial. Experience of permanence in change gives rise to the notion of substantiality.

2. You would bend a stick; but, in seeking to do this, you find that you are resisted. So also when you undertake to break a stick or a nut, these objects resist the change and evince persistence in retaining shape and individual wholeness. A child runs against a chair, but the chair does not move; you strike your hand against the wall, but the wall persists in position. The notable fact for us here is that these objects persist in retaining position against our efforts to move them. The common thought connects such experiences of persistence with the substantiality of the object; and this is evidenced by the fact that the substantiality of an object is determined for us by the persistence with which it resists changeful tendencies. That is accounted a substantial machine or building which will present a large measure of resistance to incidents which would radically change its structure. That is a substantial man who will maintain his integrity - literally, his

wholeness — despite a strongly adverse environment. We likewise think of that which acts upon us as substantial. The stone which falls upon the foot and the branch which strikes our face in its rebound, are thought of as substantial. We account either of these more substantial than a handful of loose feathers; they act with greater force. The notion of substantiality arises in our experience of a permanent in changing objects, also in our experience of the opposing activity of objects, as they effect change in us or resist activity which would effect change in them.

- 3. This category is present in our thought of events; and it is the purpose of this study to discover its relation to reality. It is usually known as substance. But the term substance is closely associated in common thought, and in certain schools of Philosophy, with the conception of an unchanging and unknowable substrate of states and qualities; and this is a misconception and must be given up. We prefer a term for this category which is free from such association, if it may be had. Beside this the word substance has to most minds an implication of thinghood; and we think it well to avoid such an implication. We will designate the category by the term substantiality. It does not suggest substrate, neither does it imply thinghood; and the form of the word is congruous with the non-sensational character of the category. Substance is that element in our conception of an object which leads us to think of the object as having substantiality. Substance is for us the objective ground of substantiality.
- § 121. Historical. The element of experience which we are now considering, has been diversely conceived by leaders in philosophic thought. "Substance" is the word generally used to designate the objective reality

of that to which it is related. In reading Philosophy, one meets this term, or its equivalent, in the writings of almost every school and philosopher; but the significance of the term, the reality which it is intended to symbolize, varies somewhat with the age and the school. In view of the importance attached to this notion and because of the diverse conceptions of the nature of the objective reality to which it is applied, we give a sketch of its history. This historical study will make it evident that despite the diversity of views respecting substance, there are important particulars in which most philosophers have virtually agreed in their conception of it.

I. Previous to Aristotle. - The earliest Greek philosophers questioned as to what the world is made of. One suggested that the world-stuff is water, another took it to be air, and yet another took it to be the Unlimited or Undetermined. All of them regarded it as a single changeful substance. The Eleatics, the later Ionians, and the Atomists differed respecting the nature and kinds of the world-stuff. They queried as to whether the worldsubstance is static or changeable, and whether this substance is one kind or many kinds. The Pre-Socratic thinkers do not designate the world-stuff by a term which is the exact equivalent of the word "substance." The word which they used means elementary principle, or first cause, rather than substance; but the idea of substance was involved in their conception of the relation of this principle to the world. Whatever exists is, for them, some form of this principle or, for those who are Pluralists, some combination of the many principles. "ideas" had a place in his philosophy analogous to that of the "elementary principles" in the philosophy of those who preceded him. The "principles" of the Pre-Socratics and the "ideas" of Plato were conceived to be

permanent existents, which are the ground or cause of objects.

2. Aristotle. - Aristotle was the first teacher who gave definition to this notion. The word which he uses when speaking of substance, is one whose root relates it to "being," and consequently to "essence." His doctrine accords with this fact. He recognizes two substances: a first and a second. A concrete individual is a first substance; e.g. "Socrates," in the judgment, "Socrates is a man." A general concrete (i.e. the universal in a class of concrete individua) is a second substance; e.g. "man," in the judgment, "Man is mortal." Substance in the secondary sense is that which is common and essential to all the members of a class or genus. In a first substance, he distinguishes two elements: a substrate, Matter, which is of itself undetermined; and a principle, Form, by which the substrate is determined and comes to be an object. With Aristotle, the matter of a rose-bush has of itself no defined characteristics; but, in its union with the rose-bush Form, the characteristics of a rose-bush are developed. The rose-bush is potential in Matter; the rose-bush in the garden is this potentiality made actual by means of the Form. For him, the individual rosebush is a substance; and its substantiality is in its essential nature when thus actualized. The concept "rose-bush" was, in his view, a substance in a secondary sense; and he so accounted it, because it is the ideational expression of the essential nature of all rose-bushes.

Aristotle speaks of qualities as "accidents," since they only exist in and with objects. Thus, the existence of "rotundity" is dependent upon the existence of some individual object, or some substance which is rotund. So with "sonority," "sweetness," and all other qualities. An existent quality is an accident of some substance-

Some qualities of an object may be non-essential; for instance, a particular tulip or man may have qualities which are not essential to the being of a man or a tulip. Non-essential qualities are not included in substance as conceived by Aristotle; they are not regarded by him as of the substance of the object. He recognized also that some of the accidents of an individual object, or substance, are essential; and he included essential accidents in his conception of substance. According to Aristotle, an object is a substance; so also is a concreted universal; and the substantiality of an object is in its actualized essence and is expressed in its essential qualities.

- 3. Neo-Platonists and Scholastics. With the Neo-Platonists, a substance is a concrete individuum, and substance is actual being. Their technical term for substance is a word which is derived from a verb that means to stand under; it is the exact Greek equivalent of the Latin word from which we derive our English word "substance." This helps to prepare the way for the later conception of substance as a substrate of phenomena. In the Scholastic philosophy, substance is conceived as that which exists by itself. It is used of the individual object as a whole, and is contrasted with the accidents of the object.
- 4. Review and Summary. We think it well at this point to note what the historical inquiry has thus far discovered to us. We find (1) That this category arises in experience of change and permanence; and substance is conceived as the permanent in change. We find (2) That Aristotle teaches that an individual concrete is a substance; and this substance owes its being to the activity of its Form, the Form effecting an objective expression of itself by actualizing the potentiality of Matter. According to this, a substance exists through its own

immanent activity; and a substance is an immanently active individual. We find (3) That substance is conceived to be the essential nature, or Form, of the object, expressed in its essential qualities. From this it would follow that the substantiality of an object is grounded in its essential nature. We find (4) That, in the Neo-Platonic philosophy, substance is the individuum as a whole; and that the technical term for substance tends toward the identification of substance with substrate. We find (5) That, in the Scholastic philosophy, a substance is an individuum which has independent existence, as distinguished from the accidents which have their existence in the substance. At the opening of the Modern Age of Philosophy, Substance was conceived (1) As the permanent in change; (2) As actual being which exists by itself; (3) As causal and, hence, active.

5. In Modern Philosophy. - Descartes conceives substance as independent self-subsistent being. God is for him the only true substance. He regards matter and mind, however, as relative substances, dependent upon the primary substance. He speaks of them as "created substances." Matter is extended substance; mind is conscious substance. The substantiality of a thing is in the matter of which it is composed. Spinoza defines substance as that which exists in itself and is conceived through itself alone; in brief, substance is self-subsistent and unlimited. Being unlimited, there can be only one substance; and God is that substance. In Spinoza's view, thought and extension - Cartesian modes of mind and matter - are attributes of the only substance; they are of "the essence of the substance." The primary substance of Descartes and the one substance of Spinoza are regarded by these thinkers as the ground of all that is. Substance is, for them, the permanent in all change; and it is individual and causal.

Leibniz defines substance as a force centre. He held that the universe is composed of an infinite number of substances. He terms these substances monads. God is the supreme Monad. All other monads are dependent upon the supreme Monad; but, apart from this, each of the monads is self-sufficient and independent. All changes are within the monad and are due solely to the immanent activity of the monad in which the change takes place. The monad preserves its individuality and is, therefore, permanent in change; and it is active.

Hobbes was a materialist; but he held that we do not know what the substance of things is, and that we are only certain that it is different from our knowledge of things. According to Locke, "we accustom ourselves to suppose some substratum wherein [the qualities of an object] do subsist, and from which they do result, which therefore we call substance." It is "something we know not what." He assumed a material and a spiritual substance. Berkeley denied the reality of material substance; and Hume necessarily denied the reality of both material and spiritual substance, for his philosophy has no place for a permanent. The notable fact for us is Locke's definition of substance as the unknown substrate of qualities and cause of their coherence. This is the conception of substance generally held by those who teach that we know phenomena only.

Kant defines substance as the permanent in change; and he also describes it as "self-dependent being." He argues that, as there is change, there must be a permanent which undergoes the change. He also taught that the notion of substance only holds for material objects, and that substance has no reality apart from its accidents and their relation. He nowhere clearly defines the nature of substance. His refusal to recognize the substantiality

of the Ego is involved in his doctrine that the self we know is only a phenomenal self, not the real self. We have rejected this Phenomenalism; and, doing so, we refuse to agree with him in his denial of the substantiality of the Ego.

- 6. Conclusions. Apart from Hume, permanence in change is accepted as a fact; and Hume confessed dissatisfaction with his own system, because the only reality which it could recognize was a series of distinct perceptions which had no real connection with each other. He felt the need of a permanent. We find also that substance is thought of as concrete in the individual; that there is general agreement in identifying it with the essential nature of the individual; that many have regarded it as an unknown substrate of accidents; that Phenomenalists think of it as the unknowable substrate of phenomena; and that most thinkers have conceived it as causally related to objects and changes. Of these conceptions, three are important for our study: (1) That substance is the permanent in change; (2) That it is active being; (3) That it is conceived as concrete in individual objects. The first and third of these have been recognized by all schools and teachers; and the second is involved in our experience of objects as effecting change in us and resisting change in themselves.
- § 122. Substance and Substrate. Many thinkers have conceived substance as a substrate in which qualities inhere, or as the unknown reality back of phenomena. This substrate is undetermined and unknown. Being undetermined, i.e. without defined character, it cannot change; for change involves difference of characteristics. To say that an object a coat or a boy has changed, is to say that its present characteristics differ, in some particulars, from its characteristics in the past.

This theory would ground substantiality in an undefined, unchangeable, unknowable somewhat. To this there are grave objections.

- I. The doctrine under consideration regards our world as a world of known appearances and unknowable reality. We have examined the dualism which separates appearance from reality (chapters XVIII and XIX, and § 87) and have concluded that it is neither consistent with itself nor accordant with experience; and our constructive study of cognition led us to conclude that we know objective reality. We, each of us, know our self to be identical with the self of our past experiences. The self we thus know, is the real self; the only actual self is the self of which we are conscious. This means that we know subjective reality. The world we know, then, is the world of reality; and it is known in and with the cognition of accidents and appearances. The assumed unknowable substrate is a myth.
- 2. This assumed substrate has no reality. The proponents of the theory under consideration regard substance as being of itself without quality. Actual Being is, however, being-of-some-sort. Pure Being, being-of-no-sort, would be pure Nothing. Those who set forth this conception, are led astray through failing to note what results from their process of abstraction. They begin with a substrate-with-inhering-qualities or a substrate-withphenomena. This is a complex unit; and every individual real is a complex unit. No element of a unit can exist apart and by itself; but those who hold this view abstract the substrate and conceive it as self-dependent. There is no substance without accident; neither is there any accident apart from substance. To abstract accidents or phenomena, is to leave nothing; for it leaves pure Being. It is impossible that Nothing should be the

ground of our experience of permanence through change and of resistance to change.

§ 123. Substance and the Primary Qualities. - 1. Some identify substance with the so-called primary qualities of an object; and, as this theory is proposed with particular reference to the substance of things, the primary qualities of the object are the primary qualities of matter. The distinction between primary and secondary qualities appears to have been first urged by Democritus. It was accepted by Descartes and Locke, and not a few since have undertaken to justify it. Locke held that certain qualities -as color, sound, flavor, odor, etc. -take their character from sensibility; he argued that they are what they are, because of our sentient organism. This is seen in the fact that the same object may have for different persons a different color or taste. If one of my hands be held for a time in very cold water, and the other in very warm water, upon laying both hands upon the same object it will seem warm to the one hand and cold to the other. These secondary qualities are said not to represent the properties of the object, but to owe their character to the subject. In other words, the secondary qualities are regarded as subjective, not objective. But those who hold for this distinction, insist that there are qualities which are solely objective; that they resemble properties of the object. These latter are called primary qualities. They are listed differently by different teachers. Descartes recognized one fundamental quality, viz. extension; but he also names figure and shape. Locke designates the following as primary qualities: extension, figure, motion, rest, impenetrability or solidity, and number. They are in general those qualities with which Physics deals. stance is said by some to be these primary qualities and to possess the secondary qualities—weight, color, hardness, etc.

- 2. This distinction is a convenience for Science; but it is untenable from the point of view of Philosophy. The object possesses the primary qualities - extension, figure, motion, etc., - quite as much as it does the secondary qualities. But a more fundamental objection to this theory is found in the fact that ideas of extension, figure, and all other qualities are just as dependent upon the subject as sound, smell, taste, and the other secondary qualities. All perception of quality requires the mediation of the sentient organism and the mind of the subject. Perception of figure, motion, and rest is dependent upon the senses and the interpreting activity of the percipient; just as much so as the perception of sound, color, and taste. In addition to this, it is a mistake to identify the substance of an object with a part, or with all, of the qualities of the object. Reasons for this statement will be set forth in the next section. The substantiality of an object is not grounded in its primary qualities.
- § 124. Substance and the Totality of Qualities. -Another view of substance has been stated thus: Substance is "the synthesis of all the qualities which appear to common sense as the qualities of a thing" during the whole time of its existence. If some quality "remains relatively unchanged while others change," that relatively unchanging quality, though it is not the substance, "would come to be considered the substance." This theory must be rejected.
- 1. It conceives an object and substance also to be a mere aggregation of qualities. We have found that reflective thought is agreed upon one point - that actual substance is substance of an individuum. Now, an individuum is not an aggregation; it is not One constituted through the conjunction of Many; it is not a synthesis of independents. It is a diversified unit, Many in

One. An aggregation of independents cannot constitute a unit. A unit is "an original one, not a total." The theory under consideration must either deny the substantiality of the self, or constitute the self through the aggregation of states of consciousness. Neither of these positions can be sustained. The self is an individual real, it is a permanent through change, and it is an active being: these are the marks of substance. To assume that this substantial self is an aggregation of states of consciousness, is to misinterpret experience. The distinguishable states of consciousness do not constitute experience; the states are themselves constituted in experience. The view under consideration misconceives individuality and, consequently, misconceives substance.

- 2. An object is Many in One; the many qualities are in the one object. They are expressions, to a subject, of the nature of the object. The nature and relations of the object determine its qualities. The qualities of a peach and of a piano reveal the nature of these objects; they do not make that nature to be what it is. A substance is immanently active. Its qualities are the result of its immanent activity; they do not cause it to be. The qualities are grounded in the substance; they are not the substance. The theory we are examining misconceives the relation of qualities to substance; and, because of this and the fact that it also misconceives individuality, we decline to accept it.
- § 125. Substantiality and Reality. Substance presents three characteristics: it is active being; it is actualized in individual reals; it is permanent through change.
- 1. The first of these marks identifies substance with reality as defined by us. The substance of an object is that which is essential to its being; it is that which, in interrelation with its environment, makes an object to

be what it is. In seeking a definition of substance, we are seeking a definition of reality. It is a notable fact that those who would have us accept knowledge of phenomena as adequate to the demands of reason, either identify substance with appearance or undertake to interpret experience without this concept. But we have found that reason refuses to accept that the world with which we are dealing is merely a world of appearances; the known world, the world with which we have intercourse, is the world of reality. Neither can we ignore the notion of substantiality and be true to experience. It persists in the thought of all of us and returns to confront the philosopher even after he supposes he had banished it. Our study reveals the fact that substance is one with reality, and that is why it persists. The substance of an object is its essential reality. The notion of substantiality arises from experience of reality.

2. An individuum is Many in One; the Many function as One. To state it otherwise, an individuum is a system. The parts of a true system inhere in the system; and they work together to serve the purpose of the system, i.e. they cohere in their activity. Reality expresses itself in system. This is true of the universe as a whole, and of the individual objects of the universe. The individuality of an object comes of the coherent activity of its reality. Substance is individual because the activity of reality is a systematizing and, therefore, an individuating activity.

3. The essential nature of any real is necessarily unchanging. The nature of an object is expressed in its appearances; its essential nature, in its essential qualities. The continuous internal adjustment of an object which is consequent upon its immanent activity and changes in its environment, will result in change of appearance.

But while the appearance of the object changes, its essential nature is necessarily permanent. The appearance of the book has changed through much use; but all that is essential to its being a book, has persisted through these changes. The permanent essential nature will express itself in a corresponding permanence of qualities. The old book still has the marks of a book. Experience develops the notion of substantiality as permanence in change, because the qualities which reveal the essential significance of the object persist through all changes; and they persist because the essential nature of a real does not change.

§ 126. Conclusions. — Substance is reality. The notion of substantiality is present in our thought of objects as changing and as resisting and causing change. Cognition takes this form because experience comes of commerce with reality. Reality is immanently active causal being; because of this it yields experience of change and of resistance to change. Its activity is coherent and systematizing; as a consequence, reality is individual, and the notion of substantiality arises in our thought of concrete individua. A real is an expression of the essential nature of its reality; and the essential nature of a real necessarily persists throughout the existence of the real. The permanence of the essential nature of a real expresses itself in the persistence of the essential qualities of the real; and experience of essential qualities persisting through changing appearances of the individual object, yields experience of permanence in change.

CHAPTER XXIX

QUALITY

- § 127. Quality and Object. I. A known object is of a kind; it is like other objects in one or more particulars, and different from them in others. If I say, "Sit on the chair, not on the stool," the chair and the stool are defined by sets of marks which distinguish them from each other, and from other objects. The glass of milk which you rejected because it was sour, was known by you as having a certain characteristic. If I say, "This is the thing I mean," I distinguish a certain object from others by its proximity and by the qualifying gesture which sets it apart for thought. For the occasion of this judgment, it is known by its proximity and the qualifying gesture. It is obvious that a known object is qualified, or defined, existence; it is known through marks which are its own. These marks, or characteristics, are its qualities.
- 2. There is no bare existence; there is no Being without quality. Mere existence would be mere nothing. Whatever is, is of some kind; and that kind is defined in the qualities of the Being. Not only is there no reality without quality; but quality cannot exist apart from a real. We cannot think a quality as having existence in itself. Our study of substantiality made it evident that quality has its being in a concrete individuum, and never apart from what is actual; and that our thought of quality is always cast in that mould. Experience has even embodied this fact in language. Thought of actualized color, sound, taste, or other quality always takes some

such form as the following: "This rose is a dark red,"
"The piano's tone is melodious," "This apple is sweet,"
"He bows gracefully." The color is thought as having its reality in the rose; the melodious tone, in the piano; the taste quality, in the apple; and the gracefulness, in the act of bowing. Reality implicates quality, and quality implicates reality.

- § 128. Characteristics of Quality. 1. We speak of qualities as changing; and this form of statement is convenient and permissible, but it is not exact. A quality does not of itself undergo change. "Red" is always "red"; it cannot become "blue" or "green" or any other color. "Sonority" is always "sonority," and "acidity" cannot become "sweetness" or "saltness" or "bitterness." The red cloth may take on another color through exposure to the sun; the melodious piano may acquire an unpleasant tone through neglect; the apple which was sour when it was unripe, may be sweet when it has ripened. But in these instances the substance of the cloth, the piano, and the apple has undergone change; and this change is revealed in the changed quality of the objects. Quality, conceived by itself, does not change; but the quality of an object may change. Change occurs only in what is concrete; and quality conceived apart from substance, is abstract, not concrete; hence it cannot change. Quality of a concrete individuum is concrete, and it changes with the changing of that whose quality it is.
- 2. Qualities have a subjective and an objective relation. A color, a sound, or an odor is, in my consciousness, my sensation. Similarly, extension, weight, taste, etc., are sensational elements of consciousness; that is, they are subjective. They arise in the consciousness of a sentient and rational subject; and they cannot be conceived as

concrete except as we conceive a subject who senses them. But they are not purely subjective; they also define objective reality. Extension is a quality of the box; weight, of the piece of iron; and sonority, of the guitar. When you think of the box as extended, of the iron as having weight, and of the guitar as sonorous, you are not imposing upon these objects what is foreign to them. But these qualities can only be actualized in the subject-object relation. An object is not complete apart from its complementary "other," the subject. Quality is developed in the interrelated activity of subject reality and object reality.

In criticism of the view just stated, some have said, "If the qualities of an object are real in the object, but only become actualized in the subject-object relation, tell us what the object is apart from this relation; describe the object by itself, unrelated to a subject." Those who ask a description of an object out of relation to a subject, make appearance impossible, and then demand a description of appearance. They cut the object off from intelligence and then ask to be told what intelligence has to say of the object; they make knowledge impossible and then demand knowledge. In describing an object, you necessarily conceive it in relation to a subject. If one should say, "An object conceived apart from relation to a subject is potentially what it is actually in the subjectobject relation," we must relate the object to a subject in order to give meaning to this description. They fail to recognize that the conditions of the problem contradict each other. We are asked to think of an object out of relation to a subject. You cannot think an object without relating it to yourself as subject.

3. The qualities of objects change as the relations of objects vary. The gown which is lavender in sunlight

appears gray in lamplight; from some points a round disk will appear oval. We have examined such experiences and have concluded that relations modify the appearance of objects (§ 77). The examples just cited — of the lavender gown and the round disk - are instances of temporary changes of perceived qualities. In a muchused book and a faded ribbon, we have examples of changes that are permanent. The book and the ribbon have been so related that the adjusting activity of their reality has resulted in relatively fixed changes of quality. The book, once new and clean, is now old and soiled; the ribbon has a duller hue, and some of the threads are much worn. The violin has acquired a richer and mellower tone. One has said that qualities are "the object's special way of behaving"; and we may add that, while its behavior will always be relevant to its nature, it will differ in different relations, i.e. it will also be relevant to its environment.

§ 129. Quality and Reality. — The reality of an object presents itself to a subject in and through the qualities and relations of the object. The qualities of an object are its nature expressed to a subject. To sense-perception, it presents the qualities of matter and material objects extension, motion, color, sound, taste, etc. To inner perception, it presents the fundamental quality of consciousness, with its three elementary phases - intellection, feeling, and volition. To rationality as intellection, reality presents itself as intelligible, as having meaning that may be apprehended. To rationality as feeling, it presents itself as that which satisfies; a feeling of satisfaction attends the conviction that we are dealing with reality. To rationality as will, it presents itself as available for practical activities; its qualities indicate how it may subserve the subject's purposes. The value of an object for thought, feeling, and action is revealed in its qualities. The manifold and variable qualities of objects are grounded in the inexhaustible richness of reality and the countless relations in which it is presented to us.

§ 130. Conclusions. — The qualities of an object are the marks by which we distinguish it from other objects. There is no reality without quality, and no quality apart from reality; reality and quality are co-implicates. Quality, as mere quality, does not change; but the quality of an object may change. Change in the qualities of an object result from the immanent activity of the object, as the reality adjusts itself to changing conditions. Quality is dualistic; it has a subjective and an objective relation. It has its origin in the interrelated activity of subject and object. The qualities of an object are its expressed nature. The innumerable qualities of objects are for us the expression of their significance for life.

CHAPTER XXX

QUANTITY

- § 131. Introductory. There are many interesting and important questions respecting this category which the limits of this Introduction to Ontology will not permit us to consider. Two facts, however, are of special import, and it is the purpose of this discussion to set them in evidence: (1) That quantitative thought of objects is true to reality; (2) That reality cannot be fully expressed in terms of quantity.
- I. The element of experience which we are about to consider comes of our thinking of objects as one or more, and of an object as being so much. We are constantly asking, "How many?" and "How much?" and these are questions respecting quantity. In the first of these questions, the notion of Number is present; in the second, the notion of Measure. Number and measure exhibit important differences; but they are so closely related that we think it well to treat them under the one category Quantity, of which they are sub-forms.
- 2. Language furnishes evidence that number is a fundamental form of thought. The most ancient languages have separate singular and plural forms; and many of them also distinguish the dual. The most primitive peoples count. Some of them, to be sure, can go no further than one, two, many (more than two); and, if they wish to be more definite as to the many, they compound thus: two one, two two, two two one, etc. The cultured races have a more extended primary series,

going at least as far as ten before they begin to form compounds. But the important fact for us is that thought distinguishes one, two, and more than two; that the notion of number is present in men's thought of objects. It is sufficient for us that experience takes this form.

- 3. All peoples have standards of measure. The standards of primitive peoples e.g. so many days' journey, so many moons are indefinite as compared with those of cultured peoples; but they are measure standards. The fact that all peoples have such standards is evidence that measure is a fundamental form of thought.
- § 132. Characteristics of Number. A boy finds a small bag containing marbles, and he desires to know how many there are. He takes out one marble and then another and yet another; and, as he does this, he counts, i.e. he thinks the terms of the number series: and he does this until all have been counted. The number which he thinks, does not indicate the kind of things that are numbered; it merely describes quantitatively the group that has been taken out of the bag. No two of the marbles need be of the same kind, size, color, or value. The number modifies the meaning of the collection; but it gives to that meaning a purely quantitative modification. It says nothing as to the quality of the individual marbles or the collection. Quality is the expression of the nature of an individual object; number indicates nothing respecting the nature of the objects to which it is applied. What we wish to emphasize here is that numbers do not express quality. A number merely names the term in the number series at which we stop counting.
- 2. Suppose that, in addition to the marbles, the boy should find other objects in the bag; and that there are altogether twenty marbles, three pencils, and two knives. From this account of what is in the bag, it will be seen that

the different classes of objects — marbles, pencils, and knives — are counted separately. The objects of any single instance of counting may differ greatly from one another; but they must be alike in this, that they are in the same class. In the illustration just used, twenty of the objects are marbles, three of them are pencils, and two of them are knives. But, if we should ask how many things were in the bag, counting would show that there were twenty-five, for all these objects fall into the class of things. In any instance of counting, or numbering, all the objects must be of one class, i.e. they must be homogeneous. The purpose of the person counting determines what objects shall be included in the count. We may state this characteristic of number thus: Objects numbered must be homogeneous.

- § 133. Characteristics of Measure. 1. The width of this room is equal to a straight line perpendicular to the side walls. If we desired to find the width of the room, such a line would be the object to be measured. This object is a continuous whole; and in this it differs from the whole which we number. The whole concerning which we ask, "How many are there?" is constituted of discrete objects which are perceptibly distinct from one another; whereas the whole which we measure is continuous within its limits. Distance, surface, heat, time, and angles are measured; and they are continuous wholes. In weighing an object or a group of objects, we are measuring the force of gravity upon a defined whole; and this force is continuous, not discrete. The first characteristic of measure which we note is that the whole which is measured is continuous between the defined limits.
- 2. In measuring the width or length of this room, we use a rule on which are marked multiples of certain arbitrary units of length yards, feet, and inches. These

units are in common use, having been accepted by convention. The rule is a device for easy and exact counting of the number of these units which are contained in a line. If we seek the measure of the surface of the floor, we measure the width and the length of the room, and by a mathematical calculation — which is a convenient way of counting - we determine how many square yards or square feet there are in the room. In such case, our arbitrary unit is a square yard or a square foot. A similar procedure holds in the measurement of time, heat, weight, angles, etc.; similar in this, that an arbitrary unit and counting devices are employed. Three facts are to be noted in this connection. (1) In measuring, we break up the continuous defined whole and treat it as if it were constituted of discrete parts. (2) In numbering, each of the individual objects counted is a unit; in measuring, the unit is arbitrary and generally conventional. (3) The measure obtained is not absolute; it is relative to the arbitrary unit.

§ 134. Real Number and Ideational Number. — I. Number has its origin in endeavor to determine how many individual objects of a certain kind there are in a given collection. The answer to the inquiry will say that there are so many units of that kind; that is, it will be a numerical definition of objects, not a mere number. A real number, then, is not of itself an individuum; it is an accident of an individual collection or group. An accident — as "blue" or "smooth" or "four" — has no objective reality in and of itself; to be objectively real it must be related to an object. "Four" in the expression "four horses" is a real number; "four" by itself is abstract number. A number thought by itself is abstract, not concrete; unrelated to objects, it is purely subjective or ideational, not real. In language, a real

number is a numeral adjective modifying a noun; in thought, it is a term in our number series, conceived in relation to a group of objects.

2. The hypothenuse of a right-angled triangle whose sides are equal, is a definite whole. In measuring the hypothenuse, we are seeking to discover how many units of a certain kind - say feet or inches - there are in the line. Given such a triangle as an objective reality, there is no real number which will express its measure. If its equal sides are each five feet in length, the number of feet in the hypothenuse would be equal to five times the square root of two; but there is no such term in our number series. The symbol $5\sqrt{2}$ does not indicate a definite or determinable number of units; it symbolizes an infinite series. But a real number is a definite, or determined, number of units; and, as $5\sqrt{2}$ is indeterminate, it is ideational number, not real number. We cannot express the measure of this hypothenuse in the same unit with that of the equal sides, because there is no unit of length which is an exact divisor, or aliquot part, of all three sides. In fact, the objects whose measure can be stated in real number, are few compared with the many for the quantifying of which real number is inadequate. It is inadequate because measure is quantification of what is continuous, and number is discrete. In measuring we undertake to divide a continuous whole into equal discrete portions; having done this, we count the equal parts. It is evidently impossible to find a unit of length which will be an aliquot part of every line; but the unit which will give determinate measure of a line, must be such an equal part of the line. What is true in this respect of length, is true of weight and of all other forms of measure. There are many objective realities which real number cannot quantify.

§ 135. Quantity and Reality. — Reality presents itself as Many and Much; hence the notion of quantity is true to reality. Quantitative thought of reality has led to important conclusions; it has furnished an impressive and valuable interpretation of the universe. The service which higher mathematics, the science of quantity, has rendered can scarcely be overestimated. Its testimony to the unity and orderliness of the universe is incontrovertible. Through its quantitative study of phenomena, it has been able to make predictions which future occurrences have verified; e.g., eclipses, the return of comets, the existence of hitherto unknown planets and elements, time and height of tides, the approach of storms. The wonderful accomplishments of this science have led many to insist that all that is may be expressed in quantitative terms. But we take exception to this conclusion.

Most of the objects with which it deals are ideal conceptions, not objective realities, not the objects with which we have experience in our intercourse with the external world. The lever of mathematics is an ideal lever, not the real lever of the workman; it is assumed to be without weight and to have a stability which no real lever has. The same is true of the beams concerning which it makes calculations which are valuable to the bridge-builder and the architect. Its conclusions are of great worth; but they are not an exact quantitative representation of the world of reality. But the impossibility of reducing all reality to quantitative terms becomes still more evident when we undertake to express the specifically qualitative characteristics of objects and experiences in terms of quantity. Quality is an expression of the nature of objects, and quantity is indifferent to the nature of the objects numbered. The hues of the sunset sky and the taste of an orange are not reducible to mere quantitative terms.

Those colors and that taste are subjective as well as objective; and, whatever may be thought respecting the objective element, the subject's consciousness of the color and the taste cannot be expressed quantitatively. It is not a mere consciousness of many or much. But we have already seen that the reality of the object, as expressed in quality, is not realized apart from the consciousness of a subject (§ 128, 2); hence the reduction of quality to terms of quantity would require the reduction also of consciousness to such terms. Feeling and volitional phases of consciousness are assuredly not interpretable in quantitative terms. Hopes, fears, joys, sorrows, and purposes have in them that which cannot be adequately stated as merely so many or so much; and what cannot be so thought, is just that which is distinctive of these experiences. Quantity cannot give a complete statement of subject reality.

§ 136. Conclusions. — Objects to which a number is related must be homogeneous; and a real number states definitely how many such objects there are in a collection. A real number is a term in our number series, set in relation to a certain kind of objects. The whole which we number is a whole of discrete units; the whole which we measure is a continuous whole. In measuring, we divide the whole into discrete homogeneous units, and then we number the units thus obtained. Mathematical calculations in measurement, and rules, scales, etc., are devices for effecting this division and numbering. If the objects of a collection are not homogeneous, the number of units in the whole cannot be expressed by a single term of the number series. A number which is unrelated to objects, is ideational, not real. The unit of measure is an arbitrary unit, accepted by convention. It frequently occurs that the unit of measure is not an aliquot part of that which is to be measured; in such case, the number by which we express the measure, is ideational.

Our experience of things and events takes this form. Quantity is a true representation of reality, for reality presents itself as Many and as Much; but there are realities which cannot be adequately expressed in quantitative The inadequacy of discrete number for the expression of many quantitative facts sets the continuity and structural unity of individua in evidence. There are aspects of reality which cannot be expressed in quantitative terms; this is notably true of phases of consciousness. We have discovered that a real is Many in One; the manifold is discrete, the unity is continuous. Subjectively regarded, quantity is grounded in the activity of subject reality, in our seeking to know the external world in respect of number and measure. Objectively regarded, it is grounded in the activity of object reality presenting itself in individual reals, each of which is Many in One.

CHAPTER XXXI

SPACE

WE distinguish Perceptual space-experience and that which is purely Ideational. Their essential differences will appear in the course of this discussion. We treat perceptual space first.

§ 137. Characteristics of Perceptual Space Experience. - I. The book, inkstand, and pen which are on my desk are seen to be distinct objects; each of them is apart from, or "out of," the others. As I lay my hand on the door-knob in the dark, the knob is felt to be "out from" the surface of the door. Similarly each of the corners of one of the covers of the book is perceived to be apart from the other corners. In like manner we apprehend that parts of other material objects are in a relation of "outness" to one another. The desk, the book, and other perceived objects on the desk are experienced as "out from" me. We do not perceive sensible objects otherwise than in a relation of "outness" to one another and to ourselves. So also portions of the cover of a book or of a patch of light are seen to be "out from" one another. In a word, all sensible individua are perceived to be in a relation of "outness" to one another and to the perceiver. In perceiving sensible objects, we always relate them in respect of position; and the objective reality which yields experience of mutual "outness," is the position-relation of the objects perceived. To say that the inkstand and the pen are "out from" each other, is to say that they are in distinct positions, and that we have related them in respect of those positions.

- 2. When we look at a patch of light, the cover of a book, or the top of a desk, we not only have a consciousness of the apartness of portions of the whole, but we also have an experience of "spread-outness," or extensity. Taking all the many positions on the surface together, the whole appears extended. This is true likewise of the perceptions of objects which are not in contact with one another. You see two colored spots at a sensible remove from each other. The whole which you thus perceive is two spots related in position, and it has an aspect of "extendedness." The element of extensity in your experience arises in your perception of the position-relation of the spots. This is evident from the fact that the extensity of the whole is dependent upon the relative positions of the spots. Suppose these spots are colored counters. If you give them positions nearer to each other, the extensity is lessened; if you move them farther apart, the extensity is increased. When a sheet of paper is folded, the more widely separated portions are brought nearer to one another, and what we then perceive appears to be less extended than the unfolded sheet. In a word, the aspect of extensity varies with the variation of the position-relation of the objects. The position-relation of perceived objects is the objective reality which yields experience of extensity.
- § 138. What Perceptual Space Is. We have found that perceptual space-experience comes of the perception of sensible objects, and that it has two characteristics: the mutual "outness" of the objects, and the extensity aspect of the whole. We have also learned that it is the perceived position-relation of objects which gives us ex-

perience of the mutual "outness" of objects and of extensity. From this it would follow that perceptual space is essentially the perceived position-relation of objects. This, however, differs fundamentally from the common conception of space, which is that space is extensity. This common conception of space is so fixed in thought that we restate considerations already presented. Every whole is many particulars in one. The surface of this sheet is for perception many distinguishable portions of a whole; and it is because we relate distinguishable portions to one another in respect of their positions, that the sheet appears to be extended. When I have experience of the book, the inkstand, and the pen in one perception, it is the position-relation of these objects that gives the aspect of extensity to the whole which I perceive. Spatial experience is, therefore, not primarily experience of extensity; it is experience of the position-relation of objects. The objects whose perception yields this consciousness are necessarily presented together in experience. You cannot relate the positions of three colored spots unless all three are present in your thought at the same time. Including this fact in our description of spatial experience, we would say that it is primarily experience of the position-relation of co-existent objects. Space, as a category, is the position-relation of objects, abstracted from the objects. There is, of course, no perceptual experience of space thus abstracted; for space does not exist by itself, it is a relation. Neither is there experience of extensity by itself; for extensity is an aspect of a perceived whole in which there are sensible particulars, - as the book and the pen, or distinguishable portions of a surface, — and it does not exist apart from sensible particulars. We conclude, then, that perceptual space is the perceived positionrelation of co-existent sensible objects, the perception of

this relation giving an aspect of extensity to the whole of what is perceived.

- § 139. Direction. You reach out and touch a wall, you see a tree toward your right, you hear a bell sounding behind you. The position of each of these objects is related by you to your own position; and you express this relation in the terms, "before," "to the right," "behind." Other terms definitive of like spatial experience are in frequent use—as "here," "there," "above," "below," etc. They define the position of objects and are terms of direction. Such definition of position-relation is present in all developed spatial experience. If we deal efficiently with objects, we must apprehend where they are with respect to ourselves. This definition of space-perception also makes experience available for intersubjective intercourse. If I should say, "The book is on the upper shelf of the case which is at the left of the door as you enter the study," you would understand me and would easily locate the book. The examples given show that, in perceptual space-experience, direction is determined with reference to the position of the subject. The wall is before you, the tree is at your right, the bell is behind you, the book-case is at your left as you enter the room. In general, in perceptual space, the direction is determined by relating the position of the object to the position of the subject.
- § 140. Conceptual Space. This is virtually the Plain Man's conception of space; it is also the space of mathematics and, therefore, of Science.
- 1. Our discussion has led us to conclude that perceptual space, the space of sense-experience, is the perceived position-relation of sensible objects and the resultant extensity aspect of the perceived whole. As the extension element of the perception is an aspect of what is perceived, it cannot

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exist by itself. We cannot image extension apart from sensible objects. Conceptual space is extension abstracted from objects; it is mere extensity. According to this conception, space is whether objects are or not. As thus conceived, space has a sort of thinghood; it is treated as an entity and is virtually regarded as a receptacle for material objects. We easily think of space as an infinite emptiness within which is all that is material. mode of thought has even found a place in Philosophy; we often say that all sensible objects are in space. But we must not so regard the objective reality corresponding to our perceptual experience; for our perceptions and our images have a spatial character because of the perceived and imaged objects. Conceptual space is not the same with perceptual space. Perceptual space is a relation and a resultant aspect; conceptual space is this aspect, conceived as existing by itself. It is a product of reflection; and, although it is related to perceptual space, it differs significantly from the latter.

2. But, if conceptual space, the space of mathematics, differs so greatly from the space of sense-experience, are the conclusions of mathematics valid for the world which we know through sense-experience? Are they valid for the real external world? Although mathematics conceives space as extensity abstracted from perceived objects, nevertheless it sets ideal objects in this extensity when it reasons respecting space. The ideal objects are the mathematical point, line, surface, and solid. Having set these in space, it discusses position-relations. The point, being without extension, is pure position. It takes the place of the subject in perceptual space; and direction and distance are determined from the point. Its line, surface, and solid are constituted ideally of positions which are external to one another. The science of geometry is

the science of related positions. From this we conclude (1) that, although mathematics conceives space as extensity abstracted from objects, it is wont in its reasoning to give this extensity concreteness by setting ideal objects within space; and (2) that mathematical reasonings respecting space are discussions concerning position-relations. In both these particulars, it puts itself at one with perceptual space. The conclusions logically deduced by such reasoning are true for related positions and are, therefore, true for the position-relations of objects. By so much as they are valid for spatial relations in general, they are valid for the spatial relations of the universe.

- § 141. Is Space infinitely Divisible and infinitely Extended?— 1. It is frequently said that space is infinitely divisible and infinitely extended. This is not true of perceptual space. The extension of any perceived whole is limited by the related positions of the perceived objects. To be sure, I can change the relative positions of my book and inkstand and pen so that the resultant whole would be less or greater in extent than my present perception. But, although I would in that case perceive the same objects, the perceived whole would not be the same; it would differ from what I now perceive in the matter of position-relation and extensity. Perceptual space is necessarily the space of a particular perception, and its extensity is fixed by the position-relations of the objects perceived.
- 2. Conceptual space is infinitely divisible and extended. This would follow from the fact that extensity abstracted from objects and that is what conceptual space is is necessarily unlimited. The critical question for us at this point is as to what the infinite divisibility and extension of space signify. A line is a whole whose capacity for division cannot be exhausted; and this is true also of

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a surface or a solid. These are primary concepts of conceptual space; and their infinite divisibility simply means that their capacity for division can never be exhausted. When we say that space is limitless in extent, we mean that however far we may think a line or a surface extended, we have not exhausted the possibility of extending it. In our attempt to think a limit, we think a "beyond." From this we see that the infinite divisibility and extension of space signify that thought cannot set a limit to the possible position-relations, size, or number of objects. It does not mean that space is emptiness which is infinitely extended, or limited emptiness which may be infinitely divided.

§ 142. Space and Reality. — 1. Perception of Material Objects always gives Space-Experience. - All material objects are known through sensory experience, and they are cognized as extended. Matter may, therefore, be described as reality expressed in extension and known in sense-experience. Being an expression of reality, it is real. Speaking exactly, it is a form in which objective reality expresses itself to a subject; it is the form in which it expresses itself to the subject as sentient. Acting after this mode, objective reality expresses itself in objects which have parts "out from" other parts — as the parts of a pen or a spot of color; and also in individua which are perceptibly discrete. Science assures us that bodies which present an appearance of continuity are really constituted of discrete particles, particles which are apart from one another. From all that precedes, it would appear that reality has an externalizing mode of activity, that it has a mode of being in which parts exist "out of" each other. To deny that this is true of reality would be to say that the cognizing mind contributes to objects what is alien to the object; and we have already assigned

reasons for rejecting such a doctrine. Objectively regarded, space is grounded in the externalizing activity of objective reality.

- 2. Whatever is known, is known as Many in One. -My knife, my pen, and my paper-cutter lie before me. I perceive all of them in one act of perception. In knowing this whole, I individualize portions of the whole - the knife, the pen, and the paper-cutter. I see the surface of the sheet upon which I am writing; and, in seeing it, I distinguish parts of the surface from other parts, i.e. I individualize portions of the surface. This individualizing activity of the mind is the synthetic-analytic activity of thought to which we have previously referred. The individualizing activity of subject reality and the interrelated externalizing activity of object reality yield an experience of related "outness" and a consequent aspect of extensity. The subjective ground of space is the syntheticanalytic activity of mind; subjectively regarded, space has its origin in the individualizing activity of the subject.
- § 143. Non-spatial, or Trans-spatial, Reality. 1. You think about bulky things; your thoughts do not have bulk. You feel pleasure, or displeasure, as you think of a happening or a person; but the affective tone of your experience is not spatial. You may purpose undertakings which will affect many or few interests; but the purpose does not fill so many cubic inches. Our thoughts, feelings, and purposes do not, as elements of consciousness, have spatial characteristics; they are not related to each other in position. Attention, memory, emotions, and ideas are not in position-relations and cannot have extension. They are expressions of subject reality. We have object reality expressing itself in extension; and, over against this, we have subject reality whose expressions of itself are non-extended.

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- 2. We have been wont to speak of matter as extended or spatial reality, and of mind as unextended or nonspatial. But there is grave objection to taking these negative terms — unextended and non-spatial — as final. They do not proffer any content to thought; whereas our experience of self, our self-consciousness, has content; and the mind gains this positive content by being related to extended reality. But, to speak of objective reality as spatial and of subject reality as non-spatial is to make them antithetical to each other. If it were possible that there should be two realities, each of them in nature and idea exclusive of the other, could they be interrelated? But, granting the possibility of their existence and their being interrelated, neither of them could possibly have content for the other. We know, however, that material and mental reality are, and that they are actually related, and that mental reality obtains content from material realitv. We have also learned that they are complementary to each other, not antithetical; and that material reality exists for mental reality and finds its significance in it. These considerations lead us to use the term "transspatial" in preference to the term "non-spatial." The self is trans-spatial reality, i.e. reality which is free from spatial limitations, that reality in which spatial reality becomes significant and for which it exists.
- § 144. Conclusions. Perceptual space is the space of particular perceptions. It is essentially the perceived position-relations of objects, with the resultant aspect of extensity. As a category, it is the extensity of a perception, abstracted from the objects perceived; this is the same with abstracting the position-relations from the perceived whole. Conceptual space is mere extensity, extensity abstracted from objects. Perceptual space is fundamentally a relation; conceptual space is treated as

an entity. Perceptual space is an aspect of a perception, and is a concrete accident; conceptual space is this aspect conceptualized and then regarded as a substance, not an accident. In perceptual space, direction is determined from the position of the subject; in conceptual space, it is determined with respect to a conceived point. Although the space of mathematics is conceptual space, the discussions of that science are related to perceptual space. This is done by setting ideal objects - the point, the line, the surface, and the solid — within its conceived extensity and in actual position-relation to each other; and its discussions are arguments concerning the positionrelations of these objects. Since its conclusions are valid for spatial relations in general, they are valid for the external world viewed spatially. The extensity of perceptual space is limited by the position-relations of the perceived objects; conceptual space is limitless, i.e. there is no limit to the possible position-relations, the size, or the number of objects. Matter is real; it is reality expressed in extension; it is the form in which objective reality expresses itself to the subject as sentient. Mind is unextended and trans-spatial reality; it and matter are complementary, not antithetical. Subject reality i.e. the self — is trans-spatial reality; it is free from spatial limitations, and spatial reality exists for it and only comes to completion and significance as it is appropriated by a self. Space is grounded in the interrelated externalizing activity of object reality and the individualizing activity of subject reality.

CHAPTER XXXII

TIME

In considering this category, it is necessary to distinguish between the time-element of sense-perception and conceptual time. They are closely related, but they differ in their conception of time; and the ignoring of this difference had led to confusion.

§ 145. Characteristics of Perceptual Time. — 1. Experience is a continuous process (§ 59, 3); being a continuous process, it is in constant change. Our interest, however, leads us to individualize portions of our experience. In the experience of this morning, I distinguish a stage in which I was reading and this present stage in which I am writing. The important fact for our present study is, not that I apprehend these stages as differing from each other in general content, but that I apprehend one of them as coming after the other. These stages are cognized by me as related in respect of sequence. This is true of all our experience of the external world; the individual stages are cognized as terms in a succession. We experience this relation of sequence in and with our apprehension of the stages. Thus, in taking up the fact of my reading and of my writing into one thought, I therewith have experience of the sequence of the writing upon the reading. This cognition of the sequence is not through reflection; in knowing these stages, I know them as in sequence-relation. The time-element of my present experience is my perception of one of these stages as sequent to the other. The objective time-element is the relation of succession. Perceptual space-experience arises in the perception of position-relation; perceptual time-experience arises in the apprehension of sequence-relations.

2. Because of the spatial element of experience, language — which is a product of experience — has such words as "here" and "there"; because of the temporal element, we have the words "now" and "then." "Then" may signify that the stage of experience to which it is applied is one through which we have passed, or a stage thought of, but not yet realized. There are experiences which may be expressed thus: "I spoke of it then"; or "I will be there to-morrow and will speak of it then." "Then" is either before or after "now"; and, in perceptual time, "now" - or the present - is the term of the succession to which all stages of experience are related. "Now" in time corresponds to "here" in space. This present, this "now," is often regarded as an instant which ceases in its becoming, which dies as it is born; it is thought by most persons to be a mere timepoint. James has trenchantly said, "The present is not a knife-edge, it is a saddle-back"; and it would be difficult, if not impossible, to find a psychologist who questions this statement. The perceptual present is an enduring present. It is not a mere time-point, separating past sequence from future sequence; it is a time-line. In the briefest time-consciousness, there is awareness of two or more sequent phases of experience, distinguished from each other. We do not have these phases of experience first and then come to know them as sequent by reflection; they are together in experience as successive. Time-experience arises in our perception of sequence, of "that" as coming before "this," or of "this" and "this" again and "this" again, and so on. The perceptual present is frequently spoken of as "the specious present"; but

this term is unfortunate, for it implies that the enduring present of perception is not a real present. It is the real present of experience. We conclude, then, that the perceptual present has duration. Perceptual time is a perceived sequence-relation and the resultant aspect of duration. The perceptual time-unit is Many in One; in respect of duration, it is one; in respect of succession, it is many.

3. From the above, it appears that awareness of sequence is fundamental to time-experience, and that the awareness of sequence gives an aspect of duration to the whole which is cognized. "A year ago to-day, I was in the rush and din of New York; now I am tenting beside a quiet lake which is hidden in the Maine woods." Here is a cognized whole of experience; and, in this whole, two stages of experience are distinguished. In the one stage, the subject is having experience of New York city; in the other, he has experience of the quiet Maine woods. In thinking about these stages, the subject relates them in respect of sequence; and he fixes the order of sequence by relating the New York stage to his present. In thus relating them he apprehends them as widely separated; and, in his cognizing them as apart from each other, the whole has an aspect of duration. He assigns a measure to this duration; he speaks of it as a year. Perceptual time is the sequencerelation of distinguished stages of experience and the aspect of duration which arises in the perception of this relation. The sequence is determined with reference to the present of the subject. If we abstract sequence and the duration from the cognized stages, we have perceptual time as a category. It is the form in which we cognize stages of experience, the form, therefore, in which we cognize change.

§ 146. Conceptual Time. — Conceptual time bears a

relation to perceptual time analogous to the relation of conceptual space to perceptual space.

- I. In conceptual time, the aspect of duration is abstracted from actual experience and is conceived as existing by itself; briefly, conceptual time is abstract duration. An aspect is a characteristic of an objective whole, as that whole is perceived by the subject. The extensity of a surface or the length of an address is an aspect of the surface or the address, as experienced by one who sees the surface or hears the address. An aspect exists only in a particular cognition; but conceptual time regards abstract duration as an individual real. It is conceived as an extended whole in which events and our experience of events and persons and things come to be. This abstract is the time of the Plain Man and the Scientist. It is not, however, treated as an abstract, or a concept; on the contrary, a sort of thinghood is accorded it. Teachers of Philosophy not infrequently speak of events and experiences as being in time. This is allowable if we are speaking of abstract, or conceptual, time; but from the point of view of real time, the time of perceptual experience, experience is not in time, for time has its origin and being in experience. If we would keep in touch with concrete reality, and would speak with exactness, we may not say that objects are cognized in time; for time is in cognition. Hence when we speak of experience as being in time, our statement is only true of conceptual time, time conceived as a condition of change.
- 2. That the present of perception is an enduring present, is undisputed. The present of conceptual time is a mere time-point; it has no duration; quantitatively it is zero. It is the point of transition between duration which precedes and that which follows.
 - 3. The conceptual notion of time has value for Science

and for practical life. It enables us to relate events to any moment of the past or future. Perceptual time can only relate them to the present of the subject, to our personal "now." For example, in our calendar, events are related to the birth of Christ — so long before or after that moment of human experience. That is, conceptual time expresses time-relations in universal terms, terms which have like temporal significance to all subjects. Although time is generally thought of as mere duration, we give it concreteness in scientific thought and every-day intercourse; and we must if it shall have value. We give it this concreteness by relating actual events in respect of sequence. "Columbus discovered America A.D. 1492"; "The Jamestown colonists came to the Western world thirteen years before the Plymouth Pilgrims." These examples go to show that the time of actual experience is an apprehended sequence-relation and an attendant aspect of duration; it is not mere duration.

§ 147. Is Time infinitely Divisible and Extended?— It is frequently said that time is infinitely divisible and infinite in duration. This statement is open to criticism.

I. Perceptual time — and that is real time — is obviously not infinitely extended; for we cannot have perceptual experience of infinite duration. Neither is it infinitely divisible. Perceptual time arises in awareness of succession; this awareness is an element of perceptual experience. This is seen in the fact that the "now" of perceptual experience has duration. In the experience of any moment, there is awareness of two or more sequent phases of experience. If the moment be that of hearing a quick tap, in that instant we are aware of the relative silence before the tap and after the tap. The "present" experience is an experience of Many in One (§ 145, 2). Experimental psychology furnishes facts which are im-

portant in this connection. If there are more than twenty changes to the second, vision cannot distinguish the individual changes. More than forty changes to the second are not distinguishable by touch; and more than 100 taps to the second are heard as one tap. Although persons differ in their ability to distinguish rapidly repeated sensations, there is for every one a limit; repeated changes of briefer duration than this minimum are continuous for perception. In such case, we cannot perceive a sequence-relation.

- 2. Conceptual time is infinitely divisible and infinite in duration. Since it is mere duration, it is conceived apart from perceived sequence-relation and, therefore, is not subject to the limitations of sense-experience. These characteristics of conceptual time signify that thought cannot set a limit to the beginning or the end of change, or to the number or duration of changes in the cosmos.
- § 148. Time and Reality. The time-element of experience has its origin in our perception of changes in objective reality. Our personal interest leads us to individualize stages of change in objects; and we thus distinguish parts of the change from one another. Objective reality is, in consequence, expressed in sequent revelations of itself. These distinguishable sequences in objective changes are the objective ground of time-experience. The same interest which leads us to individualize stages of objective change leads us also to individualize corresponding phases of experience. By reason of the individualizing activity of the mind, objective change is perceived in sequent stages, and our experience has for us corresponding sequent stages. It is of the nature of mind to relate its objects; it does this in order that it may discover their import (§§ 104, 105). In relating the stages of change, both subjective and objective, there arises the

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aspect of duration. From this it follows that the subjective ground of time is the activity of the mind in relating changes in respect of their sequence. Time is an expression of subject reality as revealed in its experience of objective reality.

§ 140. The Non-temporal or Trans-temporal. - 1. The Objective Ground of Time is Change. - Physical laws are unchangeable. Given certain events, we have a telephone system; given a certain relating of yourself, another person, and the system, you hold a conversation with the other person even though he be some miles distant. The physical laws involved in these changes do not change. One may change the distance between two material objects; but that will not affect the law of attraction as related to those objects. The fundamental order of change in the physical universe is unchangeable. The relations between persons are subject to change; but the ethical principle which determines the duty of each of us with respect to others abides the same always. The same may be said of the law of identity in logic and principle of harmony in æsthetics; they and physical and ethical laws are unchanging orders. These unchangeable laws and principles give order to the universe; but for them it would be a chaos instead of a cosmos. The nature of reality is necessarily unchangeable; and its nature just as necessarily determines its laws of change; as a consequence, orderly change has its ground in the unchanging nature of reality. In other words, what is not temporal is the ground of time-experience.

These unchanging principles have been commonly spoken of as non-temporal or timeless; but these terms are not satisfactory. They are negative. They put the so-called non-temporal and the temporal out of relation to each other, whereas we have found that they are in-

timately related. They set these unchanging principles in fundamental antithesis to the world of change; but these principles and the changes which they order are expressions of the nature of reality, and reality is surely not divided against itself. We prefer the term trans-temporal; the trans-temporal determines the order of the temporal.

2. Is a Trans-temporal Subject Conceivable? - Our "present" is limited. Much of our experience is "past" and has to be recalled if we would realize it now; there are sequences in this instant which we cannot distinguish; and there is an undefined future of experience before each of us, and this future cannot come into our present consciousness. Our "present" experience is incomplete; it is rendered incomplete by our limitations. We cannot call up all of the past at any instant; we cannot distinguish very rapid sequences, and we cannot realize the future. This incompleteness of experience makes it impossible for us to understand the full significance of "present" experience. Every stage of the rational life of each of us is an organic part of the whole of experience; no stage can be fully understood except it be read in the light of the whole life. The student experience has explanation for the years after college; and future experience was for the student an ideal which largely determined the experience of the student years. There is that in the future experience of the child which reveals the significance of the present experience of the parents. The experience of the citizen finds explanation in the history of the state, in incidents of this history which are unknown to the citizen.

Now, it would be of the nature of an Absolute subject, a subject who is himself the source of all being and activity, to have a complete experience; for all that exists would have its being from him. The incompleteness of our exTIME 309

perience is not due to the fact that it is constituted of sequent moments. It comes of our limitations. The Absolute subject would conceivably cognize all the successive changes of the world as we cognize our "present"; that is, he would have all sequences in a "present" consciousness. This would not preclude their appearing in succession; for succession is in our "now," so all succession would be in the enduring "now" of the Absolute subject. The full significance of the experience of all of us would be revealed in the experience of this subject; for his experience, being complete, would include all that is. We believe that the ground reality of the universe is the Absolute subject. Being Absolute subject, he is trans-temporal; and all that is temporal finds its ultimate explanation in him.

§ 150. Conclusions. — Perceptual time is the time of particular perceptions. It is the perceived sequencerelation of individualized stages of change and the attendant aspect of duration. Perceptual time, as a form of cognition, -i.e. as a category, -is the sequencerelation and the duration, abstracted from the distinguished stages of change. Conceptual time is mere duration. Perceptual time is fundamentally a relation and does not exist apart from distinguished moments of perception; conceptual time is regarded as having existence by itself. Perceptual time is also an aspect of a perceived whole, an aspect having its being in a perceived sequence-relation. Conceptual time is this aspect conceptualized and then thought of as a substance, not an accident. In perceptual time, sequent stages of change are related to the "present" of the subject. This "present" is not a time-point, it is a time-line; it has duration. In conceptual time, events may be related in respect of sequence to any moment of individual or universal history.

The "present" of conceptual time is a time-point. Although time is commonly regarded as mere duration, in applying this conception to actual experience it ceases to be abstract and becomes a concrete aspect of related sequent stages of experience. Perceptual time is not infinite; we cannot perceive infinite duration. It is not infinitely divisible; sequences may follow each other so rapidly that we cannot distinguish them. The infinite divisibility and duration of conceptual time signify that thought cannot set a point for the beginning or cessation of change, neither can it limit the number of possible changes or the duration of the universe. Objectively, time is grounded in the fact that reality, both subjective and objective, expresses itself in change; and particulars of change are necessarily successive. Subjectively, it is grounded in the individualizing and relating activity of the mind. Changes are orderly; and they are orderly because the principles which determine, and therefore condition, changes are themselves not subject to change. They are trans-temporal. These trans-temporal principles are an expression of the essential nature of reality; and this signifies that the activity of reality is by necessity orderly. Reality is in its essential nature trans-temporal and, therefore, unchangeable; but it is also active and expresses itself in change, in what gives time-experience. We have experience of what is trans-temporal; but our experience is temporal and incomplete. Its incompleteness and temporality do not come of the fact that objective reality is expressed in succession; it is due to our limited "present"; and our "present" is limited because we are not self-subsistent, but are in a dependent relation to all that is. An Absolute subject, being self-subsistent, would be trans-temporal; all succession would be comprehended in his "present"; his experience would be complete.

CHAPTER XXXIII

ACTIVITY, REST, AND MOTION

- § 151. Activity. 1. We know ourselves as thinking, purposing, speaking, and doing. Your least knowledge of yourself is not that you are, but that you are and are active. The being and being active are inseparable elements of this least knowledge. We may separate them in thought, by giving emphasis now to the being and again to the being active; but both are always present in our knowledge of self. In other words, one never merely knows that he is; he knows himself as active. Thinking and purposing activity is obviously internal to the self; it is immanent activity. Our speaking and working activity results in change which is external to the self; but the activity is within and of the self. This notion of activity is not a product of reflection; it is present in a subject's cognition of himself. That is, subject reality is known after the form, or under the category, of activity.
- 2. "I wave my hand" and "I lift the book" express typical experiences in which I know myself as active. The notable fact for us is that, in these experiences, I refer the activity primarily to myself. The activity which results in the movement of the hand and the lifting of the book is thought of as within the subject. The spatial changes—the waving of the hand and the moving of the book—are thought of as the token and result of the subject's immanent activity. The changes which are apparent are the tokens of changes which are internal. This is true of the movements of animals and the changes which take

place in the growth of animals and plants. The shying of the horse, the flying of the bird, the barking of the dog, the leafing of the trees in spring are outer tokens and results of immanent activity and change. The astounding transformations which are effected in the chemist's laboratory are tokens and results of internal changes in the substances with which he deals. This holds also for the integrating and disintegrating changes in nature. All change comes of activity, and all activity is fundamentally immanent.

§ 152. Transeunt Activity. — So far we have represented activity as essentially immanent, as immediately related to internal changes in reality. There are experiences, however, which seem to indicate that activity passes beyond the particular real. For example, a boy throws a ball. The "common-sense" interpretation of such an event is that something passes from the boy to the ball and imparts motion to the latter. Because the activity of the boy apparently goes beyond him to the ball, his activity in this instance is said to be transitive, or transeunt - occasionally transient. The usual explanation is that energy - or active power - is transmitted to the ball. But activity does not exist by itself; and it cannot, for activity is an attribute, not a thing. The same is true of energy. It is simply impossible that an attribute pass over, or be transmitted, from one object to another. Hence this interpretation must be rejected. Nevertheless it is obvious that the activity of the boy is intimately related to the change which takes place in the ball. There was energy in the boy and the ball before the boy threw The difference is that when the boy and the ball are related as they are in the act of throwing, the energy of the ball is expressed in the motion of the ball. A new relation is set up by the change in the activity of the boy in throwing, and there follows such an adjustment of the ball to the new relation as is necessary to preserve the harmony of the system of which the boy and the ball are parts. The adjusting immanent activity of the ball is expressed, at least in part, in the movement of the ball. When a change is effected in the relation of objects, there is an adjusting change in the activity of the objects; and this change frequently becomes apparent. Transeunt activity is not activity in which energy passes over from one object to another. When we say that an object is transeuntly active, we mean that its activity is perceptibly related to changes in another object.

§ 153. Rest. — We think of an object as at rest when, so far as we know, it is not changing its spatial relations. Such an object is commonly thought to be inactive; but this conception confounds activity and movement. Movement is not activity; it is one result, but not the only result, of activity. All reality is active; hence the mere fact that an object is not changing its position-relations does not warrant us in speaking of it, or thinking of it, as inactive. Perceptible change in an object is an indication of internal change. Sometimes immanent activity expresses itself in changes which are unaccompanied by perceptible spatial change — as in the ripening of fruit, or in the case of cool water becoming warm by standing in a heated room. We judge an object to be at rest when its activity is not expressed in known spatial change.

The important question for us is, What determines that an object shall be at rest? What determines that the mellowing apple on my desk shall be at rest, and that the hand with which I am writing shall be moving? We have seen that movement is a token of internal change, and that sometimes it accompanies change and at other times it does not. It follows, then, that the internal changes

of an object determine whether it shall appear to be at rest or not at rest. Every object is a part of the world system and is, at the same time, subject to change. It is evident that the preservation of the system requires a constant process of readjustment in the changing parts of the system (§§ 110, 114). This readjustment is effected by the immanent activity of objects. In some instances this systematizing activity is apparent in movement, and sometimes it takes place without apparent change of spatial relations. Whether an object shall be at rest is determined by the systematizing activity of the reality of which the object is an expression.

- § 154. Motion. We have experience of objects in the process of changing their position-relations. So much of experience takes this form that most, if not all, of us accept the reality of motion without question. But the Eleatics doubted its reality; and there have been teachers since who have held that motion is irrational. We will consider the principal objections which have been urged against holding that motion is real.
- I. Zeno argued that a body, in moving from one point to another, must pass through an infinite number of spaces; but it would require infinite time to pass through an infinite number of positions, hence motion is impossible. Others have conceived the line passed over to be divided in half; then the half farthest from the starting point is divided in half; then the farther quarter is thus divided; and so on. This converts the line into a series which has no last term; and it is argued that, as there is no definable last point in the line, the end of the line can never be reached. Again, a like division of the first half is conceived, and of the first quarter, and the first eighth, and so on. From this it is argued that there is no definable first point after the point of beginning; hence motion

cannot begin. The inference from such objections is that motion is irrational.

But these objections misconceive both space and time. It is assumed that the extensity between two points is an aggregate of an infinite number of infinitesimal spaces; that is, this perceived space is thought of as a totality. These objectors would constitute space of an infinite number of discrete particulars. This is a serious misconception; the line passed over and the time taken to pass over it are both of them continuous. It may be convenient to think them broken up into discrete parts; but, as a matter of fact, they are not the total of discrete particulars. Extensity is a flux, not a series of discrete terms; so also is duration. They increase from within; and thus differ radically from the total of a series, for the series increases from without. The extensity between any two positions is a unit; so also is the duration of an experience and a sequent experience. A unit "is an original one, not a totality." These objections will not stand; they misconceive space and time.

2. Zeno presented another argument which ran thus: A body which is at rest is in one place. "An arrow in its flight is, at each successive moment, in one place; therefore it is at rest." In this we have the same misconception of space and time as that in the objections already discussed; and we might dismiss it with this criticism, but we wish to call attention to another defect in this reasoning. Motion is continuous change of place; it is, therefore, not true that the flying arrow "is at each successive moment in one place." As a matter of fact, the arrow is at each successive moment passing through some place. To be in is apparently consonant with rest; but to be passing through is only consonant with motion. This objection falls, because it is based upon misrepresentation of an essential fact.

- 3. One other objection remains to be noticed. It is this: The fleet-footed Achilles cannot overtake the slow tortoise; because, when Achilles arrives at the place occupied by the tortoise when he set out, the tortoise will have moved forward; and this will necessarily continue to infinity. Here we have the same misconception of space and time that was the basis of the objections first considered. They are transformed from unities into totalities and are treated as though they were aggregations of discrete particulars. All these objections have their origin in failure to recognize the radical difference between a continuous whole and a sum of discrete terms. A continuous whole and a total of distinct terms may be equal in measure; but, when we argue as though the continuous were the same as a total, we are in danger of drawing unwarranted conclusions.
- § 155. Conclusions. It is of the nature of reality to be active. Perceptible change in an object is an expression of internal change. Some perceptible changes are changes in spatial relations; changes in position-relations are the expression to sense of internal changes and are, in consequence, manifestations of internal changes. Whether an object shall appear to be at rest or in motion is determined by the immanent activity of the object; and the form of its immanent activity is determined by the relation of the object to the system of which it is a part. Transeunt activity is not activity in which an attribute or a state of one object is transmitted to another object. All activity is immanent; and, inasmuch as the activity of an object is sometimes perceptibly related to changes in another object, this experience has led to the conception of transmitted activity; the term transeunt activity arose from this conception. The changes in the object to which the activity appears to pass over are due to the adjusting

immanent activity of this same object. Its relations have been changed, and this change forces a new adjustment of the object to all that is. This adjusting activity frequently expresses itself in perceptible spatial changes; and known objects are perceived to be in motion. Motion is real; it is grounded in the systematizing activity of reality. The reasons assigned for holding that motion is unreal and that our perceptions of motion are illusions are based upon a misconception of space and time. The objections proffered conceive a particular extensity or duration to be a total of discrete particulars, whereas it is a continuous whole.

CHAPTER XXXIV

CAUSALITY

§ 156. Origin of the Idea of Cause. — 1. We have experience of ourselves as acting and of our activity as leading to changes in the external world. The child soon learns that crying will secure attention. How little or how much thought the child gives to this we may not safely undertake to say; but we are assuredly justified in saying that the earliest self-consciousness has in it experience of the self affecting the objective world. Doubtless this element of experience is not consciously distinguished at first; but it is a part of experience, and early in our conscious life we conclude that our doing brings events to pass outside the mere self. We have no doubt but that we open and close the door, that we determine the arrangement of articles in the room. The matter of interest for us here is that we believe we effect changes in the province of the not-self. From this point of view, our life is an extension of the self into the objective world; and in so projecting ourselves into the external world, we conclude that we effect changes there. "I tore down the wall," "I built the house,"—in these and similar statements, we assert that we influence the course of events. We are certain that we do not merely act, but that our activity is a factor in bringing changes to pass in objective reality.

2. We also have experience of being limited in our doing by what is not self. We find that the nature of objects, their way of behaving, limits our determination of changes. A potter learns that clays differ and that

his treatment of clay must be adapted to the peculiarities of that which he is handling. If you would bend a glass rod and not break it, you must heat it. We often find ourselves restrained when we endeavor to shape the course of events; and sometimes we are coerced — as when the struggling boatman is swept over the falls. Our doing is conditioned by physical laws and by other selves. The inventor of the telephone determined the ideal coördination of objects for this form of distance-speaking; the maker of the instrument and the person who installs the system determine the actual coordination; and those who use the instrument determine the messages. But the inventor, the maker of the instrument, and the man who installs the system are conditioned by physical laws; their activities must be adapted to these laws. activity of one who would use the instrument is conditioned by those who serve in the central exchange, not to speak of others. Our doing is conditioned by those with whom we are related in our endeavor to carry out our purposes.

3. The uncritical interpretation of these experiences — experiences in which we determine changes and are conditioned in our activity — involves the notion of causality. This naïve interpretation may be erroneous; but whether correct or incorrect it is an element of experience and is, therefore, subject-matter for our study. We apparently interfere in the movements of the objective world; and we seem to make changes to suit our purposes. We move things from where they were to where we would have them be; and, in lifting them about, we overcome their persistent pull toward the earth. Our practical life is made up of such apparent interferences in nature and resistance of its tendencies. In all this, we think of ourselves as acting upon the objects with which we deal and causing changes in them; and we also think of the objects

as acting upon us and causing changes in our feelings. When you lift the window, you think of yourself as causing the change in its position; when it falls upon your hand, you think of the window as causing your discomfort. Men naturally and inevitably apply this interpretation to changes in the external world of which they are percipients, but to which they are not more directly related. We see a stone fall upon a toy, and the toy is broken. We project our experience, as we interpret it, into the objective world and apply it in explanation of what has taken place; and we think of the stone as acting upon the toy and causing the change in it.

4. A certain characteristic of intelligence insures the development of the notion of causality: this characteristic is the mind's insistent demand for a sufficient reason why an occurrence takes place. It is a principle of rationality that nothing occurs but that "there is a sufficient reason why it should occur rather than not." The mind begins in the early stages of its development to ask for a sufficient reason for occurrences. The child asks, "Why does it thunder?" or "What makes thorns grow on rose-bushes?" and innumerable other questions quite as puzzling. are inquiries for cause. The myths of primitive peoples are the outcome of endeavor to set forth a reason for the common and the unusual occurrences in nature; this endeavor has resulted in these fanciful answers to questions of cause respecting the origin of the world and man, and the varied natural phenomena. We are constantly framing causal judgments; and these judgments are for us satisfactory answers to the rational demand for a sufficient reason why events should take place. The activity of scientists in their search for natural laws and their formulation of these laws is an endeavor to respond to this insistent request of intelligence. The law of causation is,

as Bosanquet has said, a "subform" of the law of Sufficient Reason.

- § 157. Conceptions of Cause.— I. Causality presents one of the most complex of philosophical problems. Much of the difficulty which attends its consideration arises from the ambiguity which attaches to the term "cause." All of us connect events causally in our thought. We insist that the stroke of the broom-handle knocked the vase off the mantel; and, when we do not know the cause of a phenomenon,— as the Northern Lights,— we still believe that it is caused. But what do we mean by "cause"? In the course of thought upon this subject differing conceptions of cause have developed.
- (1) The boy says he is crying because his foot hurts, and that his foot hurts because a stone fell on it. He is connecting changes causally; he says that the falling of the stone has injured his foot, and that the change in the foot is causing him pain. The cause is, for him, the antecedent occurrence; the falling of the stone is the antecedent event of which the injured foot and the pain are consequents. The electric button was pressed, and the dynamite which the miners had placed in the rocks exploded. The pressing of the button was the antedecent occurrence, or cause; the torn rocks are the consequent event, or effect. The scientist would describe what took place in greater detail; but his description would agree in principle with this. For him the cause is an antecedent event, and the effect is an event consequent upon the antecedent. This conception of cause is variously named. It is known as the scientific, mechanical, physical, empirical, or phenomenal conception of cause; or more briefly as scientific, empirical, or phenomenal cause.
- (2) But it is evident that the empirical cause of an event is not a final explanation of why it occurs. Why did the

stone fall? How did the stone come to be? These questions obviously lead us back toward the source of all that is not self-existent. In seeking a sufficient reason why anything is or why an event occurs, we are seeking the ground of all being and change. To distinguish this conception of cause from that described above, it has been called the metaphysical cause, the ultimate cause, the ultimate ground, or simply the Ground. In keeping with this last term, Theists are wont to speak of God as the Ground of Being and Activity. They hold that the complete explanation of being and occurrences is to be found in God.

(3) There is another view of cause, which we shall call the naïve metaphysical doctrine of cause. It will be more particularly described later in this chapter.

2. We have not given a full definition of these conceptions in what is said above; we have merely indicated their distinguishing marks. Although these conceptions differ, there is that which they have in common — viz., that an event occurs because of somewhat else than the event itself. This notion is the category of cause; it is present in our thought of things as coming to be and in our thought of events.

§ 158. Phenomenal Cause. — 1. You see a portion of a limb fall from a tree upon a telephone wire, and the wire is broken. As you perceive this occurrence, you have experience of a falling limb and of the wire being broken. In your perception of this event, you regard the falling limb as the cause, and the broken wire as the effect. You might speak of the limb as the cause; but a more critical consideration shows that what you take to be the cause is not the limb, but the limb's falling. That is, the immediate cause is an event, not a thing or a person. My pen is not itself the cause of this writing; it is the event

of my using the pen. The immediate effect is a change in the appearance of this sheet; that is also an event. In both these instances, we perceive two intimately related occurrences. In our thought of these occurrences, that which is first in time is regarded as a cause, and the second as effect. In other words, we relate them causally. The fact that the effect is perceived as consequent upon the cause has led to our calling the first of two causally related occurrences, the antecedent; and the second, the consequent. In phenomenal cause, antecedent and consequent are equivalent respectively to cause and effect. Those who hold this conception of cause often apply the term cause to a person or thing; e.g. the limb and the pen would be spoken of as cause, and I would be taken to be the cause of my pen's movements. This is permissible, perhaps; but it is certainly inexact, for the antecedent and consequent are events or changes, not persons or things.

2. From the above, it might seem that we are wont to think that all perceived sequence is causal; that, if one event is perceived to be immediately consequent upon another, they are thought to be causally related. Not so, however. Day follows upon night; yet no one thinks that the occurring of night is the cause of day. The shining of the sun upon any portion of the earth's surface is the antecedent of day; and the intervening of the body of the earth between any portion of its surface and the sun is the antecedent, or cause, of night. Night and day are distinct consequents, or effects; each has its own cause. Given the sun shining upon any part of the earth, it must be day at that part; given the earth intervening between any place and the sun, it must be night at that place. From this we conclude that the cause of any event is that antecedent event which is necessary to the occurrence of the consequent. To put it otherwise: of two causally related events, that much of the antecedent event is cause or part of the cause, whose non-recurrence would mean the non-recurrence of the consequent event. Mill speaks of the cause as "the unconditional invariable antecedent"; and Bain explains this as meaning that the cause is "the sole sufficing circumstance whose presence makes the effect, and whose absence arrests it."

- 3. What we have said thus far would seem to indicate that, for the Phenomenal conception of cause, a cause is a simple event. In actual experience this is seldom, if ever, the case. Take, for example, the instance of a boy throwing a ball through a window and breaking a pane of glass. To duplicate this occurrence, so much at least as the following would be required: the boy must be in exactly the same position-relation to the glass, he must give the stone exactly the same initial momentum, and the stone must hit the glass with the same portion of its irregular surface. All these particulars are elements of the antecedent and enter into the determination of the consequent. It is evident that the cause is not the simple fact of a stone's hitting a pane of glass; it is a complex of antecedents or, as one has put it, "a concurrence of antecedents"
- 4. Phenomenal, or empirical, cause does not know of any objective causal bond uniting events which are thought to be causally related. It deals only with what is perceived, and we do not perceive any causal bond. You see apples falling from a tree which a man is shaking. What you perceive is a man shaking the tree and the apples falling. But in perceiving these two occurrences, you judge that the apples fall because of what the man is doing. You perceive the events; and, in the act of perceiving, you think the causal relation. This is true in

all cognition of relations (§ 104, 3). In space-experience, we perceive material objects; and, in perceiving them, we think their position-relation — before, behind, above, below, etc. Similarly in causal experience, when I see the stone strike the glass and the glass break, I perceive the throwing, the stone flying, and the glass breaking; and I think the thrown stone to be the cause of the glass breaking. We do not perceive a causal bond; we perceive events and we relate them causally, because we think that one of them, the consequent, comes to be because of the other, the antecedent. According to this conception of causality, antecedent and consequent are subjectively, not objectively, united.

5. It is essential to phenomenal cause that the antecedent and the consequent shall be regarded as distinct occurrences, as events which are not objectively connected. They are conceived to be connected in our thought, but not in the external world. This conception of causality is based upon the doctrine that we are not to affirm anything respecting an experience which is not present to sense-perception. The causal event and the caused event are perceived as distinct phenomena; and, according to this doctrine, we are to regard them as separate events, not merely distinguishable occurrences. sense-experience, the pushing of the button and the shining of the electric lamp are independent events. Those who hold this conception of causality insist that these occurrences are really separate occurrences. We think of them as connected; but those who hold the view we are considering declare that the notion that events are objectively linked by a causal bond is simply a developed mental habit. It would be foreign to our present purpose to set forth in detail the arguments by which it is sought to sustain this contention. The important fact for us is, that cause and effect are regarded as wholly external to each other, as distinct and independent.

- § 159. Is Phenomenal Cause Adequate? Is the conception of cause which we have considered in the preceding section adequate? Is it an adequate statement of experience as it is expressed in causal judgments? We do not ask whether it can answer all questions which may be raised in this connection. What we wish to know is whether it is true to thought and to objective reality.
- 1. This conception of causality meets the requirements of practical life. Men put capital and labor into the construction of telephone instruments and the connecting of them in a system. They do this because they believe that by relating the parts of the instrument in a certain way and by connecting the instruments according to certain principles, desired results will be obtained: persons will be able to converse at a distance. Whether there is any causal bond linking the speaking into one instrument with the hearing at another instrument, is not a matter of practical consequence to those who construct the system, or to the man of business who uses it. They probably believe that there is such a bond; but, apart from this, it is sufficient for them that the anticipated consequent follows upon the antecedent. So in all the every-day activities of men. When they discover that a certain effect follows upon a certain known antecedent, they conclude that, given the same complex of antecedents, they will have the same result. The matter of absorbing interest to them is the sequence of the effect, upon the antecedent; what makes it follow is of passing interest to a few - a matter of curiosity, rather than a fact of practical value.

The Scientist is satisfied with this conception of causality. He deals with the orderly succession of changes;

and he seeks an accurate and detailed description of changes in consciousness and the external world. When he concludes that an occurrence is the invariable and necessary antecedent of another occurrence, he regards the antecedent event as the cause of the consequent event. He does not undertake to discover the nature of the causal bond, whether it is objective or subjective; he is content to know that the antecedent is the invariable and necessary prius of the consequent. Cause is for him the orderly connection of phenomena. It is his aim to trace this connection, to discover the essential elements of the connection, and to state the order in a formula which will hold for all events of a defined class. These general statements are our scientific laws - e.g. the law of gravitation in physics and the law of association in psychology. Further than this the scientist does not need to go; hence phenomenal cause is for him an adequate conception of causality.

2. But is it an adequate conception for Philosophy? That is the important question for us; and we think it must be answered in the negative. Take the following example: I push a button and the electric lamp glows. According to phenomenal cause, we have two occurrences, and the causal relation consists simply in this, that the pushing of the button is the invariable and necessary antecedent of the lighting of the lamp. For it, the pushing of the button is a complete fact, and the shining of the lamp is another complete fact. But if we regard the pushing of the button a complete fact, we have no right to speak of it as the cause of anything. In conceiving it to be the cause of another event, that other event is taken to be significant for the pushing of the button; it is essential to a complete statement of what the pushing of the button signifies in the external world. When we say

that it is the cause of the lamp's being lighted, we so connect it with the lighted lamp that it is in our thought incomplete apart from the change in the lamp.

When we think of the antecedent event in the above illustration as the cause of the consequent event, we think of them as causally related; the two events are then known to us as the interdependent terms of a relation. The unit of thought includes both occurrences: the pushing of the button and the lighting of the lamp. If we separate these occurrences and regard them as discrete and severally complete, we have destroyed the relation (§ 104, 1, 2). For thought, cause and effect are necessarily in a whole which includes both. This whole is a thought-unit; and, being such, it is more than the succession of its parts. Mere succession, even though it be invariable and necessary succession, cannot constitute the "oneness" which is an essential characteristic of a relation. nomenal cause is philosophically inadequate, for it is untrue to the nature of a whole; it conceives a whole to be a totality instead of a "one."

3. The preceding discussion makes it evident that phenomenal cause is an inadequate conception of the subjective factor in causal experience. It also fails to give a satisfactory account of the objective factor. Change is continuous; it is not constituted of discrete terms. The pushing of the button and the shining of the lamp "are earlier and later stages in a process which is continuous." Leading physicists and philosophers are agreed as to this. It is a characteristic of continuity that, if any two portions of it lie wholly outside each other, what lies between these mutually exclusive parts is itself part of the continuity. All that comes between the putting forth of my hand and the lighting of the lamp is an unbroken process which goes continuously forward from the reaching forth of my hand

to the lighting of the room. We may not truly say of any stage of it, "Here the antecedent is complete," or "Here the consequent begins"; cause and effect are in every moment of it. We individuate stages of the process; and we do this the more readily because some moments of it are recognized by sense-perception. Our individuating activity gives an aspect of discontinuity to what is really continuous. For much of thought and practical life, no difficulty will arise from our regarding it as discontinuous, from our thinking of the whole as constituted of separate events; but such a conception of the objective reality is inexact and will not satisfy the requirements of Philosophy.

4. Those who hold that phenomenal cause is an adequate conception of causality admit that cause and effect are sometimes simultaneous. The formation of water by the union of hydrogen and oxygen in the proportion of two to one, is an example. Since it is essential to this conception of causality that the antecedent and consequent shall be regarded as independent events, the formation of water and the combining of oxygen and hydrogen in the proportion stated are to be taken as separate occurrences. But this is obviously untrue to the fact. We have one event: from one point of view, it is the combining of hydrogen and oxygen; from another, it is the formation of water. The cause and the effect are not distinct events. If we accept that the union of the hydrogen and the oxygen is the cause, the cause and the effect are simply distinguishable elements of one event. This agrees with what we found above in our discussion of causally related occurrences in which the phenomenal cause and effect are perceived in succession. In that case, cause and effect are distinguishable elements of one occurrence. By so much, then, as the phenomenal conception of causality

regards cause and effect as distinct events, it is philosophically inadequate.

- § 160. The Naïve Metaphysical Conception of Causality. We will approach the study of this view of causality by comparing it with phenomenal cause.
- I. The tendency of this conception of causality is to regard the cause as a person or thing; whereas phenomenal cause finds it in an event. The uncritical view is evidenced in such statements as the following: "He caused the disturbance"; "The wreck was caused by a defective rail." If one should ask, What causes the engine to move? many, if not most, persons would say, "Steam." Thus conceived, a cause is a person or a thing. Sitting down at your desk to write, you find it necessary to clear a space, and you push a dictionary aside. For the phenomenal view of causality, the cause is the moving of your hand; for the naïve view the cause is either your hand or you. Those who hold these differing views do not always preserve this distinction. Mill, one of the clearest exponents of scientific cause, sometimes speaks of an object as a cause; and those who prefer the view discussed in this section would not object to the statement, "The bursting of the gun caused his death." Despite their apparent agreement, these views of causality differ at this point; and the difference is fundamental. For the phenomenal conception of causality, the cause is essentially an event; for the naïve conception, the cause is a person or thing in process of change.
- 2. These views differ also as to the objective reality of the causal bond. According to phenomenal cause, the cause in any instance is merely a relation between ideas, not an objective linking of objects and events; objectively, it is simply the invariable temporal conjunction of a certain necessary antecedent and its consequent. But

the uncritical believe that, in seeking the cause of an occurrence, they are seeking something more than a fixed order of events. When they find what they believe to be the cause, they are certain that they have discovered what has actual objective connection with the affected object; they are certain that they have found what produces the effect. This conception of cause is so fixed in the thought of men that thinkers who insist that phenomenal cause is an adequate conception write in terms of the uncritical view. Hume says in one place, "The observation of this resemblance produces a new impression upon the mind." The term "produces" implies more than that "the impression" is invariably consequent upon "the observation." Bain, also a phenomenalist, speaks of the causal antecedent as that circumstance "whose presence makes the effect." The important fact for us is that the naïve metaphysical view accords with that conception of cause which seems to be established in the thought of men, viz. the notion that the cause makes the effect. We do not say that this notion is philosophically acceptable; we are merely reporting a fact.

3. Another characteristic of this view remains to be stated. A billiard ball is struck by a cue and set in motion; it impinges upon another ball, and the second ball moves. According to the naïve view, the motion or the momentum or an undefined somewhat which was in the first ball is communicated to the second ball. To state it in general terms: something which is in the causal object passes over to the affected object and produces the change in the latter. The transition of the force or motion or of some quality of the thrown stone is thought to constitute the stone a cause and to produce the change in the glass which was broken. The important fact for us is that this view tries to find an actual objective ground for the objective

change. It finds this ground in the transition of some quality of the causal object to the object which is affected.

- § 161. Is the Naïve Metaphysical View of Causality Adequate? Does it meet the requirements of critical thought? We think not.
- I. It is Incomplete for Single Events. This view conceives one object - the cause - as active and another object as acted upon. These objects are thought to be causally related in only one direction, from the cause to the object in which the perceived effect takes place. This is an incomplete representation of what occurs. When a billiard ball in motion strikes another ball, change occurs in the striking ball as well as in that which is struck; as a result of the contact, the momentum of the striking ball is lessened and its direction is frequently altered. If it be true that the rain has some effect upon the earth, it is quite as true that the earth has some effect upon the water which falls. The sunlight warms the stone; and the physicist insists that this process effects a change in the energy of the sunlight. If the billiard ball and the rain and the sunlight are active, so also are the second ball, the earth and the stone. This agrees with what we found in our study of the phenomenal conception of causality: cause and effect are both of them elements of every moment of an occurrence; they are inseparable. The causal relation is reciprocal; of two objects thus related, both are causes, and effects take place in both.
- 2. The Naïve View errs in its Conception of the Causal Bond. It conceives the bond between cause and effect to be the transition of some attribute, quality, or state of the causal object to the object in which the effect takes place. What was said in our discussion of motion (§ 152) is pertinent to the matter in hand. It is impossible that an attribute, quality, or state of one object shall be trans-

mitted to another. The accidents of an object are an expression of its reality; they are that object's own, and they exist in it and only in it; they are not transmissible. The objective causal bond of the naïve view has no existence. The objects in connection with which any event takes place are parts of the one world-system. If any part of a system be essentially changed, such change will necessitate a related adjusting change in other parts. If the size of a wheel of a watch or the number of teeth in it were altered, it would be necessary to effect adjusting alterations in other parts of the train; otherwise our collection of wheels and springs would cease to be a time-keeping system. Causally related changes in the universe are adjusting changes in the world-system. In any instance selected by us, what we regard as the effect is an element of the change to which we give emphasized attention. The effect is not due to transmitted motion, force, or quality, but to the adjusting immanent activity of the object in which the effect is exhibited.

- § 162. The Complete Ground. We have concluded that the phenomenal and naïve conceptions of causality are inadequate. We now take up the third conception, *i.e.* the conception of cause as the complete Ground of all that is.
- 1. There is a particular, not yet considered by us, in which both the phenomenal and naïve conceptions are philosophically inadequate; and our study will be furthered if we shall now attend to this particular. If an event takes place because of a previous event, it is obvious that this previous event owes its having occurred to some event which is its antecedent. From this it follows that our search for a sufficient reason for any occurrence takes us endlessly backward; for, go so far back as we may, we must ask respecting the last causal event, "What is the

reason for its occurrence?" To put it briefly, our search leads us back through endless regression. This is true also of persons or things regarded as causes. The beginning of an object is an event; and, in seeking a sufficient reason for this event, the naïve conception can do no better than name another object whose beginning was also an event. This commits us to an endless regression. The root of the difficulty is in the conception of cause common to both these views. They seek the explanation of everything in something else than the thing itself. This sets us upon a regression which this method cannot arrest. The regression could only be arrested if we could arrive at that which is itself the explanation of all that is; but we cannot do that, for the cause is in each instance a particular of the universe and cannot possibly be inclusive of the whole.

Instead of seeking the ground of particular events or objects, — a ground which is incomplete, for it is not self-explanatory, — we do better to begin with the Ground of the universe. The Ground-Reality of the universe is necessarily self-subsistent; and, being self-subsistent, it is self-explanatory. Our experience has taught us that this Reality's expression of itself is coherent and orderly—i.e. self-consistent and systematic. Such a Ground would have in it the full explanation of the universe. The Ground-Reality of the cosmos, the Ground of all Being and Change, is the only adequate answer to the demand of intelligence for a sufficient reason for all that is. This Ground is not a particular temporal reality; it is necessarily the Absolute Trans-temporal Reality.

2. What are the attributes of the Ground? (1) It must be Being which, in being, is active. It cannot be an event; for there cannot be an event apart from Being. Hence it must be concrete Being. Activity is of the nature

of reality, or concrete Being; given concrete reality, it acts (§ 81, 2). In other words, it is self-subsistently dynamic. The sufficient reason for the being and activity of the Ground-Reality is the Ground itself. Since the source of the activity of the Ground is in the Ground, it must be self-determined; and change has its origin in the self-determination of the Ground. The law of causation objectively regarded is the orderly and efficient adjustment of the particulars of the universe to changes. This adjustment — i.e. the law of causation — is an expression of the activity, hence also of the nature, of the Ultimate Reality.

(2) It must be Individual. In our discussion of Individuality, we concluded (§ 118, 1) that whatever has distinct being, is individual; that is most markedly individual which is least determined by "the other." The stone appears to be determined wholly from outside itself; in the plant, there is something of inner directivity; in the animal, still more. The animal has a greater degree of individuality than the plant; and the plant is more individual than the stone. Man is self-determined, even though his activity is conditioned by the nature of that with which he deals; and we accord to man more individuality than to animal, plant, or stone. The more evident any man's self-directivity, the greater his relative independence of his age, or of his family and racial inheritance, the more pronounced is his individuality. The individual which is not dependent upon anything apart from itself for its activity or its being, is the perfect individual. The Complete Reality, the Ground of all Being and Activity, being self-subsistent and self-determined, is the Absolute Individual.

§ 163. Conclusions. — 1. The idea of cause is grounded subjectively in our belief (1) that we effect changes in

the external world, (2) that our activity and our feelings are conditioned by the external world; and (3) in the demand of intelligence for a sufficient reason why any event occurs rather than not. It is grounded objectively in the adjusting activity of objects. If an essential change takes place in any object, adjustment of other objects becomes necessary; only thus can the system in which these objects have their reality be preserved.

2. The phenomenal conception of cause relates events to events. It defines cause as the invariable necessary antecedent of the effect, or consequent. This view does not recognize any objective causal bond connecting antecedent and consequent. Causality is purely subjective; its only ground is the developed habit of accounting that such an antecedent produces the effect. The antecedent and consequent are regarded as distinct occurrences. This conception answers the requirements of Science and of our workday relations with the objective world; but we deem it philosophically inadequate, because

(1) It is untrue to the subject-aspect of the causal relation. Viewed thus, cause and effect are in a whole;

that is, they are two in one. But phenomenal cause regards the whole as the aggregation of the two; and, in thinking thus, it makes the unit of thought a "totality" instead

of a unit.

(2) It is untrue to the objective reality. It thinks of cause and effect as external to each other, as distinct events; whereas they are inseparable elements of one occurrence. The occurrence is a process, and cause and effect are in every moment of the process.

3. The naïve view of causality relates a causal object to another object, one in which the causal object effects a change. It holds that the change is produced by the transition of some accident of the causal object to the affected object. This conception recognizes an objective linking of the cause to the affected object. This view is not satisfactory, because

- (1) It fails to recognize that the causal relation is reciprocal; that when two objects are causally related, both are causes, and effects take place in both.
- (2) Its assumed causal bond does not exist; an accident cannot pass from one object to another. The change which occurs in the affected object is the effect of the immanent activity of this same object, adjusting itself to the change which has taken place in the causal object. Such related adjustment follows necessarily, for the two objects are parts of one system.
- 4. We decline to accept either of the above views for another reason: they can never lead us to a final reason why an event occurs rather than not. The reason which they may assign for an effect calls for explanation by something other than itself; and so on endlessly. The completely sufficient reason will be self-explanatory and will comprehend within itself the sufficient reason for all that is. This ultimate reason must be the Ground of the whole. This Ground-Reality is self-subsistent, self-determined, active Being. It is the Absolute Individual, the Ground of all Being and Activity.

CHAPTER XXXV

FINALITY

§ 164. Finality in Individual Experience. — You sit at your desk intent upon study. Having reached a resting point, you notice confused sounds which appear to be caused by a crowd on the street. You go to the window and perceive a street-piano playing and a bevy of children laughing and dancing. In going to the window, you directed your activity to an end - the discovery of the cause of the noise. You were also directing your mental activity in the study that preceded your rising from the desk; you were endeavoring to secure a certain desired result. All our thought-activity is purposive. We may be giving such concentrated attention to an object that we are for the time not fully aware of the purpose of our attention; but in such case we are obviously trying to satisfy ourselves respecting the object. The pleasure or displeasure tone of our experience has its origin in the fact that our activity is directed toward an end. The boy who scores a point in a game is pleased because the gaining of the point makes for the attainment of his purpose. This is the source of the pleasure of the mathematician who advances a step in the solution of a difficult problem, and of the pleasure of the inventor whose device gives evidence of working as he desires. An experience of discomfort comes with losing a point in a game or finding ourselves halted by some unforeseen difficulty. Whatever aids in the attainment of a present purpose yields an experience of pleasure; whatever hinders, yields an experience of displeasure. In other words, we have pleasurepain experiences because we are constantly valuing the persons and things with which we have to do and the incidents to which we are consciously related; and we determine their value in view of their helping or hindering the attainment of our purposes. We may not always be aware of the end toward which our activity is directed; we may, indeed, only become aware of it when our endeavor to reach it is thwarted; nevertheless we always think and act and feel with respect to an end. We conclude, then, that subjective reality relates its activity to ends. The category of Finality is the principle of experience illustrated above. This principle may be stated thus: activity is always determined by an end and finds its significance in the end.

§ 165. Finality in Historical Sources. - The interpretation of historical sources requires the recognition of this category. We construct the history of primitive races and of civilizations which have passed away without leaving literary records, from remains which give us a clue to their activities. The sharpened flints and the rude carving on bone of the earliest inhabitants of Britain, the barrows and smooth-stone implements of the Iberians, the mounds built by the race that once occupied portions of this continent, have historical worth; but that historical value comes of the fact that they are products of activity which was directed toward ends. In the study of such remains, we always ask, What purpose did this thing fulfill? Why was it made? We must answer this question if we would know the meaning of the object to the person who wrought it; and we must know the meaning of these remains to those who made them or used them if we would utilize them in the construction of history.

What is true of instances like the above is emphatically

true of historical phenomena of later periods. The ends sought by leaders, as De Montfort in calling the parliament of 1625; by whole peoples, as the barbarian hordes when they invaded the Roman Empire; by portions of a people, as the American colonies in their protests antecedent to their declaring themselves independent — these must be known if we would understand history. But this is conceiving history teleologically, that is, by the application of the principle of finality.

§ 166. Finality in the Development of Science. — In his earliest dealing with nature, man sought to subject objects to manipulation. He wanted to make objects serve him in his struggle to support life, or in the effecting of what we call practical ends. To accomplish this, he was obliged to observe them with some care; and his thought, such as it was, was directed to ends which he might attain by means of the objects. Later, men began to seek intellectual mastery of the modes of nature's operations. From these earlier and later endeavors, the sciences have developed — agriculture, horticulture, botany, geology, chemistry, mechanics, etc. They are products of the mental and manual activity of men, directed to the attainment of ends.

§ 167. Finality in Ethical and Æsthetical Relations. — In critical situations we are wont to ask, "What ought I to do?" In asking this question one recognizes that he may not act merely with a view to securing a certain result, — as the obtaining of a situation or the getting of money, — but that his activity should conform to an ideal standard, the standard of right. When the word "ought" is used in its fuller meaning, it signifies that one is under obligation so to act as to maintain harmony with the moral order. That is, one end of activity should be the realization of the idea of right, the actualization of

the moral ideal in our thinking and doing, and in our attitude toward other persons and the course of events. Ethical terms find their significance in the relating of thought and feeling and doing to ends and to the realization of the moral ideal. Motive, desire, choice, and purpose derive their import from the principle of finality which is implied in them. Works of art — musical compositions, paintings, statues, dramas, finished style in literature — derive their æsthetic character from a desire to give expression to the beautiful. Those who create our works of art seek more or less consciously to give that character to their work. They purpose to embody their conceptions of beauty. Æsthetics, the science of the beautiful, and Ethics, the science of the true, have their ground in this category.

§ 168. Directivity. — We have found that the successive stages of subject activity are teleologically related. Beginning in this section with subject activity, we shall pass to the consideration of changes in objective reality; and we shall study these changes with a view to determining whether objective changes are teleologically related.

I. Self-conscious Individua. — In rising from my desk and going to the window and closing it for the purpose of preventing the rain from beating in, I direct my activity to a selected end. Not a little of the life of each of us is made up of such consciously directed activity. Much of our life, however, is constituted of activities which are not consciously self-directed. We have acquired habitual physical movements — as in walking and writing. These habitual movements have become quasi-automatic, and we are not under the necessity of consciously directing them. There are also instinctive movements — as the shrinking of the bashful boy when forced to enter a room where there are many strangers; likewise reflex and auto-

matic movements — as the sucking movements of an infant's lips when touched, and the life-sustaining activities of respiration and digestion. We call attention to two facts respecting those activities which are not consciously directed by the subject:—

- (1) They are related to ends, even though the subject does not consciously direct them to the end to which they are related. The reflex and automatic movements get their significance from the fact that they serve in the sustaining of life. No description of them is complete unless it passes beyond them to the end which they help to secure. The shrinking of the boy expresses what he would do if he were free to act as he would prefer; he would go almost anywhere else than into that room. The shrinking is related to an end which he is prevented from attaining. In our first efforts to walk and write, we consciously direct our movements to the walking and writing; the acquired physical habit frees us from the necessity of exercising conscious direction of our specific movements; nevertheless the walking and the writing are now directed to the accomplishment of a purpose.
- (2) Our automatic, reflex, instinctive, and habitual movements are directed from within us and by us, although they are not consciously directed. Respiration and digestion are directed by the organism; the organism utilizes them for the conservation of life and upbuilding of the body.
- 2. Other Living Individua; Selective Activity. We find directivity in other living individua; but, in these cases, we have no ground for regarding any of it as directed with conscious choice of the end and of the mode by which the end is attained. Animals select foods. Of two birds in the same garden one may take only fruit and the other only insects. The life activities of one animal will so

direct the selected material as to build up the organism of a quadruped; in another, that of a biped; in yet another, that of a fish. Different plants will utilize different constituents of the soil, and will appropriate the same material in different proportions. Some plants will secrete essential organic compounds - as indigo, mint, opium, etc. In all cases of selective activity, the activity is directed toward an immediate or remote end. Life activities as a whole are directed from within the organism toward upbuilding (or anabolic) ends, and against breaking down (or katabolic) tendencies. Thus, all the activities in a living plant or animal tend to building up and conserving the organism. This is true even of the throwing off of effete material; for the presence of effete material would make against the conservation of the life of the animal or plant. The facts just presented establish the teleological character of organic activities.

- § 169. Non-living Individua. There are processes in non-living individua which tend toward the breaking up of the individuum. Are such processes teleologically related to world changes?
- I. Living individua conserve life and build up the organism (1) by adapting themselves to their environment, and (2) by adapting their environment to themselves. The adaptation to environment and the adaptation of environment are not separate processes; they are two aspects of one life-process. The first process the adaptation of the organism to its environment is recognized by all biologists. A fish cast upon the land cannot long adapt itself to its environment and, because of its want of adaptability, it dies; whereas a frog can adapt itself to both an atmospheric and a water environment. The second aspect the organism's adaptation of the environment to itself has been too often overlooked. Organ-

isms utilize what is in their environment - air, water, elements of the soil, fruits, etc.; and, in doing this, they build up the organism and sustain life. Since organisms and their non-living environment are thus adaptable, it is evident that they are complementary parts of a system, this far at least, that the non-living is the necessary complement of the living. The living have too often been thought to constitute a realm apart from and independent of the non-living. The conditions of life show that this is a misconception. If the living and non-living were wholly external to each other, if there were nothing common to both, the non-living could not have any value for the living; in such case, there would not be anything in it which could be utilized by the living. As a matter of fact, however, organisms not only utilize the non-living, but they are absolutely dependent upon what they can thus utilize. The living and the non-living are complementary parts of a system.

2. The breaking-down processes in the non-living should be studied in their relation to the living. The lower forms of the living furnish needful sustenance to the higher forms; animals find much of the material for their upbuilding and conserving activity in plants; they go to plants for food rather than to inorganic compounds. Plants find their food in the inorganic. From this it appears that the breaking-down process in the living is not an end in itself; the product of this process is prepared for the plant; and in the plant it is prepared for the animal. We conclude that the breaking-down and up-building processes in nature are teleologically related.

3. The world is a systematic whole; every part of the system functions for the whole. In a whole of this character, that which is a more limited expression of reality subserves the higher; its significance comes to expression

in the higher. The significance of oxygen and of hydrogen has a very limited expression in these elements when each is taken by itself. It comes to fuller expression when they unite to form water; and to yet fuller, in the various compounds into which they enter. No one of these compounds — starch, for example — is self-explanatory. The significance of water is much more fully expressed when it is utilized by plants and animals than it is when regarded apart and by itself. So of the enlarging expressions of reality from the non-living up to the living, and from the lower organisms up to man and rationality. Each of the more limited expressions of reality is teleologically related to the higher.

§ 170. Self-determination the Highest Form of Activity. — 1. We have mechanical, chemical, instinctive, and rational activity. In mechanical and chemical activity, change is toward an end, but the end is not an idea of the individuum. This is obviously true of inorganic bodies; e.g. the rolling of a stone down hill, the gathering of rust on iron, or the burning of wood. It is true also of the mechanical and chemical changes in plants, and of the beating of the heart and the chemical changes which take place in digestion. So likewise as to instinctive activity, e.g. the sucking of the newly born child. In none of these is the end an idea of the individuum in which the process occurs. But in the instance of the carpenter making a box, the end is an idea of the workman; he makes conscious choice of it and of each step in the process. rational activity we have intelligence determining the end and the course which the subject will take to secure the purposed result. This is the highest form of activity of which we have experience; other forms are truly teleological, but they are relatively limited and incomplete.

- 2. Teleological activity is not exclusive of, or opposed to, mechanical and chemical. The mechanical and chemical are present in man; we have capillarity in the circulation of the blood and chemical changes in digestion, seeing, and smelling. Instinctive mental and physical activities are manifested in fear, anger, and imitativeness, and their attendant reactions. These changes are essential; they are, that we may be and that we may fulfil our functions. The high function of the individual man is to bring to pass what is peculiarly his, because he himself has made it the end of his activity. The significance of the mechanical, chemical, and instinctive activities of our organism has only a limited revelation in these activities themselves; it is most fully manifested in what we are as rational beings, as intelligent conative beings; it is to be seen in the part we have in the thought of the world and the course of events. The lower activities are teleologically related to our rational functioning.
- § 171. Finality and Reality. 1. In respect of subject reality, we find that all stages of rational activity are teleologically related. Each earlier stage finds its significance and completion in a later stage. Each step in the solution of a problem looks to a complete solution and is taken with respect to that end. It has its being, not merely for itself, but for the solution which is the ideal set by the student. No account of any stage of the process is complete which does not include the conclusion of the process. In man, the conclusion of the process is consciously accepted as the ideal whose actualization the subject will endeavor to secure. Thought moves forward by trying to realize an ideal which it has set for itself; the thought process is determined with respect to an ideal. It is of the nature of intelligence to determine its activity thus. When one is trying to recall an incident or a quotation,

he is endeavoring to actualize an ideal. Subjective activity is teleological.

- 2. Our discussion has also shown that the particulars of the objective world are teleologically related. So far as any object or event gives embodiment to an ideal, that object or event is teleologically related to the objects and changes involved in it and leading up to it. Elements do not exist merely for themselves, but for the compounds of which they are elements; and these compounds are embodiments of the meaning of the elements. We have given an illustration of this in the instance of oxygen and hydrogen. The significance of sodium and chlorine is expressed in common salt and the utilities which it serves. The leaf-bud, the flower, and fruit of a plant express the meaning of the biological processes of which they are the product. The higher reality is a fuller and a more expressive embodiment of the lower. Conscious determination of an end and direction of activity toward the attainment of the chosen end are characteristic of the teleological relation in full rational activity; but they are not the essence of the teleological relation. The essence of the teleological relation is that every stage or particular of an object has value for the whole object, for the completely developed object and for the whole of its history.
- 3. Finality is grounded in the nature of reality as developmentally active. Each successive stage of an object which is perceptibly changing is significant for the process as well as for the object. It sets forth the import of the preceding changes; that is, each successive change is end for the antecedent stages. In other words, an object regarded in respect of its changes is a system; and the parts of a system are teleologically related. The universe is a system; and the whole is a continuity. This continuity is not continuity upon the same level of signifi-

cance and value; it is graduated in value for thought, and in fullness of expression of reality from the inorganic up to man. The teleological relatedness of the particulars of the universe is manifest in this graduated continuity; and it is grounded in the systematizing nature of activity.

§ 172. Conclusions. — Activity is always related to an end. This "end" is not a terminus, a point at which activity shall cease; it is a result which is itself a point of beginning from which another end shall be attained. The carpenter in making a box prepares the necessary pieces; each of these is, for the time, the present "end" of his thinking and doing. For his further thought and work, these pieces are means for effecting a more remote result, viz. the box. The box itself is merely a stage in his effort to attain a still more remote result, - it may be the getting of a living or making a present for a friend. In any case, the box is not a terminus. It is made that it may be utilized; and the use to be made of it determines the design of the box. The "end" expresses, not the terminus of activity, but its import, its value for the system. We have found that changes in the objective world are teleologically related, that the katabolic processes of nature are teleologically related to the anabolic processes. In rational activity, the highest form of which we have experience, there is conscious choice of end and of means for attaining the end; but in the lower realms of being, in the more limited realities - as plants and animals - directivity is present, although the directing of activity is not consciously determined by the individuum. The changes in the most limited expressions of reality reveal the import of those realities and of the antecedent stages of the objects. The stages of individual thought and of manual activity are teleologically related. General history, the development

of science, and ethical and æsthetical consciousness can only be understood if we shall recognize the teleological relatedness of the particulars of the life of man. Activity is systematic; and, being systematic, it is teleological.

CHAPTER XXXVI

INDIVIDUALITY AND PERSONALITY

- § 173. Individuality and Personality. In the opening of the chapter on Individuality, we said that the study of that category would not be completed until later. We now resume its consideration.
- I. In our previous study, we learned that an individuum subjectively regarded is constituted by the selective activity of the subject. A block, a single building, a suite of offices, one of the rooms of a suite, or a single piece of furniture in one of the rooms may be an individuum. The subject determines what shall constitute his unit object, and he determines it in keeping with the interest We also concluded that individuality of the moment. is a mode of object reality, that what the subject regards as an individuum is also an objective individual, and that there is significant import in the "common-sense" conception of individuality, as to distinctness, wholeness, and independence of being. We likewise concluded that the individual is Many in One, that the Many are constituted in the One and function as one. We found further that there are degrees of individuality, and that marked distinctness of structure and function denote a high degree of individuality. Lastly, we discovered that increasing comprehensiveness and closer approximation to subsistence denote approach toward perfect individuality. In the present discussion, we will argue that the perfect individual is the Absolute Person.
 - 2. Two marbles may be perceptibly distinct only be-

cause they occupy different positions; they may appear in all other respects to be the same. Two musical notes may only differ in the fact that one follows another, as when a note is repeated. In such cases, the individuality of the objects is indicated in their being in different space and time relations. The individuality of most objects is expressed in the marks by which they differ from one another. The individuality of each of a student's books is indicated in the marks by which it differs from all other books. But the individuality of an object is not in the marks and relations in which it is perceived to differ from other objects. Difference of quality and relation are tokens of individuality; they are not the individuality itself, nor the source of the individuality. Perceptible differences are not the ultimate "principle of individuation"; the principle of individuation is immanent in the object, not external to it. Individuality is uniqueness. The individual is unique in that it alone is, or can be, itself; no other is it or can be it. It is irreplaceable. Individuality is immanent uniqueness.

3. We are conscious of great diversity in our experiences; no two incidents of our life are in all particulars quite the same. Nevertheless these innumerable diverse experiences are constituted in a continuous life experience. This continuous experience is essentially one, and it is comprehensive of all our life. These diverse experiences have their being in one self-same self. Our experience as a whole is a diversified unity. Each particular of it functions for all the others; it has its being in and with all the others and modifies them. This is true, whether we speak of the distinct experiences which we have through relation with the many objects with which we have to do, or whether we have in mind the elemental phases of experience, as thinking, feeling, and doing. Consciousness is emphatically Many in One. We also have consciousness of the self as a unit distinct from the world of not-self, a consciousness of the "otherness" of things, other persons, and events. In a word, self is known in consciousness as having the comprehensive wholeness, the distinctness, the diversified unity which characterizes individuality. No other reality of which we have experience possesses these characteristics in so high a degree as the human individual.

4. In respect of consciousness, each of us is set apart from other personal individua, is peculiarly himself, by a content which is his "private property." You are the only possible subject of your experience. If we should go so far as to assume that another person could have experience qualitatively identical with yours, that would not make him the subject of your experience. You and he may rejoice over the same occurrence; but his joy is his, and yours is yours. The consciousness of every human individual is unique. Consciousness of self-sameness gives to human individuality a higher rank than can be found in any other finite individuum. The brute lives only in the present moment, with no rational recall of the past nor forecast of the future; man possesses his past and purposes his future. The activity of the human individual is consciously self-directed. In this, we have self-assertive activity, asserting its apartness from, and relative independence of, other persons, asserting also that it itself originates its thought and determines its activities. The human individual likewise holds that his attitude toward all without is determined within and by himself, that he is in possession of a province within which he rules and into which no other may press. This claim to origination and rulership is an assertion of uniqueness. We recognize the element of uniqueness in our estimate of the more noted individuals who have made themselves a part of organized history. They cannot be merged into the mass of humanity. Their uniqueness is expressed in our judgment that they had, each of them, a distinguishing individuality. The highest finite individuality is in the consciously purposive and self-determined individuum. Of all that is finite only man is truly individual.

5. The universal is expressed in the differences as well as the likenesses of particulars (§ 47, 3). The universal "oak" is the ground of the differences and the likenesses of particular "oaks." We have found (§ 80) that experience is never experience of a mere particular; and we have concluded (§§ 94, 95) that a known object is not a mere particular, but is always a particularized universal. Every "horse" or "man" is the universal "horse" or "man" particularized; and it is only in such an individual that the universal has actuality. The individual is the unity of the universal and the particular. A particular-"horse" is distinguished from other "horses" through the characteristics in which he differs from them. differences set him apart from other "horses"; and because differences distinguish particulars, they are often regarded as the sole and sufficient token of uniqueness. But to conclude thus is to misconceive the nature of uniqueness and individuality. The modern man of culture has more individuality than a savage has. His differencing characteristics are more numerous and more distinct than those of the savage; and he is a more comprehensive expression of the universal "man." That which gives the more comprehensive expression of the universal manifests the higher degree of individuality. Comprehensiveness and distinctness of characteristics are tokens of individuality; they are elements of uniqueness. The many-sided man is distinctly individual.

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6. Since reality is individual, the Ground-Reality of the universe must be individual. This Universal is all-comprehensive; for the universe is the manifestation of the activity, and the expression of the meaning, of the Ultimate Reality. This individual is wholly self-subsistent and is, therefore, rightly denominated the Absolute. Self-consciousness and self-determination, characteristics of Personality, are also characteristics of the highest individuality of which we have experience. The perfect unitary reality, that reality which is the most comprehensively diverse and the most distinct, is to be found in Personality. The wholly self-subsistent individual, the reality which is unitary with an all-comprehensive diversity of activities, the Ground-Reality of the universe, is the Absolute Person.

CHAPTER XXXVII

SOCIALITY; SUMMARY OF CONCLUSIONS

§ 174. The Solitary Self and the Social Self. — Hitherto we have regarded consciousness as the consciousness of a solitary, purely individual self; this is, however, an incomplete view of consciousness. We are in intimate relation with other selves; and the consciousness of each of us has content and significance because of our relation to others. So much as this was said earlier in our study; but more remains to be said. Our consciousness of self-rulership, with its attendant assertion of personal rights, seems to set us apart in a province which is all our own; and we tend to think of our relation to others as wholly external. This appears also to follow from the uniqueness of the individual. Each of us is just himself; and he is all there is of himself. From this point of view, society is an aggregate of individuals; and each of these individuals is complete in himself. The self thus conceived is purely individual; and this solitary, self-centered self is assumed to be the real self.

As a matter of fact, the self who knows and plans and hopes and strives is not this solitary self. Consciousness is not purely individual, it is also social; with consciousness of self it includes consciousness of another or others. The recognition of this fact has given rise to the term "social consciousness," a term for which no satisfactory, concise definition is at hand. The derivation of the word "social" furnishes a point of beginning for the study of the social phase of consciousness. The word "socius,"

from which social and its cognates are derived, signifies fellow, partner, companion. "Social consciousness" is virtually the same with "associating consciousness." In saying that consciousness is social, we assert (1) that self-consciousness is consciousness of an "other" or of "others," as well as consciousness of self; (2) that other persons are regarded as of our kind, and as fellows—or associates—in experience. Consciousness is social in that it relates itself to others as their socius, or fellow, and the "other" to self as the socius of the self. The self whom each of us knows as "my self," the self to whom we assign our feelings, thought, and purposes, is a social self. Sociality, as a category, is that characteristic of consciousness which arises from our recognizing that others are of our kind and are fellow-participants with us in experience.

§ 175. The Social Self is the Real Self. — If it be true that the real self is the self in whose experience there is consciousness of the other as his "fellow," evidence of it should be abundant. In such case, the social consciousness should be in all our experience; it should be manifest in the attitudes and activities of life.

I. We are not first self-conscious and then conscious of the world. Self-consciousness arises in our distinguishing self from the objects of the external world. But definite self-consciousness does not simply set one apart from the other realities of the world. In my self-consciousness, I know myself as knowing and feeling and doing; I am for myself a knowing, feeling, and doing reality. That is the judgment of every one respecting himself. It may not be stated definitely, but it is involved in all our thought of ourselves. At first the child assigns feeling and thinking to things; he takes them to be of his kind; he would beat the stick or the chair that hurts him. In other words, his consciousness is from the first a social

consciousness; he and all objects are fellows. Later, he distinguishes things from persons, and he ceases to regard things as of a kind with himself; but, by so much as his consciousness is normal, he continues to account himself a "socius" of persons. From this it appears that consciousness is social from the beginning, and that sociality gets definition and limitation in enlarging experience.

2. Language testifies to the reality of the social self. Language is a product of the inter-related activity of men and has its origin in the endeavor to exchange experience. When the master gives an order to his servant, he is seeking to arouse in the servant an experience which shall be identical in certain particulars with his own. Commerce in experience has brought language to its present stage of development. To effect exchange of experience is the function of language. When you enter upon conversation with another, you assume that the other is of your kind, is rational as you are rational. You also assume that the other has had an experience in some respects the same with yours. The listener hears sounds; he assigns import to these sounds, and this import is for him the thought of the speaker. If he shall understand what is said, it is not only necessary that he shall be able to hear and to think - i.e. that he shall be sentient and rational; but it is likewise necessary that he shall have had experience which is in some particulars the same with that of the speaker. If the listener's experience were not the same in any particular, he could not discover the speaker's thought, but would be liable to assign a different meaning to words and phrases from that which was in the mind of the speaker. We recognize that things are not sentient and cannot hear, and that animals are not rational and have had no experience which will fit them to interpret reasoned discourse. As a consequence,

we never make a serious attempt to converse with things; and, if we make pretence of conversation with the more gifted domestic animals, we for the time play that they are of our kind. The teacher can only accomplish his undertaking because he and the student have an associated experience. The consciousness of the individual self is not a solitary, purely individual consciousness. A purely individual and isolating consciousness would not initiate inter-subjective intercourse; it could not have part in rational intercourse. The real self is at once individual and social; the individuality and sociality of consciousness are inseparable.

3. A consideration of our outlook upon life and of the interests upon which we set high value, makes it evident that the social self is at the centre of all our experience. We do not say that the social element of consciousness is distinctly recognized by each of us in every moment of our experience; but we do say that the social self is the self of the interests which we deem vital. The child's earliest definite awareness centres about the person who cares for him. The mother or nurse, what she can do for him and what he expects her to do — these are for him the matters of chief importance. This is, of course, not a completely defined social self, but it is the germ of the socius; it is a social consciousness in its beginning. Later, there comes a period of interest in toys and games; and then the normally developing child desires companionship in his pleasures and triumphs, and sympathy when he fails. He regularly prefers games in which others partake with him; and, when child companions are wanting, he will ask that father and mother take part with him. The vital interests of the parent, of the citizen, of every one whatever his line of activity may be, are not the interests of a self who stands apart from others; they

are the interests of a self in whose experience other selves have a large place. He is not normal of whom this may not be said.

- § 176. Social Reciprocity and the Development of the Individual. — I. The social consciousness has its source in our recognition of the fact that we are socially related to others. Our attitude toward others, our thought of them and our activity as it may affect them are necessarily determined with respect to the value we assign to this relation. But the social relation is reciprocal in nature; every person who is normal regards himself as the socius of all others. This being true, it follows that social attitudes and activities should be reciprocal. We look for social reciprocity: we treat others as though they were of our kind, and we expect that they shall treat us similarly. To be ignored, to be treated as though we were of no account, would be an afflictive experience. We long to be recognized by others as one with them; and we are disturbed when such recognition is not extended us. As we know that others enter into, and help make up. our experience, so would we have others give us a vital place in their interests, a place in their social self. This it is which gives such keenness and intensity to the effort which some make to gain entrance to what is in common parlance called "society." It is seen also in the large number of associations of various kinds and the eagerness with which men seek membership in them. The normal developing self demands social reciprocity; and this demand is a call for what is essential to the development of the individual.
- 2. Our incomplete and disconnected experience finds its completeness in social reciprocity. The social consciousness binds all together. It is our "other" who answers our questions, resolves our doubts, writes our books,

provides for our amusement, and furnishes us the many necessities and comforts which we of ourselves could never obtain alone. These "others" awaken in us thoughts which had otherwise never been ours; they live lives which inspire us; and they unite with us in carrying out undertakings which we could not effect alone. In all this they have part in developing our real self.

3. We speak of rights, privileges, and obligations. believe that the ideas which these words express should be clearly defined in our thought, that they should represent to us what is of highest value, and that they should find embodiment in conduct. These ideas have their origin in the social consciousness. We insist that a man has rights equal to those accorded others; and we consent that he has rights equal with ours. The ground of this insistence and consent is that he is of a kind with others and with us, at least in the sphere within which these rights are claimed. When we refuse another equal rights with us, it is because we believe that in that sphere he is not of our kind. The criminal is restricted in his liberty, because he has shown that he is not of the kind of the true citizen. This is further exemplified in the exclusiveness of social circles, fraternal organizations, and clubs. The unadmitted are held to be, in these relations, not of a kind with those who make up these circles and associations. We believe also that those who are of our kind have the same privileges and obligations that we have. These ideas have their development and definition within social relations and through social reciprocity; and their development in the individual is essential to his completeness. The moral sense is developed within social relations, and only there.

§ 177. Conclusions. — The normal consciousness is both individual and social; it testifies to the individual's

distinctness from others and his incompleteness apart from others. As a social self, the individual recognizes that the other is of his kind and is a co-participant in experience. Such recognition is essential to his own development. Sociality is the proximate ground of society and of the orderly development of the individual. Hence the individual is not an ultimate; he is not an independent centre of experience and therefore cannot be an independent centre of being. Society is not an aggregate of independent individuals. We do not say that it is a mere organism; but we are forced to conclude that its individual components are so inter-related that no term that implicates less intimacy of relation than the term "organic" can adequately express the relation of individuals to one another. Each functions for all the others. The ultimate ground of society is the Absolute Individual who is the ground of the being and the experience of finite individuals. Society, in the principles of its coherence, is an expression of the nature of the Absolute Individual.

§ 178. Conclusions from our Study of the Categories. — The categories are fundamental forms in which reality, both subjective and objective, expresses itself. Our study of these forms justifies our assumption that reality is active being. All realities are of interest to us; but of finite realities, man is of prime interest. A man is a true individual, but he is not the complete individual; he is not the perfect individual, for his being and his activity do not have their source within himself. He can only be conscious when he is related as subject to some object. He is in the world system and dependent upon it. Reality expresses itself in him, but he is a limited expression of reality. He is in some particulars trans-spatial; but for much of his activity he is subject to spatial limitations. He can conceive the trans-temporal and can in idea scan

the ages; but his possession of the actual is circumscribed by temporal limitations. He can rule over and utilize much of the objective world; but he is forced to recognize that his authority here is a conditioned authority. To deal effectively with the not-self he must subject himself to the conditions imposed by its constitution; but, if he shall observe these conditions, he becomes ruler in an extended realm. A man is an individual with rulership and rights which are his own as against all other finite individuals; but he is not an independent centre of experience or reality. He is organically related to all others of his kind, and he is dependent upon this relation for the experience in which he develops true selfhood.

The Absolute Reality is the Absolute Individual. As the highest individuality of which we have experience is constituted in personality, we are forced to conclude that the Absolute Individual is a person, is at least selfconscious and self-determined. The Absolute is selfsubsistent, and is the ground of being and activity; the world system is of him and dependent upon him. This Absolute determines the conditioning of the universe; and it would be a reversal of the fundamental order to speak of the universe as conditioning its ground. Absolute Reality is trans-temporal and trans-spatial. The Absolute Individual is the ultimate ground of society; the social consciousness, being grounded in the Absolute, is an expression, however limited, of the Absolute con-Because the world-process is teleological, sciousness. we conclude that it is determined toward an end. end is a purpose, not a conclusion; and it must be a purpose that is consonant with the nature of the Perfect Person.

PART IV

HUMAN FREEDOM AND EXISTENCE OF GOD

CHAPTER XXXVIII

HUMAN FREEDOM

- § 179. The Problem.—The problem of Human Freedom has given rise to much controversy; and the attempt to solve it has resulted in conflicting theories. The subject is confessedly difficult, and the difficulty has been augmented by lack of agreement concerning the significance of the terms usually employed in the discussion. In view of this, we shall endeavor to assign such meanings to the terms used as will secure that our discussion and our conclusions shall be true to experience.
- 1. Origin of the Idea of Human Freedom. We think and speak of ourselves as free. We claim some acts as our own, and hold that these acts are ours because we purposed them and took part in them of our own choice and not by compulsion. In other words, we insist that we have related ourselves freely to these acts, and we base our assertion of freedom upon our consciousness that we are self-ruled and self-directed in the decision to act. The idea of freedom, then, has its origin in our consciousness of a certain subjective relation to events in which we have part. My consciousness of freedom in any particular instance is grounded in my consciousness that I purposed my part in what took place; that the decision

to act with reference to a certain end and the initiating and directing of my course of action are my own decision, initiation, and direction.

- 2. The Problem Stated. The preceding paragraph discovers the point in controversy: Are we free in the act of deciding? This question is usually confined to ethical decisions. It might be stated thus: Is one free when he chooses, or refuses, to do what he believes to be right? But the question of human freedom extends to decisions which are not purely ethical. Are we intellectually and æsthetically free? Are you free in conducting a course of reasoning? Do you determine the reasoning? Am I free in judging as to the beauty of a landscape? In short, is one in the critical moment of rational activity determined, or does he determine? Are our intellective, æsthetic, and ethical judgments determined by us or through us?
- § 180. Kinds of Freedom. The term "freedom" has three references, and these differ so widely in their connotations that it is well to distinguish them.
- 1. Psychical Freedom.—Choosing is a psychical process; hence the question as to whether a man is freely active in this process, has a distinctly psychical reference. If we believe that one is free in deciding between alternatives,—e.g. as to whether he will attend to correspondence or go for a walk,—we hold a doctrine of psychical freedom. This form of freedom appears to present the best approach to the main question under consideration; and we shall have this form of freedom in mind, except it be distinctly stated that we are speaking of one of the other forms.
- 2. Metaphysical Freedom. The Epicureans give the term "freedom" a metaphysical reference. Epicurus held that the atoms have a power of self-determination, and that this determination is free in that it is causeless and wholly of chance. In this he assumes that reality

is in its nature free; he gives freedom a metaphysical reference. The Stoics declared that all changes in the universe take place under a law of natural necessity to which there are no exceptions. According to them, there is no metaphysical freedom. Those systems which conceive of the ultimate reality as a person regard freedom as an attribute of the highest reality. In so doing they give freedom a metaphysical reference. The question of freedom is thus involved in the nature of the ultimate reality. The mediæval theologians and the Substantialists give freedom a similar reference in their discussion of the Divine will, and this reference occurs naturally in all systems that conceive of the ultimate as a person. It is present also when we raise the question as to whether man is by nature free.

- 3. Ethical Freedom. The question of ethical freedom takes two forms. Plato inferred freedom from man's sense of responsibility. We hold ourselves responsible for certain acts. Plato would argue that a person cannot rationally be made responsible for an act that is reprehensible, unless it were possible for him not to have done what he did; neither can one be rightly praised for doing what he could not avoid doing. Aristotle agreed with him in this; so likewise almost all who have contended for freedom of choice. This gives one form to the question of ethical freedom. The other form arises from a question which Plato discussed and which has had prominence given it in ethical studies. The following query presents it with sufficient exactness for our purpose: Is the man who chooses what is unreasonable and evil, free?
- 4. Inter-relation of these Forms. These forms, or kinds, of freedom are at root one; the difference in connation comes of considering freedom in different relations.

Is human freedom possible in this universe? Our

metaphysical ultimate determines our answer to this question. The cosmos is an expression of the ultimate reality. Hence, if there is no free activity in the ultimate reality, there cannot be freedom in the universe; and, if the ultimate is freely active, there is freedom in the universe. Whether or not man is free, is a fact to be otherwise determined.

Is freedom present in psychical activity? The answer to this inquiry determines the question of the actuality of psychical freedom. What testimony, if any, does our ethical consciousness give respecting human freedom? It is argued by many that our sense of responsibility goes to prove that we are psychically free. Others reverse the argument; they say that our sense of responsibility has its origin in our certainty that we are volitionally free. In either case, it is evident that psychical and ethical freedom are inter-related.

The question, Is the man who chooses the unreasonable and evil, free? comes of regarding freedom as the ideal relation of the subject to the ethical order. This ideal is the subject's inner harmony with the ethical order, his perfect ethical rationality, his habitual preference for the rationally right, his prompt and invariable decision in favor of the right. If one should attain this ideal, he would think and act without any sense of restriction; he would be wholly free. This, the second form of ethical freedom, connects with the metaphysical ultimate, the Ground-Reality of the universe. Has the system of which the subject is an individual part, an ethical order? If the metaphysical ultimate has no ethical characteristic, the system which is an expression of this ultimate will be nonethical; if this ultimate is ethical in nature, we will expect the system to present an ethical order. Hence the question asked at the beginning of this paragraph takes us to

the Ground-Reality of the universe, and our answer will depend upon our conception of this Ground, as to whether it is, or is not, ethical.

- § 181. Theories Stated. It is generally assumed that there are two theories of volitional activity Determinism and Indeterminism. The former used to be called Necessitarianism; but many Determinists seriously object to that designation. Indeterminists are sometimes spoken of as Libertarians; but some Libertarians are unwilling to be classified as Indeterminists. There are Determinists who hold what is virtually a fatalistic doctrine; while others who propound what they call Determinism just as distinctly insist that man is free in volition. Where there is such disagreement, it will be well to distinguish a third theory and to indicate the meaning which this study will assign to these terms.
- I. Pure Determinism. This will be known as Determinism. It is the doctrine that every choice is determined by the physical and psychical conditions of the subject; the self, the conditions, and the choice are conceived, as mechanically related, as discrete. The decision in favor of one alternative and against others is a term in a mechanical series and is external to the preceding states of the self. All successive states of the subject are causally united; they are links in a chain of antecedents and consequents, quite as much so as the ebb and flow of the tides. Our decisions are mechanical products.
- 2. Pure Indeterminism. This will be known as Indeterminism. It is the doctrine that decision is not determined in any way, not even by an estimate of the relative value of what we choose and what we reject. In the instant of choice, the will acts wholly independent of external and internal influences; it is independent of our native and acquired character; it is unmotived by our estimates

of the worth of objects and actions. In this theory, the will is conceived as a faculty fulfilling an independent function; and it is regarded as externally related to the self considered in respect of character.

- 3. Self-determinism. This is the doctrine that choice is determined by the subject's conception of value. This conception of value is an expression of the self as rationally active in estimating the worth of an object. The subject decides in favor of the object or course of conduct which he judges to be most desirable, to have highest value for him. The judgment of value and the choice are the subject's own. According to this doctrine, it is always possible for one to choose what he judges to be right; on the other hand, he may put a higher value on the satisfying of evil passion than on doing the right, so that he may decide to follow his vicious desires instead of taking the course which he deems right.
- 4. Determinism and Indeterminism contrasted with Self-determinism. Determinism is fatalistic; every choice is a moment in a cosmic process in which there is no place for freedom. Our sense of freedom in deciding and the decision follow upon their antecedents with the fixedness of changes in a gravitation series. Consciousness of freedom is an illusion; a feather whirled about by the wind determines its movements just as much as we determine our choices. Determinism insists that our choices are determined for us. Self-determinism contends that our choices are determined by us. Indeterminism avers that they are not determined at all.

Determinism and Indeterminism set the subject's motives, character, and will in an external relation to the self. They are thought of as though they were apart from the self and acted upon the self. Self-determinism holds that they are organically related, and have no existence except in

and with one another. It insists that the will and character are not other than the self, and that motives are an expression of the self. The relation of the subject to his desires, motives, and decisions is immanent and developmental, not external and mechanical.

- § 182. Historical. I. Determinism. The Atomists held that the atoms - their metaphysical ultimates were subject to natural necessity; there was no place for freedom in the universe as conceived by them. The Stoics also held a metaphysical doctrine of determination. This would shut out the possibility of freedom; nevertheless, they had so profound a sense of ethical responsibility that they insisted that man is free to obey or disobey reason. They tried to reconcile this doctrine of freedom with the doctrine that every event is determined by natural necessity. Pantheism and Cosmic Mechanism (the theory that the universe and all its changes are explicable by the laws of matter in motion) are deterministic. Their determinism is illustrated in Bruno, Spinoza, and most of the Mystics, in Hobbes, in the writings of Laplace, and in the philosophical excursions of many able scientists.
- 2. Indeterminism. This is exemplified in the teachings of Epicurus, Carneades, and others of the Epicurean and Eclectic schools. Augustine was theoretically an indeterminist; but he also held that the will is practically determined by reason of man's sinfulness: being sinful, men cannot choose the good. Duns Scotus and William of Ockham were pronounced indeterminists. Voluntarists generally tend to Indeterminism. This comes of their subordinating intellective activity to volitional. William James illustrates this theory.
- 3. Self-determinism. Aristotle seems to belong here; he teaches that choice is consequent upon consideration of ends. Despite their metaphysical determinism, the

Stoics sought to sustain a doctrine of self-determinism. Thomas of Aquino says that the will is determined by knowledge, and he concedes that the will at times influences judgment. This teaching would place him with self-determinists. Jonathan Edwards leaves us uncertain as to whether he should be accounted a self-determinist or a determinist; and the same may be said of not a few who accept a deterministic theory. Many intellectualists are self-determinists. Among these we name Locke, Kant, and Hegel.

- § 183. Phases of Consciousness immediately related to Volition. It has been indicated (§§ 179; 180, 1) that the reality of human freedom turns upon the fact of the subject's freedom in choosing between alternatives and in deciding to seek a selected end. The solution of our problem, then, calls for a study of phases of consciousness which are immediately related to such choice and decision.
- I. Impulse. We are said to act from impulse when we act without deliberation. Much of our activity is from impulse, and thus without consciously organized deliberation; nevertheless, impulsive acts are not always non-voluntary. The same may be said of instinctive acts, such as calling out in sudden fear or shrinking from an object which we fear or loathe, for they are impulsive acts. Habitual reactions—e.g. walking—are consciously organized; but having been organized they are performed without distinct awareness of conscious determination of them. Impulsive and habitual acts may acquire a voluntary character. I write a letter; in doing this, many of the mental and motor acts required are not distinctly purposed, but they are necessary that I may carry out the purpose to write. When a single voluntary act includes impulsive and habitual acts, the impulsive and habitual

reactions are purposed in the inclusive purpose. But the question of freedom does not arise in connection with purely impulsive acts, — if we ever perform such; for no alternative is present to mere impulse.

- 2. Desire. Desire is, at root, a longing for satisfaction. It arises when one contrasts his actual state with an ideal state which he accounts preferable to the actual. The hungry boy desires food; and, in desiring it, he necessarily contrasts his present state of dissatisfaction with the satisfaction which would be his if he had food. This is desire regarded subjectively. We tend, however, to identify this subjective desire with some concrete object; in doing this, we objectify our desire. Thus, the boy of whom we have spoken identifies his desire with food, or possibly some specific kind of food, as bread or an apple. The object may be general, as pleasure or honor; or it may be particular, as a book or a trip. From the endeavor to identify our desire with some object, there arises what is often called a conflict of desires. more objects are compared; and the subject deliberates as to which of these will most assuredly give the longedfor satisfaction. With which shall the self identify his subjective desire? Before distinctively rational objective action takes place, there must be deliberation and choice, and purpose to attain the object chosen. The subject must give the various objects a relative valuation; and he must purpose to secure that to which he assigns the highest value. It is the self who determines the value- and purpose-judgments.
- 3. Motive. The term "motive" has a deservedly prominent place in discussions respecting human freedom; and we cannot hope to reach valid conclusions if we do not get a correct and definite conception of this element of experience. Whatever incites to action is a motive. This

conception of motive is accepted without question, and it is apparently as definite as one would desire. But despite the simplicity and apparent definiteness of this definition, those who have discussed human freedom, have not agreed in the application of motive to experience; and confusion has resulted. Some of this confusion has arisen from not recognizing the fact that the term "motive" has two possible references, a subjective and an objective reference; and that these references should be carefully distinguished.

- (1) Motive has a subjective reference. The boy's hunger and the student's dissatisfaction with his present knowledge of a subject stir them to thought as to what would satisfy them. Thus aroused they deliberate, trying to determine what would satisfy them and how that which would satisfy may be obtained. Each of them concludes his deliberation by deciding what he will do, and he acts in keeping with his latest decision. In all this mental activity, the desire of the boy and of the student to secure satisfaction is the motive which incites them to deliberation, to assignment of relative values to different objects and courses of action, and to a conclusive purpose. The desire for satisfaction moves each of them to identify his desire with some concrete object which may possibly be obtained - say fruit or bread for the boy, and a certain book or course of instruction for the student. The motive to rational activity is in each instance one with the desire for satisfaction. They are two aspects of the one subiective state.
- (2) By "motive" we also mean that which one seeks to accomplish, that end toward which one directs his activity. In keeping with this, we say that the motive of one man is the accumulation of wealth; of another, the winning of political power. When the boy concludes that some fruit will quiet his hunger, he proceeds to determine

how he may obtain it. The getting of the fruit is his objective motive. Similarly, the completed course of study is the dominant motive of the student's activity; it incites him to devise means and to determine intermediate courses of action. The purposed end is the objective motive; and the subject determines what it shall be. Motive has its origin in subjective activity; and our objective motives are determined by us, not for us. It is in deliberating, choosing, and purposing that we determine our objective motives.

§ 184. The Conditions of Psychical Freedom. — From the foregoing it follows that the question of psychical freedom may be stated thus: Are we free in deliberating, in assigning relative values to objects and to courses of activity, and in purposing? Freedom in these activities requires:—

1. That the deliberating, valuing, choosing, and purposing acts shall be determined by the subject, not by what is other than the subject.

In our study of causality (§ 156) we recognized that our activities are limited by persons and things. If we would utilize an object, we must note its way of behaving and we must so determine our treatment of it that it will react in furtherance of our purpose. Thus, gypsum is under certain conditions a powder; under other conditions it is plastic; under yet other conditions it is rigid. He who would utilize gypsum must accept its ways of behaving as conditioning his treatment of it. The nature of an object (which is expressed by its way of behaving) conditions our use of it. So, too, the attitude of a person with whom we have to deal, his interest or want of interest in the matter in hand, conditions our intercourse with him. To sum it up, the nature of the things we handle and the character of persons with whom we have dealings condi-

tion our external activities; and, so far as they are known to us, they condition our deliberating, valuing, and purposing activity in relation to them. scarcely be questioned, except possibly by indeterminists. The conditioning is from without; it is imposed upon the subject. Looked at thus, we would appear not to be free.

But what has just been said is not a complete statement of the case. How about the determination of our thought activity and our objective activity? It is held by many that, although we are externally conditioned, we are nevertheless free in that each of us initiates, guides, and concludes his own deliberative activity; that we determine from within ourselves what value things, events, and persons have for us and for the fulfilment of our desires; that we form our purposes and decide upon our course of action; and that we do all this in view of these conditions. The subject is free if he utilizes these conditions in determining his activity. We are free as we relate conditions, things, events, and persons to the fulfilment of our desires.

What has just been said raises another question. We have recognized the fact that the character of persons, their attitude toward life and life's problems, determines their activity. As a consequence, human freedom requires: -

2. That the subject's character shall not be determined by what is other than the subject, but shall be essentially the resultant of the subject's self-determination.

That we may be psychically free, it is not sufficient that our volitions shall be self-determined, but our character must likewise be essentially self-determined. My judgments of fact and value and purpose, in respect of their being determined by me, are what they are because of what I am in the moment of my judging. Hence, if my character is not essentially self-determined, if my character is determined by what is other than myself, my judgments are in reality determined by what is other than myself, not by me.

- § 185. Character. Does each of us determine his own character? We recognize that race, family, time, specific incidents, and the manifold circumstances of life have to do with the formation of character; but for us the crucial question is as to whether any or all of these fix our character for us, or whether each of us determines his own character.
- 1. Character Defined. Character has been defined as habitude of will; but this obviously falls short of including all that we have in mind when we use this term. When we speak of a person's character, we mean his personal qualities taken as a whole — his disposition or temperament, his general and relatively persistent attitude toward persons and things and the course of events. As thus described, character is emotional, as well as volitional, habitude. But we may not rest here, for this is a defective conception of character; it is untrue to the organic unity of the self. As a matter of fact, we acquire intellectual qualities in and with our acquisition of emotional and volitional qualities; and these should be included in our conception of character. Stout says, "Character is just the constitution of the Self as a whole." We can accept this statement if we add, "considered with respect to the qualities which distinguish a particular self." Hence character is rational habitude; it is an individual's mode of relating himself to the objects of which he has experience; it is expressed in the manifold qualities of the individual.
- 2. Personality and Character Distinguished. Personality and character are used to denote the same reality the self; and they are sometimes regarded as freely in-

terchangeable. It is well, however, to distinguish them, even though the particular in which they differ is generally negligible. In the term "personality" we emphasize the essential qualities, or the attributes, of a person—as self-consciousness and self-determination; in the term "character" we emphasize those qualities which are in a peculiar sense the individual's own, as evidenced in his usual attitude toward other persons and their interests, and in the standard by which he values the objects and incidents of life. In respect of essential qualities, all men are alike; in respect of qualities emphasized in the term "character," probably no two are wholly alike; for it is scarcely possible that any two persons shall have the same emotional, volitional, and intellectual habitude.

3. Personality is Subject to Development. — To be a person is to be self-conscious and self-determined; for self-consciousness and self-determination are essential qualities of personality. But an individual is not selfconscious at birth and is, therefore, not consciously selfdetermined; he is not an actual person. It is certain, however, that the normal child, if he shall live, will in time become conscious of self and will begin consciously to direct some of his own activities. The attributes of personality are obviously implicit in the child; they become explicit as the result of his experience. Man, therefore, is at birth only a potential person; it is through the experience of the individual that this potential personality becomes actualized. It is not, however, fully realized in any of us. Complete self-control, perfect mastery of our abilities, facile and effective application of our mental furnishing to the life problems which we are called upon to solve, does not come to us by inheritance. Self-mastery is attained only through extended experience; and we have reason to believe that it is still incomplete, even in those

who are most highly developed. Personality is a matter of degrees. It is subject to the law of development; it is not static, but is changing every moment.

- is not static, but is changing every moment.
 4. Character is a System. The concept "character" originates through our regarding the qualities of an individual as aspects of what is itself unitary. When we think of the characteristic qualities of one whom we know, - e.g. his kindliness and forcefulness, - these qualities are thought of as distinguished phases of what is in itself an indivisible whole. That character is conceived to be a unit, is also indicated in the fact that we do not speak seriously of a man's characters, as if he had more than one, even though he reveals qualities of self-hood which appear to us to be irreconcilable. If a person is violent in address, but patient under severe provocation, we take these inharmonious qualities to be expressions of the one character. The many qualities of any one character are thought of as cohering, although particular qualities may appear to be incoherent; and the concept "character" itself involves the idea that the qualities of the perfect character are perfectly coherent. All the instincts, appetencies, impulses, attitudes, and judgments of truth and value and purpose of such a character would be perfectly concordant. That could only be if they were all perfectly subjected to a single principle, or law. In speaking of a man's character, we assume that his affections and all his subjective activities may be truly conceived as coordinated, or organically related, parts of a whole. The objective activities of an individual are expressions of his subjective organization.
- 5. The Organization of Character. Has man a character at birth? We recognize that the essential qualities of personality are implicit in the babe, and that these attributes are certain to become explicit through experience.

Is the future character of the babe similarly determined at birth? Has the babe at birth a determined implicit habitude, so that the whole of individual qualities which is his later, i.e. the rational habitude which he develops, is at birth potentially determined for him? We may accept it as assured that every individual is born with a racial and family inheritance of "dispositions." It is certain that a child begins early to exhibit a "temperament." He would be a bold man who would undertake to describe these "dispositions" or this "temperament" more particularly; but the fact of such an inheritance is hardly open to question. It is, however, a serious mistake to regard this inherited "temperament" as constituting character. Character is not temperament or disposition; it is all the elements of our rationality organized into a habitude. Our impulses, instincts, affections, and attitudes are "raw material" from which character is constituted. They enter into character only as they are ordered into a system. Personality is self-organizing. It differs from the plant in this: the plant's type and environment determine the organism; the environment and material condition the organizing activity of the self, but do not determine it. The self chooses the principle to which all its impulses, instincts, dispositions, and activities are subjected. It coordinates these phases of consciousness, subordinating some to others and subordinating all to the ruling principle. Our choices and purposes are obviously determining factors in the organizing of character. The constituting of character is a continuous process; it may seem to be fixed in some, but it is in reality always in the making. All experience is educative; every judgment of value and purpose works for the development of character. Man is not born with a determined germinal character: character is always determining, never determined.

CHAPTER XXXIX

HUMAN FREEDOM (continued)

§ 186. Indeterminism Criticised. - Indeterminism holds that when we will we are uninfluenced by judgments of fact; it insists that our purposes are not determined by our estimate of value of an object or a course of action. It declares that volition is so far from being determined in view of fact-judgments and value-judgments that the will itself determines such judgments. According to the Indeterminist, character does not determine choice. holding the theory stated above, Indeterminism is untrue to the nature of rationality. Man is always a willing-feeling-thinking being; there is no instant of consciousness in which any one of these elements is unmodified or uninfluenced by the others. In asserting that choice is not determined by the character of the subject, the Indeterminist assumes a self, which is mere will, apart from the self of organized character. We know of no self other than the self of experience; and that self is not without character. In fact, character is that self's constitution; and the self cannot possibly act independent of its constitution.

This theory also avers that volition and the psychical processes which precede it — as impulse, desire, deliberation — are unrelated, except in time. It would follow from this that volition springs from nothing, that there is at least no relation between the impulse to choose and the choice itself, except that one comes after the other. This doctrine does not stop with declaring that the causal explanation of choice is inadequate; we could agree to

that. But it denies that there is any relation between choice and what was antecedent in the experience of the subject; and to that we must object. That would make volitional activity and the directing of our objective activities irrational. According to this teaching, one is lawless in his willing, not free. Since this doctrine gives the primacy to will and regards will as not subject to law, it follows also that we are not under law. As a consequence, there cannot be any ethical order for man; for ethics implicates an order to which we should conform; that is, it would subject the will to law. The logical issue of this doctrine is not liberty, but the anarchy which must ensue when caprice or chance rules.

§ 187. In Favor of Determinism. — Determinism is supported by a strong cumulative argument. The following statement of the case for this theory is unavoidably brief.

1. From Reflex, Impulsive, and Habitual Reactions. -Digestion is an unconsciously directed activity; so also is the closing of the infant's hand when the palm is touched. The hysterical laugh, the trembling and cowering of one who fears, the hesitant shying of the bashful child, and the impulsive grasp for something when we are suddenly tripped are reactions of which the subjects are in some measure conscious, but which are not under the control of the subjects. We are conscious sometimes of winking and of breathing, and we may partially control these reactions. Now, it is impossible to draw the line between our unconsciously directed activities, such as digestion, and our conscious uncontrolled reactions, such as the hysterical laugh; neither can we point out the boundary between our uncontrolled conscious reactions and reactions which are subject to partial control, such as respiration and winking. Further, who can state with precision when we pass the line which separates these partially controlled activities and our habitual reactions, such as acquired automatic balancing in walking and quasi-automatic guidance of the pen when writing? These habitual reactions were consciously originated, but they do not require conscious direction now that they are established. Who will undertake to say just when we pass the boundary between the realm of unconsciously directed activities and activities which we assume to be determined by the subject, if any are so determined? Many believe that reflex and impulsive acts are due to external determination, that they are purely mechanical reactions to external stimulus. That is the scientific explanation of them. Then, why not preserve unity in the explanatory principle, and say that volitional activity is externally determined?

2. Thinking which is not Self-determined. - It is generally thought that we control our thinking, that a course of reasoning is freely determined from within the subject and by the subject. We are no more certain that we form our own purposes than we are that we direct our thought, e.g. in the solving of a problem. We believe that we determine the successive steps. But is this conviction well founded? All of us have had thoughts thrust upon us. Sometimes in the consideration of a difficult subject, an idea has come to us which was not, so far as we could see, logically connected with anything which we had previously thought. At other times, thoughts which were quite foreign to the subject in hand would occupy our attention and we could not free ourselves from them; they annoyed us by their persistent interference. How can such experiences be shown to consist with psychical freedom? we are self-determined, if our rational activity is ours in the sense that it is determined from within us and by us, what shall we say of these experiences? The Determinist

insists that they can only be explained if we shall accept his theory, that rational activity is externally determined.

- 3. The Asserted Universality of Causal, or External, Determination. It is an accepted principle of science that the universe is subject to the law of external determination. Science proceeds upon this assumption; and its conclusions are verified by the course of events. There is no reason for believing that this assumption will ever lead to erroneous scientific conclusions. In our commerce with things, we assume that objects are changed by action upon them from without, so that what they shall do or become is determined by external influences, and this assumption does not lead to confusing consequences. This law certainly holds true for descriptions and forecasts of all processes, except those in which will is present. Why make the volitional process an exception? Why exempt it from the law of external determination?
- 4. Character. Character is to be reckoned with in our study of choice. We have a special liking for certain objects and situations; we think of them as having peculiar value. There can be no doubt but that we are influenced by these objects and situations. One has a love for study; another dislikes study, but is happy in conducting business undertakings. One loves pure and uplifting associations; another finds such associations unbearable. Some men give so great value to selfish projects and vicious relations that it is extremely difficult for them to choose against their selfish tendencies and the gratification of low passions. Many assert, with show of truth, that they cannot, in these things, choose other than as they do. Others give greater value to virtuous relations and to a life of helpfulness; and they could scarcely bring themselves to make choice of degrading associations or to withhold help from the needy. Is it not evident that, our charac-

ter being what it is, we are determined in our choices by accordant objects and situations? This much is certain, character determines choice.

This agrees with the fact that we explain the conduct of others by referring it causally to their character and circumstances. If any particular act of one whom we know well cannot be adequately explained thus, if it is not of a kind with the past of that individual's life, we explain it by saying: "He was not himself," or "There was something in the circumstances which is not known to us," or "He has changed." Each of these explanations is based upon the assumption that character and circumstances determine conduct.

- 5. Conclusions. From facts like those presented above, important deterministic conclusions are drawn.
- (1) Some conclude that all our activities are determined mechanically. This was the view of the older associational Psychology. Associationism has been generally discarded, but traces of it appear in relatively recent writings. That school held that our consciousness of freedom in willing and with it all other complex ideas are the result of a purely mechanical self-combining of elemental ideas; and that these elemental ideas are the product of physical stimuli acting upon our sense-organs. These elemental ideas are given to us, we do not in any way determine them; and, when they become ours, they combine by fixed laws into thinking, feeling, and purposing elements of consciousness. All our rational processes are wrought for us, not by us. Our judgments of fact, of value, and of purpose are terms in a fixed mechanical series; and there is no place for freedom in that series. According to this doctrine, we no more determine our thoughts and purposes than the thistle-down floating in the air determines its course.

- (2) Others conclude that volition is determined by the strongest motive, and that this motive is itself determined by the subject's birth-character and the circumstances within which his life has been lived up to the moment of any choice. It is urged that we have no choice as to our birth-character, and none as to the circumstances of life preceding self-consciousness, and little choice for some time after. But these initial factors—the birth-character and the earliest circumstances of life—determine our volitions ever after, for they determine the nature of the motives which shall have most power over us. These factors exclude freedom during the earliest stages of the development of character, and there is no door left for freedom to enter afterward.
- § 188. Determinism Criticised. I. General. The argument for Determinism is cumulative, and it would be unfair to reject this theory because it could be shown that each separate averment is insufficient to establish the doctrine. This could be done. For example, the fact that thought appears at times to be determined for the self, not by the self, is readily explained as mental activity which is not wholly normal. We deem such experiences exceptional. In these exceptional experiences, we are usually conscious of an inner struggle, accompanied by a feeling that we owe it to ourselves to retain mastery of our thought; and sometimes we succeed in reëstablishing such control. These facts accord with the view that such experiences are not to be accounted truly normal. Upon what ground should we permit experience which is not normal to determine our interpretation of normal experience? But we will not deal with the separate counts in the argument for Determinism; for this theory must stand or fall by reason of the validity or invalidity of its fundamental conception. For it, the dis-

tinguished elements of experience — as desire and motive — are distinct from each other; motive is treated as though it were distinct from the self; and all processes are thought of as purely mechanical and are regarded as due to phenomenal cause. The pertinence of this criticism will appear in what follows; but we call attention at this point to the fact that phenomenal cause is not an adequate philosophical conception, and to the further fact that the phases of mental activity are not externally related. The phases of rationality are organically related; to treat them as terms in mechanical relation is to open the way to grave error.

- 2. Is our Sense of Freedom an Illusion? Determinists acknowledge that we think we are free in volition; but they deem this an illusion. According to this theory, the order of the universe imposes this illusion upon all men; and, in doing this, it contradicts itself, for it imposes upon me belief that I am free and, at the same time, forces me to infer from other particulars that I am not free. this were true, it would follow that the fundamental order of the universe is untrustworthy; and universal scepticism is the only consistent conclusion. But the inference that the consciousness of freedom is an illusion is more open to doubt than the consciousness itself. In knowing myself as purposing, I know myself as free. Doubt of the validity of this cognition of self is an inference, and it is based upon the assumption that all processes are solely mechanical. This hypothesis, that all changes are solely mechanical, does not have general acceptance among philosophers. Determinism asks us to give greater weight to an inference based upon a disputed hypothesis than we give to a primary cognition. We decline to do so.
- 3. Determination misconceives the Process in the Constitution of Character. It declares (1) that we have a

birth-character; (2) that subsequent to birth, character is determined by environment. Our congenital temperament is not character; it is material which the self utilizes in organizing character. As to our being determined by circumstances, we must never forget that the subject is not a mere passive recipient of influences from environment. We are not simply acted upon by the outer world and its occurrences; we utilize the external world, its objects and incidents. The self coordinates its impulses, dispositions, desires, and cognitions; and it relates circumstances, opportunities, hindrances, and all other environing particulars to itself. We determine the value for ourselves of objects and circumstances. In this coordinating, relating, and valuing activity, we organize our character; and the organizing activity is the activity of a person, i.e. of a self-determining individuum. The theory under consideration misconceives character.

4. Determinism misconceives the Relation of Character and the Self to Desires and Motives. - It speaks of the self as "having desires" and as "impelled by motives"; and Determinists are wont to say that "the will is determined by the strongest motive," as though desires and motives existed apart from and independent of the self and could have mastery over the self. Desire is the self's longing for satisfaction - e.g. the student's longing for mental satisfaction; motive is the self's longing, thought of as stirring one to discover means for attaining satisfaction. Subjectively regarded, desire and motive have their being in the self. An objective desire or motive is constituted such by the subject. He identifies the desired object with his longing for satisfaction; for example, the hungry boy concludes that a bag of peanuts will give him satisfaction. The possession of the desired object is thus constituted a motive. The young man makes the

attainment of an education his motive. An objective motive can only become such, because the subject constitutes it the end of his endeavor. Desires and motives are what they are because the character of the subject is what it is. They become desires and motives because of the activity of the self, and they are expressions of the activity of the subject. Determinism represents them as controlling the subject; the truth is that the self determines them, both as to being and characteristics.

- 5. Determinism leaves Activity without Ethical Quality. If a man's volitions are determined by what is external to him, his choices and conduct are not his in the sense which Ethics demands. They are imposed upon him, and he is powerless to resist or to make them other than they are. In that case, the words "ought" and "moral" have their origin in illusion. We are not even permitted to say that these words should be eliminated from speech, and the corresponding ideas from thought; because "ought" is implied in "should."
- § 189. Self-determinism. From the preceding discussion, we conclude that our psychical life is a developing system. The systematizing principle is our own self-directivity seeking the realization of ends. The activity and the direction of it have their origin in the self; its systematic and coherent character show it to be determined.
- I. Self-determinism agrees with the Volitional Consciousness. In deliberation, our self-awareness is of the self as conducting the deliberation and closing it off. We know ourselves as framing the purpose-judgment with which deliberation is cut off. I am determining how I shall spend my vacation. A friend suggests a European trip; I had thought of a quiet time in the mountains. The deliberative process in which I balance the values for me

of the trip and the restful quiet is mine; and the judgment with which I close the deliberation is mine, whether that judgment is to put off the decision, or to go to Europe, or to rest in the mountains. The concluding judgment is ours. This holds even though the judgment be to accede to the request, advice, or demand of another; for in that case we know ourselves as making the decision to accede. In all the process, the subject knows himself as a self-determining Ego.

- 2. Self-determinism agrees with our Sense of Responsibility for our Deliberative Acts. - It is often argued that we are not responsible, that we are not to be praised or blamed, if our acts are externally determined. That is not what is here urged; it seems better to follow the order of the development of the sense of responsibility. This much is certain: we deem ourselves responsible for certain acts, and we hold others responsible for acts to which they are similarly related, and we adjudge the fact and the degree of responsibility by the fact and the degree of self-determination. Responsibility always goes with deliberative acts, and is based upon the consciousness that such acts have their origin in us. If we judge that a man has become a slave of passion or habit, this may mitigate the severity of our adverse judgment in the instance of some present act of his; but we hold him responsible for his present character so far, at least, as we believe it would have been possible for him to have developed a different character. Our sense of responsibility has its origin in our sense of self-determination.
- 3. Self-determinism agrees with the General Affirmation of Volitional Freedom. This much is certain: men have generally believed that they were free, that their decisions were freely determined by themselves. They have praised or blamed others, and have justified themselves for doing

so upon the ground that those whom they praised or blamed might have chosen to act otherwise than as they Self-determinism agrees with this. It holds that each of us determines his thinking and judging; and that we do so by determining the relation to ourselves of what is external to us. What the outer world shall be for my conduct of life is fixed by me. The objects of the world condition my treatment of them; if I use them, I must have regard to their qualities. But, by taking advantage of their ways of behaving, I adapt them to my purposes. Their fixed modes of behavior make my free activity effective. We have also concluded that the character of an individual is organized by the individual himself. These conclusions — that each of us determines the relations of the objects of the outer world to his thinking and his purposing and to much of his objective activity, and that we organize our own characters - agree with the consciousness of volitional freedom.

4. Self-determinism does not ignore the Law of Mechanical Causality. — The action of the will is purposive; it has respect to ends; and it would be ineffectual if there were no fixed, or determined, order. We secure our ends by relating the fixed order of the external world to our purposes. (See §§ 156, 2; 184, 1.) It is also true that our activity becomes extended and effectual in the degree to which we establish an order of physical and psychical reactions in our organism. Such established order gives expertness to the type-writer; and it is the source of the genius of the musician, artist, public speaker, and author. This order is always in the making; its ideal is the complete systematization of our activities. The more nearly one approaches this ideal, the more uniform is his conduct. Viewed from without, the conduct of others appears to be determined; we are surprised if one whom we

know takes a course which seems to differ from what has been habitual with him. Two things contribute to give conduct this fixed mechanical aspect: (1) We see the life of another from outside it, and it appears in stages which seem to be external to each other; and (2) Character develops through the systematizing of our activities, and this makes for a regularity in conduct which comports with mechanical determination.

5. An Objection. — "According to Self-determinism, the self that chooses has developed a character, he has developed a certain mode of relating himself to objects. One's choice in any instance is, therefore, determined by the character which he has acquired. In other words, a man is the bondman of his past."

(I) This objection errs in its conception of character;

it thinks of character as static in the instant of valuing and purposing. You have to arrive at a decision, possibly one of great import to you. The person who advances this objection thinks of you as coming to the time of decision with a character already developed; and he conceives your decision to be determined by a character acquired previous to the time of deliberation and decision. This is a serious misconception. Character is not static even for an instant; it is "in the making" in the instant and act of valuing and purposing. New situations are constantly in presentation, and the subject organizes character in his relating these new situations to himself. Every moment of life has in it new situations and outlooks and a developing character. Character determines while it is developing; and it develops in the choosing. The character which determines the choice of an instant is the forming character of the instant. In that developing character, we have a past character and the self-

determining self in a new situation with new outlooks.

Doubtless we tend to maintain the general characteristics of our present rational habitude. Stability of character is generally thought to be a token of maturity; and we are surprised if the generous person becomes penurious, or the haughty humble. But character is always forming, never formed; and this, together with the fact that it is self-determined, makes it so that the subject is not in any instant the mere bondman of his past.

(2) It occurs not seldom that the conduct of persons in particular cases does not accord with their past; and in many instances a transformation of character takes place. Miserly, pitiless men have been known, in exceptional cases, to be generous; and persons who were regarded as kind have said and done what was inexcusably cruel. There are instances of lapses from virtuous life, even in vigorous maturity; and cases of conversion and reform are indubitable. These facts make against the objection; but self-determinism finds a place and a possible explanation for such facts.

It is possible that there was in the character of one who has thus changed, some element which had not been previously so organized into his character as to affect conscious activity sufficiently to become manifest in conduct; and, in relating some new situation to himself, he brings this quality to the fore. He may, or may not, give this element permanent importance. It is also possible that, in his new view of objects and courses of conduct, he may temporarily or permanently assign a different relative value to objects and ideals from that which he had previously given them. These explanations are possible because character is never made, but is always "in the making."

§ 190. Perfect Freedom.—1. Psychical Freedom.— The process in the formation of character is a process of coördinating impulses and desires. The perfectly free person would be the person who had completed this coordination, and who had organized all his activities into a perfectly cohering system in accordance with the ground principle of personality. That person would experience no subjective limitations. Since his activities would be perfectly systematized, they would be harmonious; as the system is determined by the ground principle of personality, he would be free; for freedom is an attribute of personality. Psychical Freedom is implicit in us at birth; normally it develops toward complete systematization of our activities.

2. Ethical Freedom. — Is the man who chooses what is unreasonable and evil, free? Psychical Freedom requires that the psychical activities shall be in perfect harmony with the ground principle of Personality. Ethical Freedom demands that the individual's system of rational activities shall agree with the system of the universe, that its principle shall be the same with the fundamental order of the cosmos. For us, this order is the expression of the perfect Personality; it is rational and good. Man, therefore, attains freedom to the degree in which his estimates of value accord with the cosmic gradation of values, with the actual relative values of objects and ideals. If he shall determine his conduct by these values, he does not come into permanent confusion. He becomes free to the extent to which he is at one with the fundamental order of the universe; for to that extent this order ceases to limit him. This fundamental order is the expression of the perfect Reality; hence, man becomes free as he comes to be at one with the perfect Reality. As that Reality is reasonable and good, the man who chooses the unreasonable and evil is not free.

CHAPTER XL

THE EXISTENCE OF GOD

§ 191. Introductory. — Early in our study we said that three great topics had occupied the attention of philosophers: The Object — i.e. the world of persons, things, and events; The Subject, who is conscious of the objects and of self; and The Religious Consciousness. We have confined our study to the first two of these topics. A systematic consideration of the religious consciousness would yield a Philosophy of Religion. In the limits assigned us, we cannot do more than give an introduction to one of the many questions which are discussed in constructing a Philosophy of the religious consciousness, viz., the question of the existence of God. Even in the study of this one question we are forced to recognize limitations, and thus to forego the advantage of a historical sketch setting forth the various arguments by which thinkers have undertaken to justify their affirmation of the reality of God. A consideration of these arguments and of the criticisms to which they have been subjected would be both interesting and valuable. But for this we must refer the student to works which treat the subject more at large. A few of these are named in our list of references.

It is not the purpose of the present chapter to originate faith in God. In fact, it is not the duty of Philosophy to originate faith; it is its province to examine beliefs in order to discover whether they stand justified in the court of reason. Belief in God is here; it develops in the development of the religious consciousness, and it persists.

The nature of this belief is such that, if true, it is of the highest importance. Attempts have been made to oust it; but reason has always demanded a substitute, and no substitute has been able to satisfy all the facts of experience. This is a case in which doubt should be required not merely to set forth reasons for its scepticism, but also to do full justice to the religious consciousness and to experience in general.

The question to which we give an introductory answer in this chapter is this: What are some of the experiential facts which justify us in retaining belief in the existence of God? It will be noted that we only set forth some of these facts. We cannot note all; for, if God is, it follows of necessity that the whole process of the world and history, and all the particulars of experience rightly read, reveal Him. By God we mean the perfect spiritual Being, the self-subsistent One, the Ground of being and activity. Since He is conceived as the self-subsistent One, we speak of Him as the Absolute; and we wish the term Absolute when used in this work to have this meaning assigned to it.

§ 192. The Religious Consciousness.— I. The Fact of the Religious Consciousness is Indisputable. — This element of experience has been potent in the history and development of man. The having a religious consciousness is not simply a characteristic of individuals; it is a racial characteristic. If exceptions appear, the exceptional individuals or peoples are to be accounted as lacking a characteristic essential to fully developed human self-hood. A person who does not respond to music or the figures and rhythm of poetry is without a phase of experience which is essential to the full life of man. By the general consent of mankind, the lack of a religious consciousness would be a still greater defect.

- 2. A Marked Characteristic of this Experience is a Sense of Dependence. - We feel that we do not have the full control of our own affairs. Men believe that all events do not occur by mere chance, that they are made to occur often by some other than ourselves; and this is true of matters in which we are immediately interested. As thus described, this consciousness of dependence is not distinctly religious. But it is not found by itself; it is accompanied by a belief in the presence and activity of an invisible power or powers. Men have felt that they were living in a world where "higher powers" have to do with the management of human affairs. This feeling of dependence on a "higher power" has developed a desire to stand right with this power; and this desire expresses itself in worship. The object or objects of worship are always thought of as superior in some respect to the things of sense, and of a higher nature than man. This feeling, with its impulsion to worship, is not regarded by man as a byproduct of life, a negligible accompaniment of experience. On the contrary, it is thought to be of chief importance; and, being thus regarded, it has had great impelling force. The religious consciousness, of which this sense of dependence upon the super-human is the heart, has determined the ethical principles and social organization of peoples; it has given the highest ideals to literature and has influenced law and governmental forms and national activities.
- 3. The Religious Consciousness Demands an Object of Faith.— By this we mean that the religiously revered object must be thought of as a known reality. Mystery always attends man's thought of the object of religious veneration. There is a tacit or open acknowledgment that the higher nature of what is worshipped makes it impossible for us to attain complete knowledge of it; but

the object of worship cannot be wholly undefined. Only that can be real for us of which we have, or believe we have, some knowledge. Religious consciousness is not a matter merely of the feelings, nor of the will, nor of both feeling and will; it is of the whole self. To eliminate intellection from it, is to make it the consciousness of a partial self; and a partial self is in fact no self at all. We repeat here what we have previously insisted upon: man is a thinking-feeling-willing being. Man must have some idea of the object of his worship. One cannot worship "a mental vacuum"; one cannot relate the conduct of life to that of which he has no knowledge. An object of faith, of which something is believed to be known, is essential to the religious consciousness. The Greek gods did not become objects of really definite belief; and, as a result, the religious consciousness of the Greeks was relatively weak, and it had little influence over life. When this phase of consciousness is well developed, it assigns to the revered object a much higher degree of reality than to any object of sense; and it thinks of that object in descriptive terms, for man can only think thus.

4. The Religious Consciousness seeks a Unifying Reality. — Our experiences in dealing with the world of nature are many and greatly varied; and the world realities are many. The scientist groups the many changes and objects which he studies. He collects objects into classes, and so unifies them; and he unifies changes and expresses their unity in statements of natural law. He carries this unification as far as he can. The first groups — as species — are unified into a more inclusive group — as genus; and this larger group into a yet more comprehensive group — as family; and so on. There is a tendency, rather a distinct effort, to effect a similar unification of changes. Thus, evolution is taken as including a number of orders

of change — selection, heredity, etc. It is also accepted that the different sciences have a unity which demands recognition; and scientists recognize the structural unity of all sciences. In this more comprehensive view, exact scientific thought conceives the myriad objects and changes which it studies to be realities and changes of a unity. Even the Plain Man has a notion, vague to be sure, that all these things with which he has to do, belong together.

The religious consciousness evinces the same tendency. In the lowest forms of religion, there are many objects of reverence; and each of these objects stands for the relating of many experiences. The experiences connected with war are related, in respect of their religious aspect, to the god of war; experiences in connection with sowing and reaping, to the god of the harvest. In each of these objects of religious reverence, the religious consciousness has unified many experiences. Thus, the religious conceptions represented in the many gods of Egypt became unified in Râ, the god of light. This movement toward unity in and through the religious consciousness finds its completest expression in monotheism. The religious consciousness, judged by its highest stage of development, would relate all its experiences to one Supreme Being. It believes that its hopes are forwarded, its successes secured, its assurances sustained, its fears quieted, its failures repaired, and its doubts resolved, only when the subject of these experiences is in right relation with the Supreme, in real accord with the activity of God.

5. This Consciousness demands a Personal Object of Faith. — The object of worship must be one with whom the worshipper may have communication. Worship finds its incentive and meaning in the desire for communion with the super-human; and it seeks such communion with a view to securing rest of heart and support in life. This is

obviously true of the more distinctly spiritual worship; that is, worship in which there is the least of fixed ritual. But it holds also for worship which is ritualistic, for that centres about the idea of sacrifice and the kindred idea of sacrament. The element of sacrifice is significant of the thought of the worshipper, alike in the worship of primitive peoples and of those who are most highly cultured. Sacrifice is offered in order that communion with God may be made possible; and in the sacrificial meal, the worshipper partakes with the divine, or of the divine. In the sacramental idea, there is at least the conception of the binding of the worshipper to God through covenant. The perfect religion, that which would fulfil the highest aspirations of the religious consciousness, would involve immediate fellowship with the "higher power"; it would find its life and its satisfaction in conscious communion with the object of religious reverence.

It is this which gives religion so great power in the life of the genuine worshipper; he believes that he has entered into fellowhip with God. "Spiritual growth is brought about by the impact of nobler souls on ours." It is not only true that he who lives in communion with those whose life is higher than his own rises with them; but it is also true that he would who rise, seeks such companionship. The religious instinct follows this order and will not be turned aside. Definite religious experience is always attributed, by those who have it, to their having come into intimate relation with a higher reality. This requires that the object of religious reverence shall be personal; for we cannot have real fellowship with what lacks the attributes of personality. Primitive peoples worship natural objects and powers; and the Positivists worship Humanity; but the primitive peoples assign quasi-personality to those natural objects and powers,

and the Positivists do quite the same with Humanity. The religious consciousness seeks communion with the object of worship; in this it conceives the Supreme as personal.

- § 193. The Religious Consciousness Evaluated. 1. What does it signify that the religious consciousness demands a knowable concrete reality as an object of faith, one reality in which all experiences are unified, a personal object so that the worshipper may commune with the object worshipped, a Supreme Being in order that the dependent worshipper may be assured of efficient aid? Is this consciousness the expression of a mere individual desire, or is it a mode of reality and therefore at one with the Ground Reality of the universe? We believe that it is a mode of subject-reality, and that it also expresses what is significant of the world of nature and of racial and individual history. So far as it expresses the significance of our relation to nature and history, objectively regarded, it is a mode of object-reality. If this conception be true, the religious consciousness has equal authority with cognitive consciousness.
- 2. The religious consciousness is implicit in man. This phase of consciousness cannot be alien to the nature of man. It is not found in merely individual experiences; it is characteristic of the race. Individual exceptions may be discovered. There are some persons in whom it seems never to have been developed; and there are others who have confessedly repressed it or neglected to foster it until its presence in consciousness can be scarcely, if at all, recognized. But such persons fail, in this particular, to represent the normal consciousness; just as the blind and the deaf do not represent normal sentient consciousness. The religious consciousness is a characteristic of humanity. It is not a mere datum of our social environ-

ment. We never take "raw" material of experience into our consciousness; we always make over the material which we appropriate, and we assimilate it to our mental constitution. Some one is speaking. Air waves stimulate our auditory sense-organs; but, for our consciousness, those air waves are ideas. The "raw" material proffered to sense becomes, in our appropriation and assimilation of it, something quite other than that which stimulated our sense-organs. It has been assimilated to our rational nature. It is thus with all that becomes constituent of consciousness. The religious consciousness cannot be an exception; it is developed in our appropriating and assimilating what comes to us in our experience of the external world. In man's experience of the world of persons, things, and events, he has developed this phase of consciousness; in assimilating the material of experience, he has given it this quality. We must conclude, then, that it is of the nature of man to be religious, since his experiences have a religious aspect. To put it otherwise. the being religious is implicit in man; and, in his appropriation of the material of experience, what was implicit in him becomes explicit. It follows that the religious consciousness is a mode in which subjective reality expresses itself; it is a mode of its being. The requirements of the religious consciousness are, therefore, the requirements of rationality.

3. Consciousness of God is implicit. This consciousness has not been communicated to man from without. Man does not first hear of God and then become religious. Consciousness of the super-human is a primal and persistent element of the religious consciousness. If the consciousness of God, or of what is regarded as God, becomes dulled, the force of religious aspiration and impulse is lessened, and religion loses its supreme place in life and its influence over

life. For reasons similar to those advanced in the last paragraph, we hold that consciousness of God is implicit in man. Whatever aids the development of this consciousness is in harmony with the nature of man; it aids in bringing subjective reality to effective development. The requirements of this consciousness are the requirements of rationality.

4. The religious characteristic of consciousness accords with the significance of objective reality. We have insisted that man gives a religious quality to the "raw" material of experience. A question naturally follows: Is this religious significance foreign to the objective world? We do not ask as to whether the world of nature and history, racial and individual, is distinctly religious. What we wish to know may be stated thus: Is the religious consciousness in its nature alien to the significance of the world?

We have given reasons for holding that the mind does not contribute to the known object what is alien to that object (§ 98, 2 (2)). It is true that we may err in particular instances; and a whole age may err respecting an object of thought. But even in these instances there is some knowledge of reality. The point which we made in § 98 was that the cognitive act as such does not contribute to knowledge what is alien to the object. One assumption underlies all our consideration of experience and must precede all reflective thought; viz., that the world and life are intelligible. We do not assume that any one person or age will have complete knowledge of the world and life; but that the world and life are intelligible and may be known. Thought cannot begin without this assumption. That the world of nature and history may be intelligible, it is necessary that objective reality shall express itself in modes which are not alien to the modes in which the mind acts. The world in relation with which man has experience and develops consciousness comes to expression in consciousness. The consciousness which is thus developed has a religious quality; for it, life in this world has a religious significance. It must be, then, that at least some of the situations and relations in which objective reality expresses itself have a religious significance. The religious phase of consciousness is not alien to the significance of the world of history and nature.

5. When we compare the requirements of the religious consciousness with the conclusions to which we were led by our study of the categories, it becomes manifest that the objective world is at ground in harmony with the religious consciousness. The categories are the forms of reality, the forms of its being and its activity; they are at once the forms in which we experience the world and the forms in which reality expresses itself. The religious consciousness requires for its satisfaction the unification of experiences; and the highest development of this consciousness finds the ground of harmonious, restful experience in a Personal God, of whom and in whom the universe is. Our study of the categories led us to conclude that there is one ultimate reality; that the ultimate reality is the Absolute Individual, the Perfect Person; that the myriad objects and changes of the world, and the varied experiences of individuals find their unity in Him; that society is grounded in Him - in a word, that He is the unification and explanation of all experience. The religious consciousness demands a God in whom all experiences are unified. Our study of reality concludes that all modes of being and activity, all modes of experience, are thus unified. According to this, the religious consciousness is not a purely subjective longing; it is one of the modes of reality, and its requirements have the value for reason that reality has.

6. Men have given a specific religious significance to certain experiences. We aspire to rise to a nobler estate of self-hood; we strive and are often forced to confess failure. At the best, we acknowledge that the task felt to be a worthy one - has not yet been completed. We are convinced that the true, the highest interpretation of life is that there is something better for us than the struggle for objects of sense, or mere intellectual attainment, or position of power. Above all these, there is something of infinitely greater moment for us. Our conception of this better object of thought and endeavor may be vague, and our definition of it unsatisfactory even to us; but in our best moments we have no doubt of its reality. The vanity of things of sense, the incapacity of mere knowledge to fit one to enjoy others and to be gladdened by their gain - such experiences as these and those just named above lead our thoughts above the world in which and for which much of our life is lived. When we are at our best, we are convinced that, if we and all others should get a vision of the true end of life and should be obedient to that vision, the very struggle to actualize that ideal would be better than to be content with seeking what most of us too easily make the end of life. These are not mere illusions, pure vaporings; they are man's interpretation of the meaning of his being in the universe, his interpretation of the significance of his experience of the world of persons, things, and events; and they are not alien to that world.

These experiences go to sustain our contention that the religious consciousness is at one with the order of the universe. Consciousness of the need of an aim that is worthy the self has in it a religious element; and men have turned

to religion to learn how they may surely attain the true end of life. They have sought fellowship with God, as One who knew them and the world. And the most deeply religious declare that in this fellowship they have been lifted above their lower selves and have been inspired to attain a higher self-hood. They attest that they have been joined to an ideal which, although never perfectly realized by them, has been of inestimable value. They testify that in this fellowship they have been aroused to seek the best and have been aided in the search; and they have found peace. Since these experiences tend to incite man to seek what he believes to be highest and best, they are obviously at one with the law of development. The individual may err in judging what is highest. But to be responsive to what one deems to be the highest is the true test of self-hood; and the religious consciousness makes for that. If the end of experience is the development in man of the highest expression of finite personality, and we believe that it is, then the religious consciousness must be regarded as being in the order of the universe. We conclude, therefore, that it has the same value for reflective thought that the order of the universe has.

§ 194. Conclusion. — We have found that the requirements of the religious consciousness in general and of the consciousness of God in particular are requirements of rationality. We have also found that the religious consciousness is one of the modes of reality, both subjectively and objectively expressed, and that its requirements have the value for reason that any other expression of reality has. We have likewise learned that the religious consciousness is at one with the order of the universe, and that definite, constructive, religious experience is in the order of the universe. We conclude, therefore, that religious experience has the value for reflective thought that the order

of the universe has. The acceptance of the reality of the one God, personal and supreme, a God with whom man may have communion, is a demand of the religious consciousness. Hence, we retain, as an article of philosophic faith, our belief that God, the Perfect Personality, the Absolute Individual, is, and is the Ground of being and activity. "In Him we live and move and have our being."

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ABBREVIATIONS

The following abbreviations will be used in the instance of works more frequently referred to:—

Bosanquet, Logic = Bosanquet's Logic, 2d ed.

Bosanquet, *Individuality* = Bosanquet's Principle of Individuality and Value, Gifford Lectures for 1911.

Bowne, Metaphysics = Bowne's Metaphysics, rev. ed.

Bradley, Appearance = Bradley's Appearance and Reality, 2d ed.

CAIRD, Kant = Caird's Critical Philosophy of Kant, 2d ed.

Calkins, Persistent Problems = Calkins's Persistent Problems of Philosophy, 2d ed.

CREIGHTON, Logic = Creighton's Introductory Logic, 3d ed.

Enc. Brit. = Encyclopædia Britannica, 11th ed.

LADD, Reality = Ladd's Theory of Reality.

New Int. Enc. = The New International Encyclopædia.

Ormond, Foundations = Ormond's Foundations of Knowledge.

Phil. Rev. = The Philosophical Review.

TAYLOR, Metaphysics = Taylor's Elements of Metaphysics, 2d ed.

WATSON, Outline = Watson's Outline of Philosophy, 3d ed.

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Rogers, Student's History of Philosophy.

Turner, History of Philosophy, — especially valuable for Mediæval Philosophy.

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CHAPTERS XVIII AND XIX

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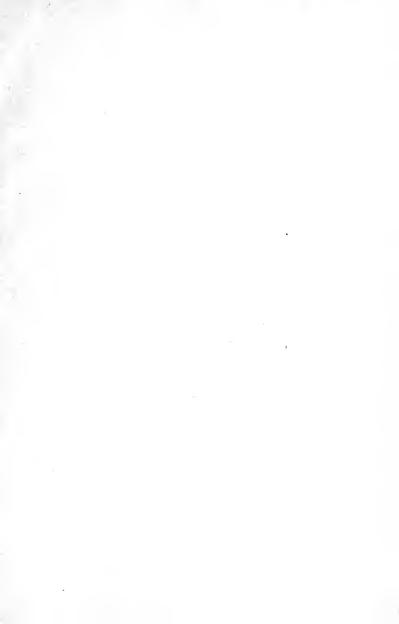
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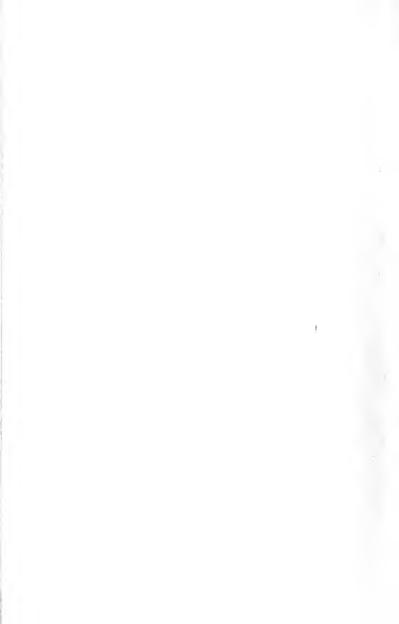
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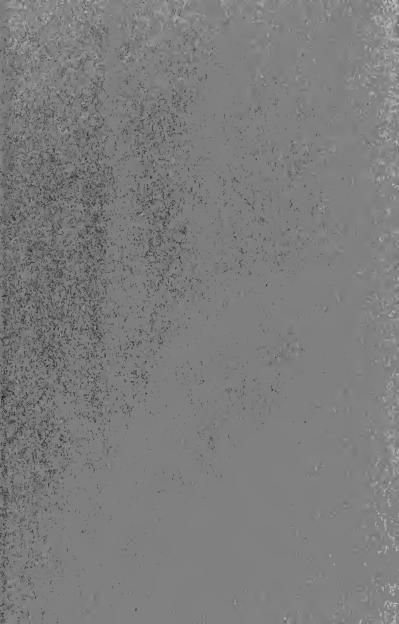




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