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PERSONAL REALISM

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The Psychology of Religious Belief
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Essays in Critical Realism
(Written in collaboration with six others)
The Religious Consciousness
Matter and Spirit
The Pilgrimage of Buddhism
Adventures in Philosophy and Religion
Personal Realism

PERSONAL REALISM

by

JAMES BISSETT PRATT

NEW YORK
THE MACMILLAN COMPANY
1937

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To

THE HUNDREDS OF BELOVED STUDENTS

AT WILLIAMS COLLEGE

WHO THESE THIRTY YEARS AND MORE

HAVE AIDED ME IN MY THINKING

AND CONTRIBUTED TO THE WRITING OF THIS BOOK

MORE THAN THEY WILL EVER GUESS

PREFACE

EVER since the *Essays in Critical Realism* appeared, in 1920, I have looked forward to an opportunity for expressing more fully than I did in that volume, my personal and matured views upon the epistemological problems there dealt with. Such a final expression I have, for these seventeen years, steadily postponed because my views, most annoyingly, have steadily kept on maturing. Upon certain aspects of the central problem of knowledge my thought has become more clear; but the major portion of the "maturing" has had to do with the presuppositions and with the consequences of the type of epistemology which my colleagues and I championed in the *Essays*. In the following pages I have set down a definite statement of such conclusions upon these matters as I have at present reached: not with the expectation that my thought will now cease from further developing, but because I realize that if I wait until it has done so I shall then be so far in my dotage as to be unable to write any book whatever.

The major problems which seem to be presupposed in any thorough discussion of realistic epistemology I have tried to deal with in the very dull chapters from II to X. Then follow four or five chapters upon the problem of knowledge in its explicit and technical form; while the remainder of the book is devoted to an exposition of the metaphysical consequences which seem to me to follow naturally, if not with absolute logical necessity, from the position maintained by Critical (or Dualistic) Realism.

In going on to these metaphysical conclusions I have been forced, reluctantly and regretfully, to part company with some of my colleagues of the *Essays*. I have long felt that the naturalistic consequences sometimes drawn from Critical Realism were not justified; and that our doctrine of knowledge pointed, rather, in a direction quite different from that of Naturalism and was bound, in fact, to lead ultimately to a conception of the partial independence and spontaneity of mind and of the reality of a substantial self.

Hence the title of this book—"Personal Realism"; for its aim is to defend both Realism and the actuality of the individual. Some years ago there appeared—from the pens of several very able writers—an admirable book entitled *Personal Idealism*. The book has always seemed to me a noble example of self-defeat. For, at any rate, a very good argument could be put forward to show that the Kantian Idealism which it presupposed rendered nugatory its spirited defense of the concept of personality. As Professor Perry has said, "once the Kantian theory of knowledge is accepted, Personal Idealism is on a slippery inclined plane with the Absolute waiting at the bottom." It is my belief that the only trustworthy defense of the reality of self, of a metaphysically grounded individualism, must be based upon a realistic epistemology.

It has not been my hope, nor is it my aim, to settle definitively all the problems here discussed, to say the last word or expound dogmatically the ultimate truth. My own thought changes too rapidly for me even to wish that all might agree with the conclusions of this book. Before the first reviews appear I may well have come to regret some of my assertions and many of my omissions. My more modest aim has been to make clear one consistent and tentative point of view concerning some of the ultimate problems of knowledge and reality. It is the function of the philosopher to *suggest;* and

to make his suggestions as logical and as persuasive as he may. In presenting my book to the reader I would simply say: Here is one possible way of looking at the Universe. *If* you take the general point of view here suggested, you will find that it throws light on these and these subordinate problems, that it presents one harmonious way of viewing a number of things. It may be quite mistaken, but I believe it is at least a self-consistent whole. It is one, though only one, of several possible ways of conceiving the world we live in. Do not take it—and do not think that I take it—as dogmatic or final truth: but, I pray you, do two things with it. First, try sympathetically to understand it; and then compare it with the other views which are its rivals, and see which, to your own thought, seems, all in all, to be the most probable.

I particularly hope that the book will have an unprejudiced reading among the younger philosophers of our time, who are just beginning their serious and individual thinking about the nature of our world. The older men who disagree with me will doubtless die in their sins; but there is hope for the young. Whether or not any large number of them can agree with my conclusions, I hope at least they will be encouraged by it to challenge the easy and dogmatic assertions of a highly overestimated Naturalism. If they refuse to be duped by impressive and conventional words and demand reasons instead of dogmas, the course of thought in the coming generation will at least be free of the self-imposed and needless fetters that have bound much of our philosophy in recent years.

My thanks are due to the editors of the Philosophical Review for permitting me to use considerable portions of Chapter XVI, which appeared in the Review for March 1936; and especially to Professor T. H. Procter of Wellesley and Professor L. H. Beals of Williams for the helpful suggestions they gave me after kindly reading considerable por-

tions of my manuscript. To my colleague, Professor J. W. Miller, I am also greatly indebted for the constant stimulation I have derived from his thought, and for the constant and wholesome reminder it has given me that my way of thinking is not the only way.

JAMES BISSETT PRATT

Williamstown, Mass.
January, 1937

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CHAPTER I

THE TASK OF PHILOSOPHY

BEFORE beginning a work upon philosophy the reader has a right to know how the author conceives his subject. There are two principal views of the nature of philosophy, and one's choice between them will very largely determine one's position upon the extent of the field and the problems involved, the methods to be used, and the degree of certainty to which the conclusions aspire. These two opposing conceptions might be called, respectively, the rationalistic and the empirical. The former, as its name implies, rests solely upon *a priori* considerations and logical necessity. For it, philosophy has to do only with what is sometimes called the logical structure of the Universe. It by no means denies experience and existence, but it is interested only in the fundamental and necessary concepts which may be shown to underlie the Real. It studies the categories of Being, the concepts that are of universal incidence. Philosophy is thus envisaged as a kind of cosmic logic. It is differentiated from science not by content but by method; and the goal which it sets itself, and which it claims in large part to have attained, is absolute certainty. The empirical view of philosophy, on the other hand, while recognizing that the logician as well as the mathematician rightly deals only with the *a priori,* conceives it to be the task of metaphysics to come to what conclusions it can about the total universe. It is interested not merely in the world of concepts but in the world of empirical facts.

It feels free to study not only *Existence* but *existents*. It starts, as does the individual and the race, with experience —or, to be more specific, it starts not with Experience but with many and diverse experiences. These are the things that we human beings are initially sure of. But no individual's experience, and not even the total experience of the human race, is self-explanatory. We long for a more luminous view of reality than our partial experiences can supply. It is the task of thought to put together the facts which experience provides, under the guidance of the laws of logic, so as to gain a more nearly complete and self-consistent conception of the real world in which our destinies are cast. To put the matter briefly, it is the task of philosophy to explain experience. If it is to do this it must make use of every method on which it can lay its hands. It is not its duty, in fact it has no right, in its pursuit of this goal, to pass a self-denying ordinance and refuse to make use of any information, whether of an *a priori* or of an empirical sort, which will be of assistance in its work. It recognizes empirical facts as well as logical laws as having a part in the ultimate constitution of the cosmos, and it therefore feels bound to take them into account in its effort to come to some conclusion as to the kind of world we are living in.

Which of these two conceptions of philosophy one shall adopt is determined by several factors. Native disposition may have something to do with it—it is said that we are all born either Platonists or Aristotelians. The chance of one's reading and of one's early philosophic education doubtless has much influence on one's decision. I think rational considerations also play an important part in the matter. At any rate I like to think that my own choice of the empirical view is not due solely to a possibly realistic disposition and to the early influence of William James, but that it has also been largely determined by what seem to me good

and sufficient reasons. It would not be profitable at this point to argue the matter—in a sense the whole of this volume will be an attempt to do that—and I shall here name only two considerations which seem to me decisive.

The first is of a verbal and historical nature. The word philosophy as used by the best writers of English, ever since English writers began using the word, has had a much wider connotation than that to which the rationalists would confine it. And certainly the history of philosophy shows that the long line of thinkers who are universally known as technical philosophers have, with very few exceptions, dealt extensively with problems which were in part empirical. The more important consideration, however, is neither historical nor verbal. It consists, namely, in pointing out an incontestable fact. No one can seriously deny that human nature is so constituted that man is bound to seek for ultimate explanations of his experiences and of the innumerable existent things and events which surround him; and that if there were no study or discipline which, in pursuit of this goal, made use of both empirical and *a priori* methods, we should have to invent one. Doubtless science seeks to offer some of these explanations. But there are problems so ultimate and so complicated that no science does or can attempt to solve them. The "unusually obstinate attempt" to get at the answer to these deep questions with the help of any and every device we can utilize, is an inevitable procedure. This attempt is what has always been known as philosophy; and if the rationalists insist that the word should be used in some other sense, their criticism is at most purely verbal.

One's choice between the two views of philosophy here presented will determine in advance one's attitude toward many metaphysical problems. Most of these must be left for future chapters to discuss, but a few words may profitably be said here concerning two questions which our de-

cision as to the nature of philosophy will automatically settle. One of them has to do with the relation of philosophy to science; the other with the question of certainty and probability.

What I have called the rationalistic view of philosophy makes the distinction between it and science primarily a question of method. On this view science deals with the empirical and existent, philosophy with the *a priori,* and with concepts of universal incidence. No such sharp mode of distinction is possible for the empirical view. For it, both philosophy and science may make use of any methods they find useful. Philosophy has no distinctive method, whether that of limitation to the *a priori* or of Bergsonian intuition. To put it in another fashion, both philosophy and science make use of the one method of rational procedure: they seek clear definition of all relevant matters (in whatever field), and attempt to come to conclusions concerning them by the use of self-consistent thought. If there is to be a distinction, therefore, between science and philosophy, this must be sought not in method but in content. And here let me at once admit that there are some problems in which the line between science and philosophy is by no means clear. Philosophy of the empirical type is not so neat as is the rationalistic. The general principle, however, according to which science and philosophy are to be distinguished by the empiricist is clear enough. Every science is by its nature limited to a definite and circumscribed field, whereas philosophy from its inception has always been characterized by its synoptic view. The physicist as a physicist cannot deal with questions of psychology; the biologist as a biologist cannot deal with questions of chemistry. No scientist can, as a scientist, have anything to say on matters of logical theory. Now it is plain that there are questions, many and large, which lie outside the realm of any one of the sciences.

Some of these are purely logical in nature—those, for example, to which the rationalists would confine the philosopher. Others involve both logical and factual matters, or factual matters which lie within the realm of several sciences. The problem of knowledge, the problem of causation, the problem of the relation of mind and body, the problem of emergent evolution, the problem of the self, the problem of value, are examples. No one science can deal with these problems. Logic alone cannot deal with them. They can be analysed and discussed only by a department of human thought which can transcend the limitations of each and all the sciences, and, using the information which the special sciences can furnish, formulate conclusions which neither logic nor any of the sciences by themselves could have reached.

But while the empirical philosopher has open to him an immensely larger field than has the rationalist, he must enter it with a much more humble spirit than that which his colleague, in his smaller world, is justified in assuming. The rationalist who confines his thought to matters of *a priori* necessity can come—at any rate he may well hope to come—to absolutely certain and demonstrable conclusions. Not so the empirical philosopher. It is the world of existence he is interested in, a world which he admits has a considerable admixture of brute fact, and having committed himself to this world he must submit himself to its laws.

Much of the material upon which he bases his conclusions is simply given him, and he must take it as he finds it. His world is not the eternal Realm of Platonic Ideas, but a bewildering realm of change. Things happen and happen, and though he can write down accurate descriptions of the way they come, he cannot be certain that they will hereafter adopt his descriptions as binding laws. Moreover, his empirical information about the real at any given moment

is partial and fragmentary. Under these circumstances, the only goal that he has any reason or right to set up for philosophy is not certainty but probability. After every conclusion of philosophy outside of pure logic there is placed a question mark. We should hold all our metaphysical opinions (outside of pure logic) forever open to modification. The relevant data are not yet all in and they never will be all in. We empiricists may well envy the godlike certainty of the rationalists, but in the factual world which happens to be our human home and which we have chosen as the object of our investigation, the best we can claim or hope for is a preponderance of probability.

To refer, as I have done, to preponderance of probability, is not to raise the difficult question of the logic of probability. Doubtless there is a distant relation between the logical problem and the judgment of the relative probability of a given theory; but this relation is by no means decisive, and two thinkers who agreed on the logical nature of probability might well disagree on the question which of two hypotheses was the more probable. In determining this latter question the important considerations are such as these: Is each of the rival hypotheses entirely self-consistent? Are both consistent with all the known facts? Which of the two is the more analogous with what we know of the nature of things? Does either of them involve some fantastic supposition, some conception which, while not actually self-contradictory, is out of harmony with the general structure of reality as the slowly matured judgment of civilized man, based on the accumulated experience of centuries, has come to consider it? Finally, which of the two theories is the more economic of hypotheses, and which involves the most superfluous guessing? With tests such as these in hand it is often possible to judge of relative probability between a number of views all of which are theoretically possible.

The admission that a balance of probability is the most that a philosopher can claim for many of his theories is sometimes seized upon by critics of philosophy as a new and damning argument against all metaphysical undertakings. Since philosophy, by its own confession, is unable to yield demonstrably certain truth, why, it is asked, waste our time upon it? Why not confine ourselves to the natural and social sciences, history, economics, and the other studies that yield certainty? The reply that first of all suggests itself to this question is the further question as to where, outside of logic and mathematics, this demonstrable certainty is to be found. Which of the sciences, social or natural, yields any such highly desirable result? Even a superficial examination of each of the sciences will show wide divergencies of opinion among authorities on fundamental matters, and large groups of unverified hypotheses; while a more careful analysis of the situation will show that in the very nature of the case none of the sciences can ever give us complete and demonstrable certainty. The best that any of the sciences can do or ever will be able to do is to point out the balance of probability. And the reason for this is exactly the reason which prevents philosophy from ever doing more: both they and it have to do with empirical, non-deductive data, and no amount of past experience can ever furnish theoretically certain generalizations. The thing is "as broad as it is long." The common nature of philosophy and science sets and limits the goal that is possible for each. Doubtless the immensely vaster realm with which philosophy deals gives to some of its hypotheses a lower degree of probability than that possessed by many scientific ones. But aside from the fact that *some* philosophical hypotheses are more probable than *some* scientific ones, the difference is only one of degree and the principle involved is identical. This same principle applies equally well to history and economics, to

business and finance, and to the factual decisions of courts and juries. For the outcome of none of these classes of investigation is absolute certainty claimed. Only of philosophy, whose realm is so much vaster than any other, is the highest degree of certainty demanded: only for philosophy is modesty of claim regarded as a reproach. And it must be acknowledged that to some extent, philosophy itself is responsible. For the absolutists and rationalists have repeatedly asserted that philosophy is capable of attaining demonstrable certainty, and have insisted that no metaphysical system which fell short of demonstrability was worthy of the name. It is hardly to be wondered at that the reading public have often taken these philosophers at their word; and realizing that no philosophy outside of the realm of logic was able to produce results possessing more than a high degree of probability, have drawn the conclusion that all philosophies are worthless.

Once we see that philosophy's modest goal of a balance of probability is a goal shared by science, legal procedure, and practical life, the accusation that philosophy "never gets you anywhere" loses its sting. Philosophy never gives you conclusions which are not open to an at least theoretical doubt; but neither does any other pursuit of general truth within the existential world. If nothing but the infallible were of value we should, consistently, have to give up not only our philosophy, our science, our law courts, and our practical wisdom, but much of our food stuffs and all of our machinery. My watch *may* not be right. It is fallible and gives me but a high level of probability as to the time. I shall not, however, for that reason throw it away, but by frequently setting and regulating it, I shall try to make it as good an instrument as possible. It will never be perfect, but it is the best timepiece I have.

Philosophy will never be perfect, but it is the best,

the only cosmic timepiece we have. Ultimate questions about the ultimate nature of Reality we men will always be asking. Our practical needs, our sciences ask them. They ask themselves. Why "bother with them"? So long as we are human they will bother us. This being understood, the value of a pursuit which seeks to gain the only kind of answers obtainable can hardly be questioned. It is sometimes said that philosophy presents us with nothing but conflicting theories, whereas the sciences, so far as they go, give us real knowledge concerning the world we live in. I believe that the sciences do give us real knowledge (with the limitations as to theoretical certainty to which I have referred); but I think that philosophy, even with all the divergencies between philosophers, also gives us real knowledge about this world, and knowledge that is equally valid, equally interesting, and far wider and more profound. Philosophers, doubtless, have always disagreed on many points, and on some points they always will; but the study of philosophy teaches us these three very important things: (1) what are the real questions about the cosmos; (2) what are the possible answers to these questions; (3) what, in general, can be said in favor of each of these answers. I submit that the man who has made a thorough study of these three things knows more about the character of our Universe than the man who has learned from the natural sciences many particular facts, but has failed to attain any synoptic vision of the whole.

Chapter II

MEANING

THERE is, perhaps, no other term so fundamental to every philosophical discussion as that which stands at the head of this chapter. And there are very few which are so ambiguous. The inexact, the almost thoughtless way in which this word has been used by the philosophers of our generation and that which preceded it is little short of a disgrace to philosophy. Sometimes we are told that certain ancient thinkers meant infinitely more than they were aware: but little care is given to the query whether "meaning" can have any exact connotation if it be applied to all sorts of things of which one is entirely unconscious. Sometimes it is said that the world consists of meanings, and that nothing is real save significance; but we are not informed what it is that possesses significance nor what this undefined entity is significant of. Miss Calkins enumerates seven uses of the word meaning, and Ogden and Richards give eighteen, all to be found in the writings of reputable and recent thinkers. This wild and blind extension of the word has reached such a pass that some philosophers (and Miss Calkins was among them) advocate the complete banning of the term from all serious philosophical writings.

Indeed we may have to come to that: yet I can hardly see how it would be possible for philosophy really to dispense with the word. It stands for a relation so central that we must have some term to express it. If, however, the word

"meaning" is to be preserved, it is plain that it must be given a specific and exact connotation, and consequently that most of the uses to which the word has been applied must be strenuously avoided. No one individual, of course, can legislate for all on a matter of our common language; but every philosopher who makes use of the term may, and I think should, let it be known in advance just what he is going to "mean" by it. And I am sanguine enough to believe that a little consideration would lead the majority of philosophers to agree on banning from philosophy several of the commoner and more ambiguous uses of the word.

One of these uses which I think should be avoided is that which makes meaning synonymous, or nearly so, with relation. A little reflection should make this evident without elaborate argument. Doubtless every case of meaning involves a relation. But while every meaning is a relation, or, better, a relational quality, it is not true that every relation is a meaning. There is nothing that is unrelated to an infinity of other things; but if it *means* all of these things, it ceases to mean anything in particular; and if that be the case the word becomes entirely useless. Meaning is a relation, but it is a very specific relation and must not be made into a synonym for relation in general.

If some philosophers have thus tended to give the word meaning too wide a connotation, some psychologists have used it in a sense that is both too wide and too narrow. Thus according to Titchener, "meaning, psychologically, is always context: one mental process is the meaning of another mental process if it is that other's context. And context, in this sense, is simply the mental process which accrues to the given process through the situation in which the organism finds itself." [1] I do not know how much of a reservation is intended in the above by the use of the word "psycholog-

[1] *A Textbook of Psychology*, p. 367.

ically." But I do not see how, in the long run, a word can have a given meaning in psychology and not have it in philosophy. And to assert that no mental process can ever *mean* anything save another mental process seems to me a form of expression which, if taken seriously, would give to the word meaning both too wide and too narrow a connotation, and (what is much more serious) would make all discussion, whether in psychology, in philosophy, or in practical life, quite impossible. Such a use of the word, I say, would be too wide; for surely my thought does not mean all of its psychic context; does not mean every mental process which "accrues to the given process." The use is also too narrow, and it is this narrowness that I had in mind when I said that such a view would be incompatible with the acknowledgment of the possibility of discussion. To limit the possible objects which my thought can mean to my own mental processes, and to limit your possible objects to your mental processes, carries with it the unescapable corollary that you and I can never mean the same thing. Since this is so, all discussion, all communication between us becomes impossible. And from this it follows that when Professor Titchener thought he was telling us about the relation known as meaning, he really was talking about one of his own mental processes; and that he never did and never could talk about or mean anything else. Since, moreover, on this view I can never mean anything but my own mental processes, and since his processes and mine are not existentially identical, I can never think about his mental processes, any more than he can think about mine. Thus, as I have said, all communication becomes impossible and all writing of text-books on psychology becomes impossible; and while indeed it would still be open for Professor Titchener to write out for his own amusement his reflections upon his own mental states, no one else could ever read intelligently what

he wrote, for no one could ever mean or think of the things that Professor Titchener was writing about. Clearly a certain amount of objectivity in meaning must be admitted if one is to avoid a position which is essentially solipsistic.

A third unfortunate use of the word meaning should, perhaps, be mentioned, namely that which would include within the meaning of a thinker's assertion all the propositions that can be logically deduced from it. Thus, it is sometimes said, whoever makes a true though very simple assertion about the Real means much more than he realizes. He is unaware of the full meaning of his words. The first man to define a triangle unconsciously meant all the facts about that figure which Euclid and his successors have been able or shall in the endless future be able to deduce. Now of course it is possible to give to the word in question this large extension. But to do so would, so far as I see, answer no useful purpose and would render the word very nearly useless. If we wish to assert, as often we do, that one proposition is deduceable from another, or that several propositions are logically derivable from a definition, it is not difficult for us to do so. We gain nothing but the pleasure of indulging in mild paradox by saying that the given definition or proposition *means* the derivable propositions. And if we extend the use of the word in this fashion, so that a man can perfectly well "mean" an indefinite number of propositions of which he has never dreamed, we shall find our discourse full of ambiguity when we come to employ the word in its common and more exact sense.

For it will be my contention that the word *meaning* has a common and exact connotation which everyone understands and to which it should be confined. Perhaps the simplest experience in which we become aware of it is the experience of *pointing*. The young child wants something. His elders wonder what it is. He points to it. They there-

upon know "what he means." A motorist is finding his way over unknown roads to the capital of Italy. At a fork he finds an arrow pointing to the right, and with it the word *Roma*. The arrow-and-word sign mean Rome to him. Meaning always involves reference beyond the symbol.

Just how far a philosopher should abide by the common uses of the words which he employs as technical terms is a difficult question. There are some who think he should abandon the use of common words when dealing with technical matters and invent new terms, as some of the sciences do. So long, however, as philosophers desire to have enough of a public for their books to induce the publishers to print them, it will be necessary for them to write in something else than technical jargon: hence, for a long time they will still be faced with the problem how far they may venture to limit the meaning of their terms and how far they must accept the common usage. I have suggested that certain limitations be put upon the word meaning; but even with these limitations I think we shall have to recognize, and even adopt from common speech, two related but distinguishable uses of the word under discussion. These two uses will be made clear to the reader by the two following sentences: "Dog means the animal that barks." "No, I do not mean Rome, N.Y. but Rome, Italy." These uses are alike in that both are cases of pointing or outer reference. They differ in this, that the first of them involves a symbol or sign, whereas the second seems to be a direct mental reference without the use of symbols or other means of representation. We shall consider them in turn.

While a self or personal mind can "mean" in the sense of referring to something or thinking of something directly, only a symbol or sign can *have* meaning. "To mean" in this second sense (*i.e.*, to have meaning) is to act as representative, to serve as an instrument for pointing to or indicating

(either for one's own use or, as is usually the case, for others) the object of which one is thinking. This is probably the commonest use of the word. Every complete case of meaning in this sense involves three things: (1) the sign or symbol or representative, (2) the object "meant" which we shall call the referend, and (3) the active, conscious process which is aware of what the symbol refers to.

Symbols acquire their representative quality (their "meaning") through experience; which in one way or another links them (in the mind of the person involved) with their referends. This may be brought about deliberately and more or less arbitrarily, as when a few logicians agree that they will use the sign $\supset$ to mean *"implies."* Most commonly the linking is produced in our minds by certain regular and unintended events through the process known as association-by-contiguity, or by habit. And here let me point out something that may seem arbitrary in my use of the word we are discussing. It is true that common speech often refers to the connection between one experience and another, which has been brought about by the process of conditioning a reflex, as a case of meaning. Thus it is said that to the driver of an automobile a red light "means" *stop.* The conception of meaning which I am presenting would assert that to the learner who has to think what to do at a traffic light, the red light does mean stop; but that for the old hand at the business, whose stop reflex has been so completely conditioned by the red light that his act has become automatic and almost unconscious, the word meaning is inappropriate. I acknowledge that between the two cases there is no sharp line of demarcation, but that seems to be quite irrelevant. Day is not night even though none of us can say when one begins and the other ends. It seems to me worth while to disregard an admittedly common use of the word meaning in order to bring out the very important contrast between

the conscious activity of reference by means of symbols, and the unconscious activity of our nervous systems in cases of conditioned reflex.

A good instance of the way in which verbal symbols come to have meaning is to be found in the experience one goes through in learning the words of a foreign language. At first the German word *Hund* is just a noise in the air. By the processes of association it takes on a representative status: it points one to the animal that barks. This case is typical. And while dealing with this question of the way in which symbols get meaning, it may be well to sound once more the note of caution which the Pragmatists so helpfully sounded at the beginning of the century. The ultimate source of all the meaning that a symbol possesses is experience. The only simple referends we can mean are those we have experienced, and the only compound referends or situations we can mean are those whose qualities or characters we have experienced. The words which we use are really meaningless—just imposing noises—unless we can bring them back to concrete experiences with which in our past they have somehow been linked. Like checks they are valuable only if they can be cashed; and the only coin of the realm of meaning is experience. The most inclusive and cosmical and fundamental of concepts get their meaning for the individual who uses them from concrete and individual events within his conscious awareness. In Reality as such, concepts of universal incidence, fundamental logical and mathematical laws, may be primary. But the symbols that stand for them and by means of which we men talk about them get their significance from particulars.

The referend to which the symbol points may be either a thing or a quality. I may touch some object and say "I mean *this*"; or I may say, "Virtue consists in loving your neighbor as yourself." Both the "this" of the first sentence

and the "virtue" of the second have meaning; but in the first instance one means an (as yet) undefined entity, or individual, in the second a quality which might be attributed to many individuals. Here we have, of course, the familiar logical distinction between denotation and connotation. Proper names are often cited as symbols which have no connotation but merely denote or point out individual things. As a fact, of course, most proper names, once they have been used to denote individuals, get suffused with a certain amount of connotation: they come to suggest some of the qualities which the individual denoted is known to possess. But in so far as a proper name merely points to an individual it is purely denotative and has no connotation. The important point for us to note is that *meaning* does not necessarily involve the ascription of quality nor refer to quality. A symbol may stand for a referend without attributing to it any character. The whole meaning of a symbol such as *Henry* or *this* may consist in pointing us to a referend; whereas other symbols may have meaning in that they refer to some definable quality or characteristic. In both cases, meaning consists in an activity or attitude of the mind, a form of behavior, if you like, a selection, a direction tendency.

If the connotation of the word meaning which I have been advocating be adopted, one rather important corollary for philosophical discussion will follow: namely, that the thing or experience or quality pointed at by the symbol need not have meaning. A type of argument frequently used against the possibility of certain alleged or hypothetical entities consists in pointing out that the entity in question "has no meaning." Against the possibility of physical objects, of events not linked up with others by rational "laws," of causal sequences which are not logically deducible, of a world that is not completely dominated by rational order,

this criticism is often brought. It is said that such things as these cannot be because they are "meaningless." To this attempted mode of refutation a sufficient reply is to be found in the answering question: Is there any good reason why these things should have meaning? Objects, events, experiences, sequences, collections must indeed have *character;* if they are to *be* at all they must be something in particular. Hegel was right in maintaining that to assert mere being is all one with asserting nothing, and that the minimum of reality is determinate being. But things can very well have character without meaning anything. It is only symbols upon which the possession of meaning is incumbent. And surely there are a great many things in heaven and earth besides symbols.

Very fundamental to the problems of thought and knowledge is an understanding of the large place which symbols have in all or almost all our thinking. For we not only communicate with each other by means of symbols: we do nearly all our private thinking with their help. It is important, therefore, to distinguish between what one might call public symbols and private ones. Public symbols are those gestures and sounds and products of our activity which Nature or convention has made the common property of any group of persons, by means of which any member of the group can enable another member of the group to think of a given referend. These same conventional or natural symbols may be used by the individual in his private thinking. Sometimes we think in words, sometimes in visual, auditory, or kinaesthetic imagery. But whatever kind of images we use as symbols, these are not the objects but the tools of our thinking. It is really strange that, considering the importance of this subject, the text books on psychology have usually so little to say about it. They regularly point out that we think almost invariably in images, but they

seldom make it clear that these images are not the referends of our thought, but merely the means by which we think about something else. Associationist psychology, indeed, was constitutionally incapacitated from understanding or even admitting this fact. For it, as for John Locke, the "mind hath no other immediate object but its own ideas": hence according to the associationist it was impossible for us to know anything save our own mental content, a content which both Associationism and Structuralism analysed into sensuous images. With this attitude toward the thinking process, it was inevitable that psychologists of these two schools should see in meaning nothing but mental context. This matter of the difference between the object and the content of thought will come up for discussion in another connection. For the present it may suffice to point out that, whether or not on psychological theory it be possible for us to mean anything besides our images and other mental content, the fact is that we do. We seldom make our mental images the object of our thought; never, in fact, except when introspecting. We think *in* images, but not *of* them. Images, as I have said, are our private symbols by means of which we refer to other things. In all consciousness of meaning in which images or symbols are used (and they are used invariably except in "imageless thought"), we are aware not only of the images but even more sharply of the fact that the image or symbol is of no importance for itself but points away from itself to something else. In most cases we know perfectly well that nothing in our mental content is our referend. When I speak to you of *this book* neither of us for a moment supposes that I am referring to my sense image. Much, of course, is involved in this assertion which will have to be carefully discussed in later chapters. Here let it suffice to say that I have no intention of supporting Naive Realism, but rather a form of Representative Realism.

The important point is that we actually do refer to, mean, intend, objects (whether existent or merely conceptual) other than our own psychical concepts, images, and percepts. If to someone who would reduce every activity of mind to a flat piece of psychological surface it seems impossible that the mind can perform anything of this sort, then to him consciousness of meaning must be impossible.

To put it in other words, every case of meaning involves transcendence. The image or symbol used is not the referend. When one thinks of some past or future or merely possible experience of one's own, it is the image and the present mental content that is transcended. But most commonly in both our theoretical and our practical life, the thing we intend, the thing we will to "mean," is some object external to our experience as a whole and not to be existentially identified with any part of it. It may be that a few idealists will quarrel with this as a statement of fact, but I do not see how they can deny that the statement is at least meaningful and the situation possible. Surely it is possible for me to "mean" or think of some one else's experience, or of things that have never been experienced either by me or by anyone. I can imagine a round stone on the other side of the moon, or a griffin or an angel or Santa Claus; I can mention it, as I am doing now, and when you read my words you will know what I mean. Moreover, even if you deny that there is such a thing as the stone or as the other side of the moon, or Santa Claus, you will *mean* it: else you could not deny it. Indeed, unless we could transcend our own experiences we could never mean the same thing and communication would be impossible. Certainly it is from experience and experience only that the characters and qualities and types of referends, to which I can attach my symbols, originally come. But the imagination can make new combinations of experienced qualities and attribute them

to some being or to some region of space or time which no man has ever experienced, and thus transcend in meaning all existential experience. "A man's reach should exceed his grasp," and each of us can "mean" innumerable things which eye hath not seen nor ear heard.

This brings us back to one of the loose threads of our thought which we dropped earlier in the chapter and which we may now pick up. On page 14 we saw that even our limited use of the word meaning ought to be wide enough to include within it not only the significance of symbols but the nature of my awareness when I say (to revert to the former illustration) "The Rome I mean is not Rome, N.Y. but Rome, Italy." The difference between the two uses of the word meaning is apparent on the surface but is not very fundamental. Not only are both of them cases of pointing or reference: the direct reference of which I am aware in imageless thought and in the most unsymbolic intention is also present in all cases of symbolic meaning. As this characteristic of all meaning was discussed in the preceding paragraph I need say little more concerning it here. I may put that little by saying that in the active reference which is essential to meaning, there is always an element of conscious intention, there is always a *personal thinking of.* Without this the act of meaning is unthinkable. For the central character of meaning is reference or pointing; and reference or pointing is always an act. No word, no symbol of any sort, in itself *means* anything. Before a gesture, a word, a mental image can have meaning, someone must put the meaning into it. There are instinctive acts and conditional reflexes, there are words in languages and conventional symbols which the observer understands as possessing meaning. But the meaning of these things, if it be there at all, must be put into them either by the conscious being who exhibits or produces them, or by the observer

himself. The view expressed by Ogden and Richards that a symbol by itself means its cause, will not stand the test of serious consideration. Every symbol or gesture has many causes and it surely does not mean all of them. It may, on the other hand, not mean or refer to any of them, but to something not in the causal sequence at all. It would be absurd to say that when I *mean* Mrs. Nickleby, that purely imaginary lady is the cause of my symbol.

Unconscious things, sounds and markings used as symbols, get their meaning from conscious beings; and not all forms of consciousness give meaning. A mere succession of images, a mere series of associated sensations, neither means anything itself nor lends meaning to symbols. Only a mental act can do that. In short, the essence of meaning as intended by common speech and as discovered by philosophical anaysis involves some degree of personal activity. As Dr. Schiller says, "What anything means depends on *who* means it. When, where, on what occasion, in what context, with what purpose, with what success." The ready-made conventional symbols with which language presents us we may accept and use if we like. For the purposes of communication with our fellows some generally accepted symbols are necessary. But in themselves the symbols mean nothing, and no one can force us to mean by them the conventional referends unless we choose to do so. Surely it is not uncommon for people to take oaths, make promises, repeat creeds, "with mental reservations." It is, of course, a necessity of civilized, of communal, life that we should have conventional symbols by the use of which we can communicate to each other our thoughts. But whether I *mean* what I say depends upon me. " 'When I use a word,' Humpty Dumpty said to Alice in rather a scornful tone, 'it means just what I choose it to mean—neither more nor less.' "

I should not conclude this chapter without adding a few words upon the related topic of definition. We may, properly enough, take the word "definition" to mean any use of words by means of which one person may induce in another the idea which he wishes to convey. If we insist on greater exactness than this, we may say that the only *complete* mode of definition is analysis. A compound object may be conceptually broken up into its parts, elements, aspects, qualities, etc., and if the symbols which stand for these are already understood, the total object may thus be indicated or, as we say, defined. Plainly no *simple* object or quality can be defined in this manner, and in the strict sense, therefore, no simple object can be defined. It is quite plain, moreover, that no compound object is capable of definition unless its aspects or elements can be connected with common symbols. It is equally impossible to define a simple and unanalysable sense datum like yellow, and a compound experience like an abdominal pain. Moreover even the most perfect definition presents us, at the last, with elements which themselves are undefinable and which must be known, if at all, by immediate awareness. I may lead you to a place I cannot define, and I may in various ways induce in you an experience, or the mental image of an experience, which cannot be verbally analysed. All definition presupposes the indefinable, the merely given or directly experienced.

It is important to note, in the light of these considerations, that it is only symbols and never things that are defined. We do not make "things" any clearer, but only our concepts and words, by the use of definition. A word that cannot be defined in some fashion or other, a word that cannot lead you, through the use of analysis or by association and pointing, to a referend, is not a symbol. And for a symbol, incapability of definition is fatal. It is not fatal for an

entity or event or experience. As we have seen, a thing or experience need not have meaning—indeed cannot have meaning unless it be a symbol. Similarly a thing or experience can perfectly well be indefinable and still be real, provided it has character. Of course if it cannot be indicated in any fashion, by analysis or intelligible pointing, it cannot be a common referend, one's thoughts about it cannot be communicated to others, and no symbol for it can enter into philosophical discussion. But the thing can perfectly well *be,* or the experience may be directly and acutely felt, even though we humans are unable to talk about it. Its character, its reality, its influence upon other things and experiences are not dependent upon its definability. The existence, and importance, at any rate the possible existence and possible importance, of things which we can in no way define must be recognized by every philosopher who is unwilling to identify the real world with our talk about it.

The major part of this chapter has been concerned with the meaning of terms, and possibly a word or two should here be added dealing more specifically with the meaning of propositions. It seems to me, indeed, that the general principles already discussed cover adequately both propositions and terms: but recent discussions of the matter on the part of the Austrian logical positivists and the American instrumentalists have raised questions upon which it may be well for me to comment very briefly. The position of some members of the schools referred to seems to be substantially this: that no metaphysical or other proposition possesses meaning unless it be capable of verification within the experience of the individual. The modicum of truth in this position has, I think, been amply recognized in an earlier part of this chapter—the section in which I pointed out that every word or term or symbol must be capable of finding its "cash value" within human experience. But while this is

true, the object about which we make a meaningful assertion need not be within our individual experience nor even within human experience in general. The possibility of the kind of outer reference to which so much of this chapter has been devoted is based upon the fact that the human mind possesses the power of imagination or conception. One's own personal experiences do indeed furnish all the material which one can ever attribute to the objects of one's meaning; but it is possible for one not only to make new combinations of this material (as in fancy), but also to imagine or conceive other existents besides one's own stream of consciousness, and imagine these existents characterized by some of the qualities which one has found in one's own psychic stream. For we know from our own experience what *otherness* means: we have experienced it within our own experiences. Since we know what we mean by it and by various kinds of qualities and by space and time (in at least rough and naive fashion), it is possible for us to imagine certain qualities in a space and time other than the space and time of our experience.

It is not necessary that propositions concerning things thus imagined should be verified or should be even verifiable in order to be meaningful. To assert this necessity is to confuse meaning with knowledge. It is true that no proposition can be called knowledge unless it is capable of some degree of verification. But it is rather obviously absurd to assert that unless a proposition can be verified it is meaningless. Is anyone uncertain what is meant by the assertion that the earth would continue to exist with many of its present qualities if all conscious life should cease from the universe? Obviously we have here a statement which in the nature of the case could never be verified. In fact, the assertion that verifiability is requisite to meaning is reducible to something like self-contradiction. For what is it to which verifiability can be attributed? Obviously to nothing but propositions.

And surely it is equally plain that a "proposition" which has no meaning is not a proposition but a meaningless string of words. That is to say, knowledge, verification, and verifiability presuppose meaning. Unless we know what we mean by a proposition, we cannot even raise the question whether or not it be verifiable.

Chapter III

TERMS AND RELATIONS

In the preceding chapter we saw that while definition is fundamental to all philosophical discussion, it presupposes the undefined. All meaning is a process of referring, but referring presupposes a referend. Similarly all relations presuppose relata. In one sense reality is a net-work of relations, but if there are to be relations there must be terms. And if the terms are to be real terms and give the relations anything to relate, they must have some reality of their own and not be dependent for their entire nature and for their entire existence on relations. Otherwise we should have a situation as fatal as that of the Highland village whose inhabitants eke out a scanty living by taking in each other's washing.

I do not wish to take for granted the existence of an external world and am willing to discuss the matter from the point of view of a single, and if you will even solipsistic, consciousness. Certainly our minds are full of relations and all our experiences are related. But this fact presupposes real experiences—real in the sense that they are something more than merely experiences of relation to something else. Our awareness is by no means purely intellectual, by no means solely relational. As so many psychologists and logicians have frequently pointed out, we have not only awareness of relations but immediate experiences. These may be sensory, emotional, conative, but they are not re-

lational nor representative. Plato insisted (in the Theaetetus) that in addition to relations and compounds there must be elements, and that these elements (or letters, to use his figure of speech) are not compounds and cannot be known in the sense in which compounds are known. James, in an oft-quoted passage of his Psychology, dwelt upon the contrast between "acquaintance with" and "knowledge about." Russell distinguished between "knowledge by acquaintance" and "knowledge by description." Titchener, Dewey, Bergson, Stebbing and in fact a considerable majority of the leading thinkers in various fields—and we might add many of the leading languages of mankind—recognize and emphasize the distinction. I "know" *that* yellow stands next to orange in the spectrum; and I also "know" yellow when I see it. And if I did not "know" yellow when I see it I should not know that it has any place in the spectrum. We have experience of relation and of meaning, and we also have such a thing as direct awareness, an experience which does not *mean* but *is*, and which, though doubtless related to other experiences, has an intrinsic quality of its own not derivable from its relation to anything else. Since the conscious life of each of us presumably begins at some point of time, various sensuous and effective experiences must come to us in infancy absolutely new and with no previous associations or intellectual, meaningful connotations. When such a new experience comes for the first time it must possess its own unique freshness, its own inherent quality. In principle the matter is hardly different in adult life. For though it is doubtless true that each experience in our maturer years is related to many others, and is in part characterized by these relations, both introspection and the logic of the situation show that it possesses and must possess its own immediate and inherent *quale*.

A prominent school of idealists is unwilling to accept this

native and original aspect of qualia, whether in experience or out of it, and insists that terms are as completely dependent upon relations as relations are upon terms. The two are said to be mutually dependent, and a term is defined as a locus in a pattern. A pattern is composed of terms in relation, and the entire character and uniqueness, the whole nature and the whole existence of each term, is said to be derivable from its locus. The principal consideration relied upon to enforce this view is the fact that an isolated term, unrelated to other terms, would be meaningless. In answer to this it is important to point out that the question at issue is not whether there are absolutely isolated and unrelated terms, but whether terms even in the net-work of relationships which they sustain have some inherent characters or qualities which they do not owe to these relations. Even aside from this, moreover, the argument that an independent term would be meaningless and therefore impossible has no force for one who accepts the doctrine of meaning proposed in the preceding chapter. As we have seen, there is no reason why a term should have meaning: only a symbol can have meaning and only a symbol needs it. A term, indeed, must have character, but nothing has been said to show that character can be given only by relations. *Whether* this be the case or not is, in fact, the very question under discussion.

A variant upon this form of argument against the possibility of inherent qualities is the assertion that a term or quality cannot be defined without making use of its relations, and that an unrelated term or quality would therefore be impossible. The answer to this is similar to the answer to the objection concerning meaning. If definition requires either the analysis of a compound or the expression of relations, then plainly an unrelated simple term or quality cannot be defined. But we must remember that referends may often be indicated or exhibited even though indefinable,

and that there is no good reason why the possibility of definition is necessary to a thing's existence or to its possession of character. One must distinguish the problem of communication from the problem of being, unless indeed (as suggested in the preceding chapter) one means to identify reality with talk.

At the cost of repetition let me say once more that I am not contending for an atomism. I am willing to admit, in fact I am eager to assert, that every being, event, experience is related to all other beings, events, and experiences. I am merely pointing out that in addition to the characters which things get from their relations, they must also have some intrinsic characters of their own. I lie on my back under the blue sky with nothing else in sight. Doubtless this blue mass, this sense datum, has extension and vague shape; doubtless this visual experience is contemporaneous with the temperature sensa of my body produced by sun and breeze. Doubtless the blue sensum is related in various other ways to various other things. Yet it is perfectly possible for me to know what I mean by just that experience of blue. The blue character of the experience is intrinsic in the sense that it is not to be identified with its relation to anything else.

Indeed, unless terms possessed their own intrinsic qualities which they bring with them into the group of things to which they stand related, it is hard to see how variety could ever enter the world. The attempt is sometimes made to account for both variety and uniqueness by reference to the many loci within a pattern. And, to be sure, there is a certain kind of uniqueness and variety and individuality derivable wholly from pattern. On a checker-board, for example, each square is unique, and there is a great variety of squares; and yet both this variety and this uniqueness arise from the relations of the different lines. Within a color

harmony each splash of color has its unique spatial position and its unique relation to all the other parts of the whole. But to have thought out the problem only this far is to have thought it only half through. For a little farther thinking will make it evident that another kind of variety besides that of locus is involved, and that this type of variety is given only by intrinsic qualities. Indeed, so far is this intrinsic and original quality from being dependent upon pattern, that, as a fact, pattern is dependent upon it and presupposes it. If anyone doubts this, let him draw for us a pattern with white paint upon a white canvas; let him compose for us a tune all on the same note. Variety is plainly antecedent to pattern; and unless terms possessed intrinsic qualities as well as relational characters, neither terms nor relations would be thinkable.

We must now come to an understanding concerning the nature of relations. Relations are notoriously difficult of definition, and the task is made the more complicated by the unfortunately controversial nature of the word. The controversial implications we must seek to avoid until we have come to some view of the nature of relations which all parties can accept. Plainly if a term is to be the basis of discussion for different schools of thought, it must not be initially defined from the point of view of one school only. Thus it would be destructive of all possibility of illuminating discussion to start out by defining relation as a work of the mind. It is possible that the Kantian view concerning relations is true. But if one is to prove this, one must start out with a conception of *relation* which does not beg the question in advance. Plainly when Kant came to the conclusion that it is the mind which creates relations he added something to the notion of relations which he had previously held. When one asserts "Relations are the work of mind," one should have a fairly clear notion as to what it is that

is the work of mind. Otherwise one says nothing, or at least nothing more than this: that the work of the mind is the work of the mind. The very possibility of making the Kantian view significant demands that relation shall first be defined, or its nature indicated, in a manner which both the Kantian and his opponent can accept.

There is another way of defining or thinking of relations which should also be avoided if our discussion is to be profitable. They should not be defined or conceived in such fashion as to turn out to be merely further terms in disguise. It is fundamental to any profitable discussion of the question to remember that *relations relate.* That is what we mean by them. If, therefore, it transpires, during a discussion, that relations as conceived cannot possibly relate, we should not conclude that relations are unthinkable, but that we have started out by thinking of them wrongly. It is, of course, with Bradley's treatment of the question in mind that I have been led to make these rather obvious remarks. The seeming strength of Bradley's attempt to show that relations are self-contradictory and therefore appearance and not reality, is due to his initially conceiving a relation as a kind of tie, like a chain or a piece of string, which binds terms together. Since a link of this sort is as much a term as are the things which it seeks to unite, the question is fatal: How link the link—how relate the relation? The difficulty is an entirely artificial one and evaporates at once if we refuse to make the fatal mistake of starting with a "relation" which does not and cannot relate.

I do not mean, by what I have said, to imply that I consider relation an easy word to define. As a fact I think it extremely doubtful whether, in the strict sense of definition as analysis, it is capable of being defined. As we have seen, no simples are definable in this strict sense for the very reason that they are simple. But while simples cannot be

analysed they do and must possess character. And if we are to mean anything by the symbol we use in referring to this character, the character must be one that we have experienced. Hence to understand what a relation or any other simple is, we must go to experience. We find and we think terms, but we do more than this. We find terms in groups, we find them together with other terms. We experience a yellow pencil, but we also experience a yellow bird and a yellow watch. The yellow we also find in the spectrum next to orange, between orange and green. If we put the yellow pencil next to a yardstick we find it is *shorter than;* if next a rubber eraser it is *longer than.* In these and innumerable other ways we find that terms not only have intrinsic qualities but that they are somehow different when taken with other terms than they would be all alone; different in one group from what they are in others. Thus though we cannot define relation we can exhibit it.

This examination of relations as we find them naturally suggests the definition or description of relation which Professor Royce used to commend. A relation, he said, is a character which a term gets by being a member of a group. The definition given by Johnson in his Logic is somewhat similar—namely that a relation is a "transitive adjective." Neither of these ways of describing the nature of relation can be called a definition in the strictest sense of the term, for ultimately they both involve an initial understanding of the term to be defined: both "transitive" and "group" presuppose relation. But as a way of indicating what is meant by relation I find these forms of expression, especially Royce's, decidedly helpful.

If the line of thought suggested thus far in this chapter be correct, it would seem to follow that terms have two kinds of characteristics, which we might indicate respectively as inherent or intrinsic qualities, and relational characters.

This conclusion is of considerable importance in itself: and it also throws light upon a much-discussed—perhaps a too-much-discussed—problem; namely as to whether relations are internal or external. The definition of these expressions is rather uncertain and the distinction between them rather vague. In a general fashion I suppose we may say that internal relations are those which somehow get inside of, or are in part within, their terms and which thus qualify and help determine their nature; while external relations are thought of as connections betweeen terms and thus, in a sense, presuppose the terms as existing with characters of their own antecedent to their being connected. Bradley, indeed, takes external relations in a much more extreme fashion: "External relations," he writes in the Essays, "if they are to be absolute, must, I suppose, be thinkable apart from any terms." [1] As presumably no upholder of the reality of external relations takes them in this extreme and absolute fashion, there would be no point in discussing them in this sense. Bradley would say, and does say, that if relations are not external in the sense defined they have "ceased to be external absolutely." And indeed they have. The only external relations that are likely to find defenders are partly internal. They cannot exist by themselves and to some extent and in some sense they qualify and help determine the nature of their terms. Similarly there are no internal relations that will be taken seriously which do not connect the terms to which they belong with other terms. In short, relations are both external and internal, and there is no reason why a given relation should not, in different senses, be both.

The real controversy which goes under the name of these relations is, as a fact, at bottom a controversy over the question already discussed in the earlier part of this chapter.

[1] P. 238.

It arises because some of those who stress the importance of the internal nature of relations insist that relations are not only internal but constitutive, and not only constitutive but the sole determiners of the nature and existence of their terms. This is, of course, merely another way of insisting that all qualities are relational characters and that what we have called inherent qualities do not exist. This raises an important question. It has ramifications that lead out into ultimate problems: it is, in fact, merely a part or aspect of the fundamental crux between extreme rationalism and empiricism. If reality be wholly and solely a logical structure, if the real is the rational and the rational the real, then plainly there can be no *datum,* no intrinsic and original quality anywhere. The terms of geometry have nothing intrinsic, nothing their very own, nothing which they do not derive wholly from their relations; and if the world be as purely logical and *a priori,* it too can have no place for the merely given. In so far as the controversy over relations is an outgrowth and expression of this larger question, it is one of fundamental importance.

If it be true that every term derives both its existence and its nature from its relations to other terms, it would seem to follow that no term can leave the group in which it finds itself and still retain its identity. Term A cannot leave the group A-B-C-D and enter the group A-E-F-G and still be the same A. In favor of this view it may be argued that the relations which a term sustains to other terms certainly do characterize it and that every such relation, therefore, to some extent helps to constitute its nature. When a new American President is inaugurated and thereby takes on a very great number of political relations, there is a sense in which he "becomes a different man." Similarly his predecessor, by being stripped of all these relational characters, ceases to be all that he was. This, as I have said, is the

truth about "internal relations" and it is a real and important truth. Yet if we say that a term is only a locus in a set of relations we would seem to set sail upon an endless search which in the nature of the case could never find either terms or relations. Each term and each relation would find its whole nature and being in its relation to other terms and relations, and these, having no character of their own, could never help to characterize anything else. We should be defining x in terms of y, y in terms of z, and z in terms of x. As I sit here at my desk it is doubtless true that I (as a psycho-physical organism) am a certain number of miles, feet, and inches distant from a certain stone in central China. One of my characters is my spatial relation to that stone. But I, at any rate, feel very sure that I should remain the same person that I now am even if a Chinaman should pick up the stone and throw it at his wife. If there be no endurance in any terms except as all their relations endure, if it be impossible for a term to remain identical with itself upon leaving one group and entering another, if an object cannot move without ceasing to be itself because of its changing spatial relations to other things, then certainly πάντα ῥεῖ with a vengeance, and all philosophy, all science, all assertion in the simplest matters becomes impossible. Hence the necessity of recognizing not only relational characters which give us "knowledge about" but also intrinsic qualities which terms possess in and by themselves, and which we can know by direct awareness or "acquaintance with."

As I have said, the controversy concerning internal and external relations as it is usually carried on is not sharply defined and not very significant. There is truth on both sides of the controversy. There are two ways of looking at the world, both of which are true and both of which are important. We may consider it, first, as a whole and dis-

cover within it various interrelated terms; if we do so we shall find all relations internal. Or we may start with a pluralism of terms and discover their relations: and if we do this we shall find the relations external. But whichever way we go at it, and however we start, if we are to have either terms, relations or total pattern, we must recognize in our terms both intrinsic qualities and relational characters.[2]

In this discussion I have dwelt chiefly upon the necessity of recognizing intrinsic qualities. This I have done because it is chiefly these whose reality has been impugned. To give the right perspective to my position I must go on and add that if one can distinguish in value between two things both of which are absolutely essential, the relational characters are for most purposes far more important. This is largely because our lives, and especially our intellectual lives, are to so great a degree social, and it is only the relational characters of our common world that we share and that we can communicate. The qualia of my sensations and of my feelings are intimately and solely my own. I may talk about them to you. I may somehow succeed in stimulating within your experience similar sensa and feelings. There are various tests by means of which I may make reasonably sure that a given sensum, such as blue, occupies in your subjective world the same relative position that it has in mine. All the things that you name "blue" I also find to be "blue." But there is absolutely no way of telling whether the intrinsic quality that you find in the cloudless sky, in the delphinium and the anchusa, and between green and violet in the spectrum, be my blue, or what I should call red, or be possibly some color that I have never sensed nor dreamed of. Moreover, for our practical life and for our scientific and

[2] This, in fact, is fully recognized by Bradley, in his *Logic*. Vol. I (page 254).

intellectual life it makes no difference whether the intrinsic qualia of our sensa are similar or not provided that their relational characters are the same. For the purposes of communication and of science, identity of pattern is the only thing needful: it matters not whether for different people this pattern be painted in any number of different color combinations. Only, be it remembered, there must be colors or there could be no pattern.

The realist is usually the thinker most interested in vindicating the reality of intrinsic qualities. Yet the only aspect of the realist's world of nature that interests him is its relational characters. As we shall see in a later chapter, he makes no claim to knowledge concerning the intrinsic qualities of his material reals. It is only their structure, their processes, in short their relational characters and the patterns they constitute which interests him or which he thinks it possible for us to know. And yet some intrinsic qualities in things there must be. For if there were not, there could be neither things, relations, relational characters, nor patterns.

I fear I have labored this question far beyond the span of the reader's patience. The fundamental importance of the question must be my excuse, for in a sense the entire point of view which this volume seeks to present depends upon it. For the Universe I am trying to suggest is neither a through-and-through rational and completely unitary One, nor an atomistic Many made up of finite absolutes. The terms which I am insisting upon cannot properly be called little absolutes, for absolute means cut off from relations. On my view all the terms, all the reals, are interrelated. The world is in a very genuine sense a whole, and I am at one with Idealism in believing that the Whole tells us more concerning the parts than the parts, taken abstractly, can tell us of the Whole. But while there are no terms that are

unrelated, and while the relational characters of terms are usually their most important aspects, each still possesses its own intrinsic qualities which are not created by nor dependent upon relations to other terms. Whether such a view of the world will be called a monism or a pluralism I do not know: and I confess I do not greatly care.

Chapter IV

THE STATUS OF UNIVERSALS

The discovery and specific recognition of universals and their importance was perhaps the central achievement of Greek philosophy. So highly was their significance esteemed by the Platonic School that it tended to be exaggerated, and reality as such was identified with the Ideas and denied to the particular things of our experiential world. Among the Mediaeval Platonists, each universal became reified and made into a kind of self-existent being. There is no need here of going into the long controversy between Realism, Nominalism, and Conceptualism; but it may help us to avoid possible misunderstandings if, before going further with the general view to be presented in this volume, I explain briefly my attitude on a few of the problems centering around the nature of universals.

The actual situation seems to be this. We live in a world of particular things, and our conscious lives are made up of particular experiences. It is only particulars or individuals (I am using the words synonymously) which we find existing. I trust that after the preceding chapter the reader need not be reminded that by individual things I do not mean "things-in-themselves," but concrete things with their qualities, and that among these qualities are their relational characters; and that the things thus qualified form together a complex whole. It is in this sense that I intend the assertion that we find only individuals existing. But this emphasis upon the individual is not the whole

story. Some of our experiences are similar to each other in certain respects. Some things are like other things. It is a fact that one red rose is similar to another red rose in some ways and different in others. Early in our development we come to recognize this fact. Our attention is called to it. We concentrate our attention upon this aspect of the two roses. This is another way of saying that we abstract the quality in which the two roses are similar. The use of language facilitates and hastens this process. In order to fix in our own minds the respect in which the two roses are alike, and in order to communicate it to others, we give it a name. I speak here, of course, quite inexactly: it is the race that invents the names and it does so without any such deliberate intention as I have suggested; but the reader will understand the somewhat symbolic nature of my description, necessitated by the need of putting into a brief sentence a process which has taken ages to perfect.

In this account of the process by which universals are abstracted from individuals, I would not be taken to mean that we find characterless individuals first and then discover qualities which they share with others. The characters are discovered with the individuals. As Aristotle pointed out, the child at first calls all men *papa*. But while it would be false to say that characterless individuals come first and general qualities come second, it would be equally mistaken to assert that qualities are recognized first and then united into individuals. The minimum of existence and of recognition is the *individual with its qualities*. Yet though the quality and its implicit recognition are as original as the individual which (later on) we say it qualifies, the explicit recognition of qualities abstracted from individual things or experiences is a later and more sophisticated process and (as I have pointed out) is hastened and widely extended and

made more and more specific by language and the need of communication. In order to make use of our experience as a guide, in order to communicate it to others and to gain their co-operation in our practical living, we have to abstract from the individuality and uniqueness of an individual thing or experience and draw attention to qualities which the individual shares with others and which language names. It is thus that we form concepts or free ideas. These concepts or ways of thinking are not arbitrary but (as I have said) correspond to, because they are drawn from, the actual nature of individual things. Things actually are in groups or classes in the sense that they are in some respects similar to each other. To say, therefore, that concepts, or the names we give to these similarities, are *flautus voces,* mere noises in the air, names *and nothing more,* is a most superficial way of expressing the situation. Concepts in a sense are names, but they name actual facts of enormous importance, the facts, namely, of significant similarities, the fact that things actually exist in classes in the sense I have explained. While this is true, however, it would not justify us in reifying these abstracted characters. The characters or qualities have no existence of their own. To nothing are we justified in attributing existence save to individuals. Universals are not individuals and cannot rightly be said to have any independent existence. They are possible objects of thought.

For purposes of short-hand expression, universals or qualities, natures or essences—all of which terms I am here using as practically synonymous—may be thought of as modes of reality—of reality as distinct from existence. There can be no doubt that universals are real in a sense—in the sense, namely, already explained. The real world is such that thought is justified in dividing existent objects into classes based on similarity and difference. Thus it

comes that some thinkers who would quite agree with all that I have said about universals find it convenient to speak of them not only as real in the sense explained, but *as if* they were real in their own right, and thus to erect a "realm of essence" in contrast to the "realm of existence." When this use of words is understood as only a short-hand mode of expression it may be useful; and it may be that at times I shall avail myself of the expression. If I do so, however, I trust the reader will remember that I regard this mode of expression as a verbal tool, and not as possessing any further ontological significance than that already explained. Universals are real only as definable natures, as logical entities, as possible objects of thought.

So much understood concerning universals as the term shall be used in this book, little need be added as to concepts. There are concepts of individual things as well as concepts of classes and qualities, but in the concept of whatever sort there is always a universal element. In this it differs from a sensation or an image. It is a way of thinking about objects or classes of objects or possible objects, about qualities and relations and other abstracted characters of the real. The word, it must be confessed, is a bit ambiguous, and it is well especially to distinguish its psychological from its logical uses. As a term of psychology "concept" is used to mean a form of actual consciousness, the active entertaining of a symbol as standing for a definable nature or group. Personally I am doubtful whether any psychic entity or content of this sort exists. I question whether introspection ever discovers a *concept*. I do, indeed, discover introspectively various sorts of images, and also the active process of meaning or conceiving; but a *concept* as distinguishable from these I do not find. Since the word is often used in this psychological sense, however, I shall not argue the matter here. "Concept" is also used, some-

times, as a *possible* form of consciousness of this sort—a use of the word which leads from the psychological to the logical, and stands midway between the two. When used as a term of logic, abstraction is made from all conscious awareness, and it is taken to refer only to the actual or possible object of such awareness—the class, the definable nature or essence, the conceived individual. Thus the word "concept" comes to mean both an actual content or process of consciousness, a potential form of thought or of communication, and a potential form of reality. The formation and the refining of exact concepts is largely facilitated by language, and nearly all of our scientific concepts are the product of social co-operation. These are potential forms of description and communication, devices for talking about the potentially existent or the abstracted.

Similarly the *proposition* (of which word there are perhaps a score of subtly different uses) is a potential form of assertion or description. It is to be conceived as belonging to the realm of the perpetually possible rather than the actual. True propositions are true in the sense that if any one should consciously entertain them he would be thinking truly. It is, let us say, true and eternally true that honesty is the best policy, that twice two are four, that in 1492 Columbus crossed the ocean blue. When one asserts that these propositions are eternally true one does not mean that at every moment of the day and night someone is thinking these things; but rather that they are potential forms of true thought. Propositions are, thus, not independent or actual existents but rather ways in which we *may* think. When a proposition is the formulation of a (psychologically) actual thought, we call it judgment.[1] Judgments are actual psychological processes in the mind of

[1] One must, of course, recognize the fact that the word *judgment* is often used as a synonym for *proposition*.

an individual. No judgment exists except when someone is entertaining it. But a proposition (as distinct from a judgment) never exists at all. This lack is compensated to it by its ability to be eternally true in the realm of logic. But this eternity of the potential must not mislead us into conceiving the actual as in part constituted by true and real propositions.

The word law, as applied either to logic or to nature, has a close relation to concept. Laws, like concepts, may be eternally true, but they are not existents. They are possible ways of thinking. If you should make the statement formulated in the "law" you would be speaking the truth. Laws are thus descriptive propositions—possible judgments —which if attributed to reality would truthfully describe it. They are not real in themselves nor have they any power of their own. Laws in philosophy and science are very much like laws of literary criticism. There are so-called "laws of poetry," which consist in observations framed by critics on the poems which they read. The poems come first; laws are empirically derived from them. It would be no more absurd to suppose that these laws make the poems than it would be to think that the laws of nature "govern" reality. There is no dynamic in a law. Reality is as it is, it acts as it acts: and laws are merely formulations, or possible formulations, of these ways of acting. In putting the matter in this form I do not mean to be committing myself to Positivism or Atomism. The ways in which Nature acts and the human formulations of these ways, are dependent upon and derived from the ultimate characters of reality. Nothing that I have said concerning law is inconsistent with the conceivability of our piercing more deeply into the nature of reality than Positivism would admit as possible.

One final commonplace—this one concerning logic—

and we can have done with these preliminary and rather obvious matters. It is the function of logic (and also of mathematics) to discover the interrelations between various possible ways of thinking. The logician is interested not in existence but in form alone. It is only indirectly that logic deals with the actual world. It has to do directly with concepts and propositions, with the potential and the abstracted. It never tells you what is, but it does point out to you various ways in which you cannot think if you are to think consistently. Moreover, since it is a necessary presupposition of all science and of all philosophizing about reality that thought is of some use, that it actually helps in revealing the nature of the real, we must further presuppose that what is impossible for consistent thought is impossible for reality. It is true that logic tells us only negative things: that for positive facts about the universe we must go to experience. But negative facts are of enormous importance, and without the guidance of logic—by which I mean the fundamental canons of clear and consistent thinking—the task of both philosophy and science would be utterly hopeless.

A word or two perhaps should be added, but surely only a word or two will be needed, to point out the attitude which must be taken by anyone who accepts the position presented in this chapter toward two of the leading philosophical tendencies of our time. The intuitionist school, which attacks analysis and at times impugns the cognitive nature of scientific and conceptual formulations, is doubtless justified in insisting that concepts must not be mistaken nor substituted for immediate experience and existent reality; but it surely goes beyond all proper bounds in asserting, or implying (as it occasionally does) that concepts are necessarily misleading and cannot be used in true knowledge. There is evidently no reason why the conceptual

formulation of the qualities which things share, and of the interrelations between these universals, should not be thoroughly cognitive. Nor is there any real justification, so far as I can see, for the related position of the other contemporary tendency to which I referred a few sentences back, which teaches that concepts and abstract propositions are merely tools of the mind or of the organism, useful indeed in a practical way for influencing the future, plans of helpful action, but in no way cognitive, in no way formulations of an actual and present or past real and independent situation. This is not the place to argue the matter; but it will not be irrelevant to point out that if concepts are really useful this is a most significant fact, and that their usefulness can in no wise be explained unless they be formulations of truth about an actual situation: unless, that is, they be not only pragmatically useful but intellectually cognitive as well.

We have seen that all thinking about the real, that is to say all science and all philosophy, presupposes that what is necessary to thought is necessary to Reality. From this it follows that the necessities of thought give us a kind of frame-work for the real world, a certain amount of *a priori* knowledge concerning it which can be denied only at the price of denying all possibility of knowledge and, therefore, all justification for discussion, assertion, or denial. Such a frame-work of thought as applied to the actual has been explicitly formulated in various ways and made use of by a number of thinkers from the time of Aristotle in Europe and the Vaiśesika Philosophy in India. Kant, Fichte, and Hegel, as everyone knows, made new lists of categories, and in our own time the subject has been dealt with in some detail by a number of logicians, and by two of the leading realist philosophers.[2] The conception is, thus, common to

[2] Alexander and Sellars.

many schools of thought: in fact no fundamental thinker can dodge the question: What *must* we think about the Real if we are to think at all?

This question may be put, and its answer applied, in several different ways, and we might, therefore, speak of several different kinds of categories. I suggest three, but do not intend to imply that there are no other kinds. Most obvious, perhaps, are what might be called the strictly logical categories. Of these there are at least three, namely, the fundamental "laws of thought" pointed out by Aristotle:—"Identity," "Non-contradiction," and "Excluded Middle." None of these can be proved, save by showing that whoever denies or fails to make use of them cannot discuss, affirm, or deny anything. We do not demand much of our opponent, but, as Aristotle puts it, we do insist that he say something; "and if he says nothing, it is absurd to attempt to reason with one who will not reason about anything. For such a man, as such, is seen already to be no better than a vegetable." [3]

A second class of categories deal with what might be called the metaphysical nature of reality, and point out necessary ways of thinking of the real world if there is to be any real (or imaginary or conceivable) world to think about. Two of these necessary ways of thinking the real were discussed in the chapter preceding this. Thought cannot go on unless there be "things" (in some sense of that loose word) to think about, and unless there be thinkable relations between them. With the acceptance of things and relations we have, as a necessary implication, the further category of Order. I am not using the word here in the more specific sense of a specific order: an order made definite by the linking of all the terms in the group through a limited set of repeated relations, such as we find

[3] *Metaphysics*, 1006 *a*.

in a series.[4] I refer rather to the fact that no matter how "disorderly" the things or terms of a group may be arranged, *some* arrangement there must be, and that the denial of this is an impossibility of thought. The concept or order is related to the concept of causality, but the two must not be confused. All causal series are types of order, but there are many orders that are not causal; and from the fact that order is a category of our thought it does not follow that the same thing can be said of causality. Two very real categories that I have not yet mentioned, are, however, inextricably connected with the category of order, namely Space and Time. The coexistence of things presupposes space and the possibility of events presupposes time. Physical thinghood (even in imagination) means the possession of spatial quality, just as *before* and *after* and duration mean temporal character. Another pair of categories—and these closely related to space and time—are essence (or quality) and existency. These will be discussed at considerable length in the next chapter, and I think it will there be seen that they are necessary modes of thought if we are to think a temporal world at all. The attribution of qualities to the realm of existence results in the concept of Substance, which I, therefore, think should be regarded as a category. Further members of our list are Identity, Diversity, Position, Motion, and probably several others. I make no claim that the list here presented is either complete or systematic. I know perfectly well that it is not.

Nor shall I seek to give an exhaustive list of the concepts presupposed in knowledge—epistemological categories as Professor Sellars suggestively calls them. The whole question of the presuppositions and the nature of knowledge will be the center of discussion in several of the chapters

[4] It is in this sense that Russell, Stebbing, and other logicians use the word.

that are to follow. Here I shall merely indicate a few, with no attempt at completeness or systematization. Perhaps the most obvious of these epistemological categories is Mind or Consciousness. Conceivably one may (in words at least) deny the reality of consciousness, but I do not see how this could be done by one who admitted the reality of knowledge. Another concept presupposed in knowledge is that of the Subject-object Relation. Consciousness in its simpler forms is conceivable without this, but not knowledge. From this, as a further epistemological category, would inevitably follow Transcendence. The object in the subject-object relation *is* not the subject: in the knowing relation the subject refers to, intends, thinks about, something other than itself. Finally, if knowledge is actual, the subject implied in the subject-object relation must be an actual subject. That is to say, it must be a real self. The concept of Self thus appears to be an epistemological category, a necessary concept if we are to put meaning into the term knowledge. This, I know, is by no means the universal view, and I put it forward here not dogmatically as a proved fact, but tentatively as a suggestion. It seems to me true. But of this more will be said in the sequel.

Chapter V

EXISTENCE

The things with which the preceding chapter dealt—universals, concepts, qualities, essences—form the subject-matter of nearly all philosophical and scientific discussion. Yet none of them exist. They are abstracted from the existent; they are actual and possible objects of thought, actual and possible modes of being. Only by a rather special usage can they be called real—a usage, namely, which would distinguish "being" from the actual and existent. But since the definable and conceptual and universal is the only possible object of science, it is natural that the importance of these eternally potential objects of thought should be exaggerated to the extent of excluding from recognition existent individual things and experiences—the whole realm of existence as distinct from that of essence. "Existence," says Santayana, "is odious to the logician. To him it seems a truly monstrous excrescence and superfluity in being, since anything existent is more than the description of it."

It must seem very strange indeed to anyone but a philosopher that the reality and importance of an existent world, of actual and particular things and experiences as distinct from essences or definable natures, should need any vindication. And indeed, once the question is seriously faced, little vindication is needed. Not even the solipsist or the extreme skeptic can successfully deny existence, for at least his doubt exists. It is not merely a definable nature but an

actual experience; if it be not, his skepticism is not actual and he has nothing to talk about.

Not only is the realm of existence (if I may use this phrase, contrasting it for the sake of brevity with what is often referred to as the realm of essence)—not only is the realm of existence undeniable: it is of the utmost importance to a well thought-out philosophy that the distinction between it and essence should be made clear and emphatic. If only the conceptual be real, if there be no realm of existence, if we assert with Parmenides that "it is the same that can be thought and that can be," then we must go all the way with the Greek thinker and assent to his conclusion that "there is not and never shall be any time other than that which is present, since fate hath chained it so as to be whole and immovable. Wherefore all these things are but words—namely coming into being, passing away, change of place and alteration."

Change and motion are impossible for Parmenides and Zeno not only because they recognize no empty space but also because for them there is no real time—*i.e.*, no duration—at all. As Bergson has pointed out, the essential and characteristic element of time in the sense of duration cannot be put into a definition, but is to be known, if at all, only by directly experiencing it. When the attempt is made to rationalize time it has to be transformed into a fourth dimension of conceptual space. The universals or essences which alone rationalism recognizes are simply not in time. That has been their glory ever since the days of Plato. They are timeless, eternal. The nature of a triangle and all the rational laws about it and its relations are just what they are whether in Euclid's century or in ours or a million centuries hence. They are not subject to change and are to be taken only *sub specie aeternitatis*. A world of pure rationalism which recognizes no brute fact given by

experience, no existence as distinct from essence, can have no place for real time and hence none for motion or any other kind of change. Doubtless we can have concepts of duration and of change and motion, but these concepts do not endure nor change nor move. A timeless concept of change is itself as starkly static and unchanging and motionless as are the concepts of the timeless and the immovable. All real change, as all real duration, supposes something that changes and endures, and only an existent entity—not an essence or ideal nature—can do this.

Not only duration and change but also individuality is ruled out by any philosophy which refuses to recognize the existent and which therefore identifies the real with the rational. For the touch-stone of the individual is uniqueness. An individual is a being of which there can be no duplication. God might create another exactly similar, but it would still be another. There is a sense, of course, in which every concept or essence or Platonic Idea is unique —it is itself, and no other universal is just it. But this is not what is meant when in common language we refer to an individual. The common use of the word signifies in the ears of nearly all hearers an individual existent—a certain man, *this* object and not that, this particular private experience which no one else does or can share. No argument is needed to show that an individual in this sense cannot belong to the realm of universals, and that if philosophy be refused the right to deal with existents it can take no cognizance of individuals.

Furthermore, an existent individual is never completely definable. After all its qualities have been abstracted and named there remains ever a residue which is not identical with any quality or namable essence. Definition, as we have seen, means either analysis into ultimate qualities (which are universals) or indication by means of relations—*e.g.*

assigning the thing to be defined to a namable locus in a pattern. But the relations thus named are universals, and though the locus indicated is unique within the pattern, you have not through this method of definition reached anything really unique unless you add that the locus in question is in *this* pattern. In short, the locus can be unique and individual only if the pattern be unique and individual. Thus your attempt at definition has brought you no nearer to the individual than you were when you started; and in every individual existent there is and must be an ultimately indefinable aspect. Define your individual down to the most extreme detail: there is no reason whatever why there should not exist ten million exemplifications of this definition.

The contrast between logical natures and existent things has been recognized, not only by common sense quite universally, but also by nearly all the long line of technical philosophers. Of the Greeks only the Eleatics failed to recognize the reality of the realm of existence; and among the moderns the distinction has been kept clear pretty generally, although some confusion is found occasionally in Spinoza, Leibniz, and Hegel, and a few post-Hegelians. Perhaps the clearest expression of the contrast of the two realms is to be found in Plato. "In the first place," he writes, "we must distinguish two things: What is that which always is and has no becoming, and what is that which, always becoming, never is? The one, being always the same, we comprehend by thought with reason; the other, becoming and perishing, never really being, we guess at by opinion with unreasoning perception." [1] It is plain, of course, that in this passage Plato means by the world of "being" the realm of unchanging universals, while the world of "becoming" is our realm of the existent, the actuality of which

[1] *Timaeus* 27 *d.*

Plato never for a moment questions even when allowing the honorific title of "being" only to the Ideas. It is plain also that, for him as for us, change and duration are to be found only in the existent realm, and that, for him as for us, knowledge of this world of change is to be had not by reason alone but in part at least by "unreasoning perception." Only in the realm of Ideas or of essence and logic can it be said that the real is the rational and the rational the real.

When dealing with the world of becoming or existence —with this actual world of men and experiences and things possessing qualities and relations—Plato is thus not a rationalist but an empiricist. And I do not see how it is really possible to maintain any other position. But let us face seriously what is here involved. It means that there is in the existent world a non-rational element; not merely that the processes of existence could not be entirely predicted by logic, but also that within the existent there is an element or aspect not susceptible of exact definition. If after defining the nature of an object you say, "This exists," you add something; though you do not thereby add anything to the definition or the essence. As Kant expressed it, "being is evidently not a real predicate or a concept of something that can be added to the concept of a thing. It is merely the admission of the thing and of certain determinatives in it." Being is not a "real predicate" in the sense that it is not a definable nature or quality which can be predicated of a thing or added to the concept of it. This does not mean that being (or existence) is unreal or unimportant: it means that concepts or definable natures are not the whole of the real. It is for this reason that the ontological argument cannot prove what it starts out to prove. In a world of logical natures, a realm of essence, the ontological argument would be completely

adequate and, in fact, no other type of argument would be significant. The philosopher who makes use of the ontological argument, if he has thought out his position carefully, is really giving notice that he is dealing not with the existent world but with the realm of essences, of logic and mathematics. For such a realm "the real does not contain more than the possible. A hundred real dollars do not contain a penny more than a hundred possible dollars." It is only in the existent world that there is a difference between the real and the possible, and this difference is not one that can be expressed conceptually. It can be known only in the form of direct, existent experience by some existent experiencer.

There are thus two aspects of any given experience: the one its description and definition, the other its simple givenness. No one has expressed the situation better than Bradley, in an oft-quoted passage: "If we take up anything considered real [*i.e.,* what I have called existent], no matter what it is, we find in it two aspects. There are always two things we can say about it; and if we cannot say both, we have not got reality. There is a 'what' and a 'that,' a content and an existence,[2] and the two are inseparable. That anything should be and yet be nothing in particular, or that a quality should not qualify and give character to anything, is obviously impossible. If we try to get the 'that' by itself we do not get it, for either we have qualified it or else we fail utterly. If we try to get the 'what' by itself, we find at once that it *is* not at all. It points to something beyond, and cannot exist by itself and as a bare adjective. Neither of these aspects, if you isolate it, can be taken as real, or indeed in that case is itself any

[2] I have inverted the order of the words *content* and *existence,* in order to express more explicitly Bradley's meaning. The passage is on page 162 of *Appearance and Reality* (Allen and Unwin).

longer. They are distinguishable only and are not divisible. And yet thought seems essentially to consist in their division. For thought is clearly, to some extent at least, ideal. Without an idea there is no thinking, and an idea implies the separation of content from existence. It is a 'what' which, so far as it is a mere idea, clearly *is* not, and if it also *were,* could, so far, not be called ideal. For ideality lies in the disjoining of quality from being."

Existence, then, cannot be defined. There is nothing miraculous or unique about this fact. It must be recalled that no simple thing or quality or experience can be defined, for definition involves analysis. But though existence, like *red,* cannot be defined, it can, like red, be exhibited. As Sellars has expressed it, "the basis of the category of existence is in our own sense of existing, and in our responses to the things around us taken to be as real as ourselves." [3] Existence is known to us directly (in the sense of "acquaintance with"), in all our various direct experiences taken as present psychoses. Very early, moreover, we come to think of given reals which are not given to us. As we also come to think in terms of causation (which certainly we do in very early childhood), we conceive of real things—groups of qualities in definite spatial and temporal loci—as bringing us the data, with their tang of givenness, which we immediately apprehend. It is a most natural and certainly a very meaningful supposition for us to entertain that there are other collections of qualities besides those we actually find that have a *that* as well as a *what:* which not only are describable, but have a locus in what we all think of—whether naively or with some sophistication —as the real space and time. These things we conceive as actual, for we think of them as affecting someone's consciousness. So we come to conceive of the real as *that which*

[3] *Physical Realism,* p. 289.

is capable of making a difference to experience. This simple way of thinking of the existent seems to me a rather good and even adequate definition for it. It is intended to include experience itself, wherever found; and also any combination of *what* and *that* which actually can affect experience. An asserted existent, on the other hand, which under no circumstances, directly or indirectly, could make any difference to any experience could not in any significant sense be called existent. This view is, in a sense, pragmatic, and to that extent I am glad to agree with the pragmatists.

Not all philosophers nor all philosophies are willing to accept the view here emphasized—a view in which Kant and Bradley agree with Realism—that the givenness of the existent is not a definable quality and hence that there is in existence a non-rational but purely empirical element. In fact it seems plain that no one could accept this position who asserts that the real is the rational and the rational is the real. Thorough-going rationalism would, therefore, appear to be confined to the realm of essence. The rationalist who knows what he is about should, apparently, limit himself to logic and mathematics, to concepts and converse, and have nothing to say concerning the existent world,—which he should leave to science and common sense. In so far as he does this there can be no quarrel between him and the empirical philosopher—unless it be merely over the verbal question how the word "philosophy" should be used. A consistently rationalistic philosophy which should thus recognize the limitations of its universe of discourse would have the great advantages of being clear in its thought and certain of its conclusions. It would have the one disadvantage of being precluded from dealing with most of the questions which interest mankind and which have been the themes of philosophic discussion since the days of Thales.

Not a few philosophers, however, who maintain the identity of the real with the rational are unwilling to recognize the contrast between the realm of essence and that of existence; they insist upon dealing with matters belonging to the existential world, yet deny that there is in existence a non-rational and purely empirical element. The ultimate impossibility of maintaining such a position makes itself plain in many ways and in the consideration of many problems. What, for example, can the upholder of such a view say as to the difference between the real and the imaginary? It is hard to see how he can possibly recognize this distinction. He would seem to be precluded from admitting that there is any meaning in questions such as the historicity of the Buddha or of Jesus. Or take such a question as the following: Let us suppose that George Washington had for years a servant, whose name has been forgotten and about whom at present we know nothing. It seems quite probable that such may have been the case, and at any rate no one could seriously question the possibility or the meaning of the supposition. Let us also suppose that Mrs. Nickleby was entirely an invention of Dickens' imagination. The question I wish to raise is this: What is meant by the assertion that George Washington's servant was real and Mrs. Nickleby was not?

The empiricists' answer to this question will consist in pointing out a number of real distinctions. Washington's servant had a stream of experiences of his own; each of these had a *that* as well as a *what,* each not only possessed character but did be. The man, moreover, if we consider him as a psycho-physical organism, had a definite series of loci in the real space and time, as well as a definite position within the casual nexus of the actual universe. His experiences and his acts made a difference, directly or indirectly, to the experiences of many other real people. These expe-

riences of theirs and these experiences of his were not merely possible objects of thought or of imagination: they had the tang of reality, of givenness about them, the sort of "this-ness" which we feel in our own private experiences. They were not merely conceptual; they were actually given. Of Mrs. Nickleby, on the other hand, none of these assertions can truthfully be made. Her character is, indeed, a much more clearly defined conception than his; we can talk about her at length, we know her idiosyncrasies, we can tell what she would probably do and would probably say in many situations. But exactness of conception or definition, while it gives status in the realm of essence, does nothing whatever to guarantee status within existence. We know all about Mrs. Nickleby but we insist she never really was. For she had no locus in the one real space and time. She (as distinct from Dickens' image and description) never affected anyone or was ever capable of influencing actual physical or psychical reality; she had no experience of her own. In her there is only a *what,* entirely divorced from a *that.* She is a case of what Bradley calls *ideality,* which consists "in the disjoining of quality from being."

What answer will be given to our question by those philosophers who identify the real with the rational and deny the contrast between essence and existence? I am not sure. Sometimes the answer is suggested that a purely imaginary world or being fails to work, to continue itself, and cannot be consistently maintained. Paraphrasing a remark of Russell's, it may be said that Mrs. Nickleby is the sort of person of whom it may be asserted that if she ever walked the streets of London, London is in Timbuktu. Such a response, however, plainly appeals to the existent and to the distinction between it and the merely conceptual or ideal. It appeals to the real space and time, not to a purely conceptual space-time system,—to a real London, not to a conceptual

London. So far as conceptual space is concerned we must say that Mrs. Nickleby did walk the streets of London,—the conceptual London of Dickens and his readers. And as to the imaginary failing to continue itself, it may succeed perfectly well, as in many a story whose hero and heroine "married and lived happily ever after," whereas many a real couple have died of starvation. The purely imaginary may be entirely consistent with the system in which it belongs, it may work perfectly well and forever within the purely imaginary world. It proves to be self-destructive only when it comes into contact or comparison with the *existent* world. It is not lack of consistency or system that makes the imaginary or purely conceptual fall short of the real. If the servant whom George Washington actually had is to be adjudged real in some sense in which Mrs. Nickleby was not, one must acknowledge the profound contrast between the realm of essence, of concepts or universals, and the realm of existence; and such acknowledgment involves the recognition of an empirical, non-rational, given element within reality which precludes the identification of the rational with the real.

The admission of the non-conceptual experience into the real is a serious and significant admission. It commits the one who makes it to empiricism, and to a form of philosophy for which the world cannot be entirely luminous. In this question of the recognition of existence as contrasted significantly with essence we come to perhaps the greatest crux in philosophy. Here we are at the parting of the ways, and I can hardly do better in closing this chapter than point out whither the two ways tend to lead. For the decision that one comes to on this fundamental question will be likely to determine one's attitude on many others. As a suggestion of what I mean I shall put in parallel columns a list of antithetical positions which may be roughly

subsumed under the general headings of Rationalism and Empiricism. It is not my contention that one's decision on the question of existence discussed in this chapter necessarily determines one's position on all the problems presented in our list. I mean merely that if one refuses, with extreme rationalism, to recognize the distinctive character of existence, it will be his natural tendency to adopt the positions in the first column of our list, and *mutatis mutandis* with the more empirically minded thinker who accepts the distinction to which this chapter has been devoted.

The list follows.

Extreme Rationalism	*Empiricism*
No "acquaintance with"; only "knowledge about."	"Acquaintance with" as well as "knowledge about."
Terms and qualities entirely dependent on relations.	The qualities of terms are of two sorts: relational and inintrinsic.
There are no existent entities but only conceptual natures.	Existence as well as essence is a part of the real.
"Substance" is meaningless and unreal.	"Substance" is meaningful and real.
Truth is coherence between concepts.	Truth is correspondence between a judgment and its object.
Causation is logical necessity.	So far as we can tell, causation is not logical.
Monism	Pluralism
Time and Change are transcended in the Real	Time and Change are real and ultimate.
Determinism.	Possibility of Determinism but also possibility of spontaneous activity and the emergence of the new.

Denial of the individual and of individualism.	Assertion of the individual and of individualism.
All values are instrumental.	Some values are intrinsic.
Philosophy is the investigation of a system of concepts.	Philosophy has to do with the existent world, attempts to explain our experience, and differs from science not in method but in scope.

Chapter VI

SUBSTANCE

Few technical terms in the history of philosophy have had so eventful a history and such striking contrasts of good and ill fortune as that which stands at the head of this chapter. From the time of Aristotle to that of Kant there was no more important or respected word in the writings of the philosophers. During the last part of the Nineteenth Century and the first part of this, it was not only dethroned but ridiculed, and none so poor to do it reverence. In the last few years many a voice has been raised in favor of its restoration.

By whatever name we call it, the idea at the back of the word substance owes its origin not to the philosophers but to the popular mind. It antedates the birth of philosophy by many ages and is, in fact, simply the popular concept "*thing*." For as soon as men got beyond the perceptual and purely practical stage and began to reflect upon their experiences they were faced with what seemed to be two undeniable and rather puzzling facts, which indeed owed their formulation to the nature of language, but were essentially much more than linguistic. The first of these was the observation that things *have* qualities, and the second the conviction that change involves something that changes. Now if things *have* qualities there must be some distinction between the qualities and the things; and if there be something that changes this something must be relatively permanent.

The first philosopher of the West who sought to make this general nature of the thing into a technical concept was Aristotle. The word he chose to express it was ο ὐσια—that is to say, *being* or *that which is*. Throughout his treatment of the term it is plain that he is thinking of what common sense and common speech knows as an individual thing. When he comes to subject his term to a careful analysis he finds that it has several marked characters. The most important of these is the fact that οὐσία is capable of being the subject of an assertion. "It is that which is not asserted of a subject but of which everything else is asserted." In other words, *substance* (if we make use of the Latin term which later Aristotelians substituted for οὐσία) is first of all to be contrasted with *attribute*. A substance is primarily a substantive. The category of substance, Aristotle insists, is prior to all others for several reasons, the most important of which is the fact that a substance "can exist apart" while attributes or qualities cannot. It is thus intimately bound up with the concept of existence; while qualities, which are universals, are in the realm of forms or essences. It is important to note, however, that in saying a substance can exist apart he does not mean that it can exist without qualities. A substance without qualities is not an Aristotelian conception: it belongs to a later and more abstract school of thought. For Aristotle a substance is a thing entire *with* its qualities. It includes its qualities, and its qualities cannot exist without it. Independence, the ability, so to speak, to stand on its own feet is, thus, the most striking characteristic of Aristotle's substance. It is not a universal: it is a particular thing. This means for Aristotle, as Ross has expressed it, that a substance is "a unity involving not only qualities but also a surd or unknown element which he calls matter or substratum." [1] It must

[1] Page 166 of Ross' *Aristotle*.

be recalled that matter for Aristotle is not itself a substance and that it has no definite character of its own. A careful consideration of his use of this term (ὕλη) will, I believe, show that he meant by it essentially the same concept that in the preceding chapter we discussed under the name *existence*. Matter for Aristotle is indescribable and indefinable; it is not a quality; but it is that which everything in this world of individual things must possess in addition to form or qualities. It is the givenness of the given, the *that* which must be added to the *what* if we are to have an actual entity. As such it is an essential aspect of substance. In other words, though a given substance must, for Aristotle, possess qualities, there is in it something more than these. It belongs not to the realm of essence but to that of existence, and as such it has an indefinable, non-rational element or aspect.[2]

The Scholastics who based their thought largely upon Aristotle carried on his views in ways that really modified them. Their tendency was to sharpen the contrast between substance and its attributes to such an extent as to separate them. It was not without significance that they substituted the Latin *substantia* for the Greek ἰσνοα. They were no no longer thinking of the concrete individual thing with all its rich variety of qualities, but rather of a colorless and unknown something which *stands under* and holds up its attributes, and which (as illustrated in the doctrine of Transubstantiation) could be removed from its attributes and be replaced by another substance without anyone knowing that anything had happened. This divorce of the substance from its qualities also led to the view that substance was absolutely simple and hence quite unchangeable, and that all substances, consequently, were in themselves sim-

[2] If this were a treatise on Aristotle's philosophy I should add that one can find in his writings other uses of the word οὐσία than that I have expounded. This, however, is the one most central to his thought.

ilar,—views which removed the concept farther and farther from the actual and empirical world.

It is not surprising that this Scholastic view of substance, which has lasted down into our own time, should have had the effect of convincing many modern thinkers that the term is merely an outgrown mediaevalism which should be abandoned *in toto*. Hence the attempt is common to give an account of our world without anything like the concept of substance. Difficult as is the concept, however, I am convinced that we cannot do without it: that unless we make use of it we cannot make the world we live in, and the experiences that we have, really understandable. But if we are to retain the concept of substance we must free it from the exaggerations of the Scholastics and go back to something like Aristotle's meaning.

The two essential differentia of substance, in the sense of the word which I shall accept, are existence and substantivity. A substance is not an essence but an existent, and it has the character of being a substantive rather than an adjective. We might, in fact, define it is an existent substantive, or a substantive existent. Existence and substantivity are related, but they are by no means identical, for an essence or abstract quality, such as goodness, is a substantive. All substances are substantives, but by no means all substantives are substances. On the other hand, unless we use the word existent in some unusual sense, we may properly equate *existent thing* with *substance,* and say that all existent things are substances and all substances existent things.

On this understanding of terms, all manner of even very transitory things can and must be recognized as substances. Qualities—such as white—are not substances because they are not existents: but *this patch of white,* or briefly *this white,* even though it be but a flash of light, is existent and

substantive and so falls within our definition. But while it must be called in some sense a substance, it represents a very low degree of substance. For on the view that I am seeking to present, substances are of varying grades. In existence, of course, substances do not differ from each other: there are no degrees of existence. But there are grades or degrees of substantivity, or independence;—for, following Aristotle, I am using the words here almost synonymously. All substantives as compared with adjectives, have a certain degree of independence. Independence is, of course, a relative term: but adjectives or qualities have none of it, while all substantives and all substances have some. Now plainly substances differ in the degree of independence they possess. *This white,* or *this peal of thunder* have barely enough of independence to be called substantive and to be substances. They are what I shall call substances of a very low grade. The paper which is white, the cloud or the atmosphere whose processes cause what we know as thunder, possess more independence. Parts of things may be called substances of lower grade than the wholes of which they are parts, since they usually possess less independence. Spinoza was correct in saying that the only absolutely complete substance is the Whole of Reality. Only it is fully independent; only it is "in itself and is conceived through itself."

The substantivity or relative independence requisite to substantiality plainly involves a certain amount of unity. Nothing is thought of as a substantive except as *it* is thought of:—to be conceived as a substantive or as a substance it must, from some point of view, be one and not a disintegrated plurality. Many substances of low grade possess only artificial unity: they owe what unity they have to us and to our purposes. The constellation of the Great Bear is an example; but most material objects are to a considerable degree dependent for their unity on our ways of thinking or the

purposes for which we utilize them. My watch may be regarded as unitary from one point of view, and from another as a collection of substances. Substances which are artificial in the sense of possessing no unity of their own but borrowing all they possess from our ways of regarding them may even overlap with each other—as each of two constellations embody identical stars.

Not all things which may be considered substances are of this artificial sort. In the case of some the unity which we find is grounded in their nature and hence is more or less objective. Things, for example, which are centers of special spontaneity and unified activity by no means owe all their unity to our attitude toward them. As the reader will recall, Leibniz made this power of spontaneous activity the one criterion of substance. It is perhaps a verbal question whether we should accept Leibniz' limitation to the use of the term; and while I shall not do so, I am forced to recognize the important distinction between those existent substances whose unity and identity is chiefly due to our ways of regarding them, and those which have objectively within themselves a character of activity or power which suggests to us that they are actually in some sense self-identical units, and which justifies us in judging that they are. Such centers of existence I call substances of higher grade. The line of separation between them and the lower forms is the character which distinguishes individuals in the original sense of that word—*indivisibles*. If there are indivisible atoms or electrons these are substances in the more objective sense, substances of much higher grade, surely, than the Great Bear. But it is in the biological realm that we find most certainly the higher forms of substance. And while living organisms are plainly higher in grade than atoms, centers of conscious life would be higher still. The highest form of substance that we know,—except, perhaps,

for Reality as a Whole—would be self-conscious and self-directing selves. But of this question there will be much to say in a later chapter.

The view I am suggesting, it will be noted, does not identify substance with an unknowable X divorced from qualities. Neither does it make all substances alike. Nor does it make substances simple or changeless. There is no qualityless substance. A substance is always at least an existent group of relatively unified and existent qualities. The qualities or characters which belong to it are of the two sorts discussed in a former chapter—intrinsic and relational. This, of course, means that every substance gets a large part of its character from its relations to other substances. From this it inevitably follows that, far from being changeless, it is changing in some sense all the time. If, therefore, we use pluralistic terms and speak of Reality as made up of substances in their relations, we must not interpret this expression in an atomistic sense. For since each substance gets most of its character from its relations to other substances, and since all of these substances and many of these relations are constantly changing, Reality as a Whole must be both a nexus and a process, and at least something like an organism.

In seeking to do justice to the changing aspect of substance we must not, however, altogether neglect the relative degree of permanence which many substances possess. It is hardly to be denied that some of the characters (both intrinsic and relational) of a substance are relatively central and others relatively superficial. The size and shape of the pyramids of Egypt, and the physical qualities of the stone of which they are built, are more central than are their relations to a certain fly in India or to the guess that I may make as to their age. A man's character and dominant purposes are more central to him, characterize him more

truly, than do the freckles of his skin or the length, at a given moment, of his finger nails or his changing spatial relations to a falling star. When central characters remain fixed for a considerable period, amid a constant and dizzying flux of superficial characters and relations, we can say in very significant phrase that the substance in question is self-identical and relatively permanent in change.

The very fact, moreover, that a substance is an existent presupposes in it at least some degree of permanence. For every existent must have not only a locus in real time but some duration. A mere mathematical cut in time would not exist: it would be conceptual rather than existent. A substance, therefore, must be a continuant. Change is possible because substances are continuants, or (to put it another way) because the central characters of substances outlast some of their superficial characters. The qualities of a substance, of course, do not themselves change—all qualities are eternal: but a substance changes its qualities. Blue is never anything else than blue, but a blue dress may change its color and a man may change his opinion. Unless there were something—a group of existent qualities—which for a given period did not change, what we know as change would be impossible. One quality would simply follow another, and we should not use the category of change, unless it were to conceive of the *world* as changing, or *our experience* as changing. Change as distinct from mere succession involves something which for the time being retains its identity, and its character. Similarly if there is to be motion there must be something that moves—*i.e.*, something which although constantly surrendering one set of spatial relational characters for another, retains an identical set of more central characters. Both motion and change are thus made possible and meaningful by the concept of substance.

The conception of substance here presented will probably

appear plausible enough to most readers. You let them not accept it too easily. It is necessary to remember that our conception of substance involves the acceptance of *existence* as well as essence. Substance for us as for Aristotle has both μορφή and ὕλη—both form and a non-rational surd—both a *what* and a *that*. Whoever accepts this view of substance, therefore, lays himself open to the charge of supporting a non-rational philosophy. He surrenders faith that the real is wholly rational. The world cannot be for him entirely transparent and luminous, for it has within it the opaque element of the merely given. Such a conception of the world need not be *irrational,* in the sense of harboring the self-contradictory: it may be entirely self-consistent and obedient to every law of logic, and the structure or pattern of the world which it recognizes may be largely rational. But part of the material out of which such a world is built will owe nothing to reason and will simply have to be accepted rather than reasoned to.

Before concluding this chapter it may be well for us to consider the alternatives from which we shall have to choose if we refuse to accept some form of substance doctrine. I can think of but two: for though many forms of expression have been given to the attack on substance, the substitutes proposed, varied as they are verbally, in the last analysis are reducible either to a denial of existence, or to some form of Phenomenalism. The attempt to deny existence has been discussed in the preceding chapter and I have nothing to add here. The realm of essence is composed of pure concepts: and if one wishes to confine one's philosophy to that realm, by all means let one do so. This method of refusing to admit the concept of substance, or to have anything to do with it, will be entirely successful—if one is willing to pay the price. The method of Phenomenalism is not so successful. The phenomenalist maintains that there

are no substances, no real beings, but only appearances. But if an appearance be not a real appearance it is not an appearance at all. And if it be real, either it must be real in its own right, stand on its own feet, as an actuality—that is as a *substance;* or else it must be at least an appearance to someone, or a modification of someone's experience,—in which case the being to whom it appears, or the experience of which it is a modification, is a substance in one sense of the word. Phenomenalism thus presupposes the very thing it seeks to deny.

My conclusion, therefore,—and I do not see how it can be avoided—is that we cannot do without the concept of substance in an existent world.

Chapter VII

TRUTH AND KNOWLEDGE

The steady divergence of the two points of view which I have called Empiricism and extreme Rationalism is one of the significant things that emerge from a study of the series of philosophical problems which we are considering. As was pointed out at the close of Chapter V, it is possible to predict with a good deal of security what position a philosopher will take on a number of issues once we know his opinions about terms and relations, essence and existence. The present chapter will be a further illustration of this fact. The view of the nature of truth taken by Rationalism and Empiricism respectively is very largely determined in advance by the contrasted positions they occupy on the fundamental questions already discussed. If the world—or at any rate so much of the world as philosophy deigns to consider—is purely rational and conceptual, a world of definable natures and relations, of logical necessity, with no non-rational or brute fact about it, then obviously all that truth can mean will be self-consistency and coherence within the total logical scheme, and the only form of proof to be offered in favor of the reality of anything will be in some form of the ontological argument. On the other hand, if there be a world in which existence as well as essence is recognized and whose constitution is only in part to be discovered by logical laws, in part also by actual experience and inferences from the given, then judgments about the existential facts of this world will be significantly characterized not only by

consistency and coherence within a logical pattern, but also by the relations they bear to the existent facts to which they refer. If, for example, you admit that my mind and your mind both exist, that I have experiences and you have thoughts, and that my experiences are not your thoughts and that you may think about my experiences, then the relation which my experiences bear to your thoughts will characterize your thoughts in significant fashion, and the truth of your thoughts about my experiences cannot be fully determined without taking my experiences into consideration. Let me point out further, in passing, that not only does one's real opinion about existence determine one's position on the nature of truth, but also, conversely, one's position on the nature of truth betrays one's real opinion about existence. There are philosophers who refuse to admit that they deny existence and the reality of the non-rational given, yet attack the correspondence theory of truth as meaningless. Such an attack would seem rather plainly to indicate that the philosophers in question think only in terms of the realm of essence and actually refuse to acknowledge the reality or the significance of existence and the given. The explicit denial of the existential world, when put in plain words, is a daring and a rather tremendous undertaking: but the number of philosophers who implicitly make the denial, whose philosophies are really inconsistent with an admission of existence, is probably much larger than is often supposed. One test of a man's real position on this question can often be found in his choice between the coherence and the correspondence theories of truth.

The correspondence theory defines truth as the correspondence of a judgment with its object. The term correspondence has made a good deal of trouble with many who have begun their investigation with a desire *not* to understand. What the upholder of the doctrine in question

means is this: that one's judgment corresponds with its object if the object is as one thinks it. Let us suppose that A makes the judgment "B has a toothache." Plainly the question whether B's tooth-experience is as A thinks it is at least a real and meaningful question. I do not see how anyone, unless he be determined in advance not to understand, can fail to see the question's meaning. If B actually has the experience known as toothache, then A's judgment corresponds with its object; and that is what is meant when we say A's judgment is true. There is surely nothing hard about this.

Let me point out here one or two things that the correspondence theory is not. For one thing, it is not an assertion of Realism as against Idealism. It need take no position on the question of physical reality. It holds as well, and is needed as much, within a Berkeleyan or subjective world as in a realistic one. Nor is the correspondence theory a theory of *copying*. It does not mean that I have pictures in my head which are *like* external things. The figures in the ledger of a railroad company do not copy nor resemble the tracks, rolling stock, and buildings, the traffic and its mass and value, to which they refer. Yet they may correspond with these things: and they do so when the judgments which they express conceive of the property, traffic, and value as they really are. Of course you need not call this relation of correspondence *truth* if you prefer some other word,—although if you refuse to do so you will be starting out to invent a new language; for there can be no doubt that *truth* is the word by which the English language most commonly expresses the character of a judgment which thus corresponds with its object. But whatever your taste in words and the originality of your vocabulary, you can hardly fail to admit that this character of correspondence, vulgarly called *truth,* is a most important character and one

that most of our investigations and discussions in science and in common life are about.

After what I have said it will hardly be necessary to repeat (what has so often been pointed out by logicians) that judgments and propositions are the only things that can be either true or false. An object or thing cannot be true, a man cannot be true (in the sense here under discussion), a concept cannot be true, a plan of action cannot be true. Only an assertion actual or potential, can be said to correspond or fail to correspond with its object. All this is plain enough. It is, perhaps, not so obvious that truth, on the correspondence view, has a slightly different meaning according as the object of the judgment or proposition is in the realm of existence or in that of essence. In the former case the true judgment is a description of an existential reality or situation, as when A judges that B has a toothache, or that all men are mortal. When, however, one is discussing matters wholly within the realm of essence, such as mathematics and pure logic, true judgment is essentially a statement of the mutual implications of concepts. In spite of the obvious differences between the two types of proposition, however, we may properly say that the true judgment always corresponds with its object, though the kind of correspondence naturally varies with the object intended. In the one case we have an existential situation which the judgment describes. In the other we have what we might call a logical situation which the judgment also describes. Certain concepts have certain interrelations, in the sense that whoever denies these interrelations can ultimately be shown to have contradicted himself. The true judgment states these undeniable interrelations. Euclid makes the judgment: The internal angles of a triangle are equal to two right angles. This judgment is not a description of an existential triangle, for no triangles may exist. But it states that the concept of triangularity and the concept of

possessing two internal right angles are so related that no one can deny the connection indicated between the two without contradicting his (previously accepted) definition of angle and triangle. Incidentally it is interesting to note that many of the upholders of the coherence theory accept this second type of true judgment (the statement of the mutual implication of concepts), and attack the first type (the description of existential reality). Here again let me point out we have an indication of their unwillingness to admit either that there is an existent world or that we ever make judgments about it.

It is important to distinguish between the truth (or trueness) of a judgment and the proof that it is true. Suppose someone asserts: In the glacial age there were mastodons. The listener asks: What do you mean by mastodons and the glacial age? He also asks: How do you know there were mastodons in the glacial age? Both questions are good questions; but they are different questions. A who judges that B has a toothache may never be able to prove that his judgment is true: but there is no reason why it may not be true none the less. It tends only to confuse thought if we refuse to make this obvious distinction and to keep separate though related questions clear in our minds. Let us know what we mean by our judgments before we seek to prove them true or false.

Now one of the most important considerations in proving the truth of a judgment is its self-consistency and its coherence with the mass of our recognized and established truths. Coherence is recognized by the upholders of the correspondence theory as an important, perhaps the most important, test of truth. But the test of a thing is not the thing tested. The proof of the pudding is the eating; but the eating presupposes the pudding. Coherence is a way of telling a true judgment, a necessary condition which a

judgment must fulfill before we can be sure that it is true; but when we are dealing with the existential world coherence is not what we mean by the truth of the judgment.

When we are dealing solely with the realm of logic, mathematics, essence, coherence (if interpreted widely enough) is in one sense all that we mean by the truth of the judgment. Here the relation intended by our judgment and the test of this relation are identical because the relation intended is mutual coherence and the test is mutual coherence and the judgment is simply a statement of this coherence. On judgments of this sort there is only a verbal difference, if even that, between the two theories of truth. In short, the correspondence theory applies to both realms, the coherence theory to only one.

So obvious and natural is the correspondence theory of truth, when the judgments in question have to do with existential matters, that it is difficult to understand why it is so often attacked and how it can be so absurdly misunderstood. The misunderstanding, I suppose, is the chief explanation of the attack; for indeed the caricature of correspondence, the "copy theory," is patently untenable. Probably, as I have more than once suggested, the attack upon correspondence is sometimes to be explained by an implicit and half-conscious unwillingness to admit existence at all. More often the attack may be due to a downright misunderstanding of what the theory is and what it aims to do. For not a few of its critics write as if they supposed the correspondence theory were, not a theory of the nature or meaning of the truth of a proposition, but a *test* of its truth.[1] They appear to think that the defender of the view

[1] This assumption is implicit in the attacks of many critics of the correspondence theory. The most recent of these to come to my attention is that of Mr. Ratner in the Journal of Philosophy for March 14, 1935, where it is taken for granted that the theory in question is "a criterion that we can apply, one that we can actually *use* in the process of gaining truth."

says something of this sort: The way to see whether a proposition is true is to take it and compare it with the real object which it means to be about. It is not difficult to show that whatever one may think of the wisdom of such an undertaking, it is a very different undertaking from the effort to determine what the truth relation is. And I have never seen an exposition or defense of the correspondence theory (by a believer in it) which justified any such interpretation. The aim of the theory is, not to tell us how to test our judgments, but to explain what the truth or trueness of a judgment means; not to show us how particular propositions shall be proved true, but to make clear how the abstract notion of the truth relation, or the quality of trueness, shall be defined.[2] Of explicit and direct attacks upon the correspondence theory I know of only two worthy of consideration. One is the familiar criticism, made by pragmatists, idealists, and even by a realist like Professor Alexander, that truth must be verified, and that the correspondence of a judgment to its object never can be verified. Both of these assertions are exceedingly dubious. The first, in fact, is really dependent on a confusion of thought—an unconscious play upon words. The word *truth* (let me explain, if so simple a matter calls for explanation) has several common uses. In one of them the word is taken to refer to a demonstrated statement, as when we speak of the "truths" of science and mathematics. It goes without saying that a "truth" of this sort has to be verified, for what we mean by the word in this sense is just a verified assertion. But the word *truth* is also used to mean the quality of trueness which a proposition has in virtue of the fact that its object actually is of the nature which the proposition as-

[2] Some of the most persistent critics of the correspondence theory seem ready to admit its truth in those rare moments when they really deal with it and are not misled by some misunderstanding of it such as the one just suggested. *Cf. e.g.* Joachim, *The Nature of Truth*, p. 20.

serts. Truth in this sense obviously does not need to be verified in order to be—though doubtless it does need to be verified in order to be *known*. To insist that the Copernican theory was not "true" until it was proved true is either a mere matter of words and not of philosophy: or else it is an assertion that Reality has no character of its own—a position which ultimately reduces to solipsism. We must, then, separate the meaning of trueness from the possibility of proving it in any given case, just as we must separate the meaning of any proposition from the mode by which it may be verified. And as to the assertion that the correspondence of a judgment to its object can never be verified, that is as it may be. Just what is meant by the verification required, just how absolute the certainty of our demonstration must be before we have truth, just what tests shall be accepted—these things should be told us if we are to understand the sweeping assertion that on the correspondence theory nothing can be proved true. The general question of proof and probability is a large one and we shall face it in more than one section of this volume. Here let it suffice to point out two things: first that if, for the reasons stated, no judgment can be true on the correspondence theory, then all judgments, scientific, historical, practical that have to do with any other existence save one's own private and immediate experience, are incapable of truth; and second that all the philosophers who deny the correspondence theory repeatedly make use of it, and in fact insist that their own theories of truth are true in the correspondence sense.

The only other attack upon the correspondence theory which seems to me worthy of consideration is the challenge sometimes thrown down by its critics of showing what can be meant by asserting its truth. If the truth of a theory consists in the correspondence between it and its object, what is the object to which the correspondence theory cor-

responds, and what can be meant by its correspondence? I apprehend that the seeming difficulty in answering this question is merely the verbal difficulty of analysing and exhibiting the essential nature of any complicated situation. The correspondence theory of truth is a short-hand expression for a rather complicated proposition which may, I think, be analysed into the three following assertions: (1) The judgment of an individual mind may refer to objects outside of itself (*e.g.* to experiences in other minds). (2) It is conceivable that such a judgment may correspond to its referend in the sense that the referend may be as the judgment asserts it to be. (3) In case a judgment does correspond in the sense indicated, it may properly be characterized by the adjective *true*.

Each of these three propositions refers to a situation, as its object or referend, which is at least conceivable. There is at least nothing either meaningless or self-contradictory in asserting that each of these propositions corresponds with its object—that the situation is as the proposition asserts it to be. If you deny the third of the three propositions, this denial is a purely verbal affair and of no importance. If you deny either the first or the second, you must deny that judgments can transcend the mind that makes them, and thereby you deny the possibility of common meanings between two minds, and with it the possibility of science and philosophy and ordinary conversation. The correspondence theory, I therefore hold, is true in the correspondence sense of true: true in the sense that situations such as those described in propositions (1) and (2) are actual; and you cannot deny the reality of such situations and continue to discuss either the correspondence theory or the coherence theory or anything else.

The coherence theory of truth might be conceived and expressed in such a way as not to differ in anything but

words from the correspondence theory. You might, that is, define a true judgment as one that coheres with the entire situation to which it refers, thus using the word *coheres* as merely a synonym or substitute for the word *corresponds*. Of course, it is not in this way that the advocates of the coherence theory take it. By most of them, at any rate, the word *truth* is used ambiguously, sometimes to mean coherence, sometimes to act as a synonym for Reality. They attack the problem not from the point of view of the individual judging about an object, but from that of the total system of true concepts and propositions. The fact that Truth (the capital T is often used and in this sense always should be) is by them equated with Reality, suggests something about the nature of Reality. It would, at any rate, seem improbable that this Reality which is another name for Truth should contain within it any brute fact, any mere datum. In short, it is probable that the Reality with which Truth is identified is not and does not include existential reality, but is wholly within the realm of essence. The reals of the realm of essence are held to be so interrelated so as to constitute a logical system in which each part or aspect implies every other. The doctrine of internal relations holds here absolutely. There being, on this view, no mere datum, no intrinsic qualities, every member of the organic whole gets all of its nature from its relations to everything else. Thus nothing is real short of the whole of Reality, and nothing is true short of the whole Truth. From these considerations it follows that no stateable truth (no verbal assertion) can *be* the whole: that is, none can be fully and completely true. This assertion obviously must be true. Yet if no truth can be completely true, how can this one? Have we here a case of Epimenides of Crete? I do not know what the official answer to this may be. But it would seem plain that if no truth is completely true, the coherence

theory cannot be completely true—a logical consequence which is loyally and frankly accepted by the chief spokesman of the theory.[3]

I shall not here trespass upon the reader's time nor my own by attempting to expound the pragmatic view of truth. There is much in it with which an upholder of the correspondence theory need have no quarrel. The chief respect in which it is in disagreement with that theory consists in its identification of trueness with verification—a matter which has already been discussed in these pages. It may be worth while, however, to point out a rather interesting relationship. For an example of extreme opposition between schools most of us would probably suggest that between Rationalism and Pragmatism. The rationalistic doctrine of truth is, as we have seen, the coherence theory. The pragmatic doctrine, to use a favorite phrase, is that truth is workability: a true proposition is one that works. This expression, however, must not be taken to refer to pleasant and irrelevant results; Pragmatism by no means supports the absurd notion that any belief is true provided it makes you happy. The workability to which Pragmatism appeals is a matter of consistency. The true proposition is one that works together with experience and with one's other accepted judgments and beliefs. In short, there is a very close and essential relationship between the pragmatic view of truth and the coherence theory. Rationalism agrees with Pragmatism that truth consists in workability, properly understood; and Pragmatism that truth is really coherence.

The truth-theories held by the schools of Rationalism and Empiricism are, as we have seen, determined by their re-

[3] Joachim, *The Nature of Truth,* pp. 171 and 175. "The coherence notion of truth may be said to suffer shipwreck at the very entrance of the harbour." "The coherence notion of truth *on its own admission* can never rise above the level of knowledge which at the best attains to the 'truth' of correspondence."

spective views of reality; and in their turn the two truth-theories determine the general outlines of the theory of knowledge as held by the two schools. To one who rejects or neglects existent things, deals only with the conceptual world, and finds in truth nothing but logical coherence, knowledge is naturally indistinguishable from truth, as truth is ultimately for him indistinguishable from reality. For the question he asks is not, How does the individual mind know its object, or what is the relation between the knowing mind and the object known? but rather, What is the nature of the system of concepts which constitutes the Real? Knowledge either as a process within an existent finite mind, or as involving relations between that mind and its referends, does not interest the rationalist. And indeed it should not if, as I have so often suggested, he takes seriously neither existent minds nor existent objects. For him, therefore, epistemology and metaphysics are not two but one; and both in the end would seem to be identical with logic in the larger intention of that word: since in the end, the task of all three is to investigate a system of concepts, the structure of the rationally real. Such a view of knowledge, like the coherence view of truth to which it is closely related, has no place for transcendence. What, indeed, is there, in such a system of concepts, to transcend? Since neither the point of departure nor the purpose or goal of the investigation has anything to do with finite and particular existents, such as human minds and their objects, the question whether meaning transcends the given simply does not arise.

For the empiricist—and I should suppose for everyone who acknowledges existence and the conceivability of knowing about existences—the problem of knowledge is the problem of the individual mind and its relation to its objects. The nature of the problem is best understood if we go at it, in the first place, not from the first person but from the

third. That this is a fair way of attacking the problem can hardly be denied by anyone who admits that there are other persons besides himself who may have knowledge: and he who denies our right to consider the knowledge of a third person thereby writes himself down among the solipsists. Let us then start out with a third person, John, knowing some fact about the experience of someone else, let us say Peter. If it be admitted that John can have knowledge about Peter, how shall this knowledge of his be described or defined? I know of no better definition of knowledge in this sense than Plato's: "Knowledge is true opinion with reason."

This definition, it will be observed, involves three subordinate propositions: (1) Knowledge is opinion—*i.e.*, an opinion about some referend, a situation which involves transcendence. Of the significance of this I shall have something to say after dealing briefly with the two other propositions involved in Plato's definition. (2) The second is the assertion that the opinion which is to be knowledge must be true; and the empiricist takes this to mean that the opinion must correspond to its referend in the way discussed in this chapter. And let me remind the reader that if the referend be (as here supposed) an existent object, it is hard to see what other interpretation could be given to a true opinion. (3) Thirdly, the opinion not only must be true but must have received a reasonable degree of verification. The extent of the verification is wisely left unspecified. If we insist that absolute and complete verification is necessary to knowledge, we must be ready to confine the word *knowledge* to logic and mathematics, and to admit that none of the natural sciences give us positive knowledge and that we have no general knowledge of anything in the existential world. We do, indeed, possess certain negative knowledge. We know that the self-contradictory cannot be accepted

as real. We also have "acquaintance with" and possess this kind of knowledge in the realm of our own private experience. But conceptual, general, scientific knowledge which is positive and beyond all shadow of doubt is to be had only in the realm of essence. For this reason it seems to me best to allow such a degree of verification as we possess in the better verified results of natural science to satisfy the demand of our definition that knowledge shall be true opinion *"with reason."*

Let us return now to the first proposition involved in Plato's definition: knowledge is opinion. This, as we have seen, involves transcendence. Opinion is not just an experience, knowledge is not just an experience: it is an opinion *about* something. Its meaning is wider than the experience. The referend is not identical with the symbol. In all cases of knowledge (other than "acquaintance with") there is an outer reference. This is plain enough in itself and it also follows from the nature of meaning as expounded in Chapter II. The fact of transcendence in knowledge is obvious enough and is simply not to be denied without denying the possibility of science or of social communication—for we two must "mean" or refer to the same thing (whether it be existent or subsistent) if we are to discuss, agree, or even disagree. But while the fact of transcendence can hardly be denied, the nature of transcendence and the implications of transcendence are by no means simple matters, and careful thought is requisite to their understanding. Professor Lovejoy has helpfully pointed out that there are at least three distinguishable problems which the question of transcendence raises: an analytic, a metaphysical, and a genetic problem. The third of these, as to the steps gone through in the development of the power of transcendence, is not involved in our discussion. The metaphysical problem, as to the regions of reality which may properly be said

to transcend individual experience, or perhaps all experience, will engage our attention in several of the chapters that are to follow. Here we are concerned only with the analytic problem which Professor Lovejoy expresses thus: "What is actually present to consciousness when the experience of 'referring' to an object as 'real' or 'not-given' occurs?" [4]

Let us suppose that John Smith is thinking about the King of England, and forms the opinion that King Edward is, at the moment, in Windsor. What happens in John Smith's mind when he makes this judgment? Unless he is greatly mistaken (and indeed unless it be impossible for two men to think of the same thing), he is not thinking about his *idea* of King Edward but about the actual King—a real person who, we all agree, is independent of John Smith's thought. The actual King Edward is not *in* John Smith's mind. The content of his mind will probably include some kind of visual, auditory, or muscular sensation which acts as symbol for the King, some kind of symbol for Windsor, and probably various other things. These are woven into what is sometimes called a schema which, though it includes and binds together images of various sorts, is far more conceptual than sensory. But this complex schema is by no means all there is to the matter. John Smith has had, and in fact now has, the experience of otherness and of externality. He knows what he means by these things. With the use of these concepts, derived from experience, he is able to form the idea of realms of existence other than his own experience, in fact of realms of existence other than anyone's experience. Thus he conceives that his schema of Windsor with King Edward in it is representative of, but not identical with, the existent situation which is his referend. The images and tendencies to action, and the con-

[4] *Dualism and the Paradox of Reference,* Journal of Philosophy, Vol. XXX (1933), p. 590.

sciousness of meaning are present, subjective, and psychological. But John Smith uses them to mean more than they are.

There is nothing self-contradictory or logically difficult about this. If it seem to be so, it is because the description and analysis given is misinterpreted to mean that an object which is not present is present. The belief in transcendence by no means involves any such fallacy. The description I have suggested means to be only a description of a psychological situation which we find when we seek meticulously to analyse the experience of judging that a certain man is in a certain place, or anything of the sort. John Smith's private experience is taken and used by him to refer to something which is not an experience of his. There is nothing in this asserted fact at all inconsistent with a perfectly natural and very common way of conceiving the mind and its activity. But it is inconsistent with a view which would make the mind merely "a flat piece of psychological surface," or merely a stream of consciousness or a nexus or pattern of experiences which are ultimately analysable into sense material. In fact I do not see how the existence of a schema of conceptual relations within the present mental content and nothing more could account for the consciousness of meaning and transcendent reference. More is needed than any findable, analysable, passive content could give. For transcendence means an active referring beyond the psychological given. There is nothing difficult about this conception unless action be difficult. If there be nothing more in the life of mind than the associationists and structuralists find, if there be nothing more than an undynamic process, a mere sequence of one thing after another, then indeed it will be not only difficult but impossible to find either action or transcendent reference. Both spontaneity of action and meaningful reference to what is beyond the

given involve a being who *uses* his mental content, and thus *acts* and *means*. If such a view of mental life be accepted there is no difficulty about transcendence; without it transcendence would seem to be unstatable.

The matter here suggested is so fundamental as to deserve further consideration. Knowledge involves an explicit or implicit judgment. Not only is a judgment a conscious process: it is different from processes that are merely sequences of experience. In a judgment someone judges. Judgment and knowledge, as distinct from mere trains of association, presuppose some kind of thinker, some kind of self. This is not merely a linguistic conclusion: it is involved in the very meaning of the transcendence which is the heart of knowledge and judgment. In every case of transcendent reference we find that there is a bi-polar situation: there is the object we are thinking about, or referend, and there is also a *thinking about it*. This activity of thinking about the referend is not a sequence of sensa nor even a relational schema. The word which best suggests what is indicated in our experience of judging is the word *subject*. The subject is involved in the experience of judging about the object. The word *object* is notoriously ambiguous; but its ambiguity need not make us trouble in this connection, since what we mean is the referend. The referend may be an experience within our present total awareness, or it may be an existent that existentially transcends our private experience or even human experience. If we are using the word to indicate a present experience, such as a tooth-ache, we may say that the object is in full view. The subject, or thinker, which makes the judgment, is not in full view. This seems to be a necessity derived from the very nature of judging and knowing. The thinker can no more be its own object, in the sense of being directly cognized, than the eye can see itself. Of course the thinker

may think about himself, through the use of a concept, but the actual thinking self, as subject, cannot be directly apprehended, in the way that, for example, a pain may be. None the less, the self, in the experience of the bi-polar relation which knowledge is, finds itself inevitably implied.

Let us suppose an intelligent being who has all his conscious life lived alone upon a desert island; and let us add that he has no mirror and has never seen his own reflection in a pool. Let us further suppose that, on reaching maturity, he reflects upon the facts of vision, that he analyses what he finds, and asks himself what is involved in the facts that he finds. He sees objects: but he perceives that the objects do not tell the whole story. He notes that if, while looking at an object, some other object comes into a certain spatial relation to the first (as we should say between it and his eye) he ceases to see what first he saw. It is thus borne in upon him that seeing is a bi-polar process. It involves a relation which is like a line (in fact we call it the "line of vision"), but a line with this peculiarity, that he sees only one end of it. The line extends toward him, to him, but the hither end he cannot see. But that it does have a hither end is indicated by the fact that it is a line of vision and that it has a far end. A line of vision with only one end would be like a stick with only one end, or like a relation that did not relate. If you see only one end of a stick you do not conclude that it has only one end: you do not doubt the reality of the other end even though it happens to be hidden from you. Hence, I judge, the intelligent being of our illustration, on his desert island, would probably conclude to the existence of an organ of vision which, just because it was a seer, could not be seen.

The situation in knowledge and judgment would seem to be analogous. In our actual experience we have not simply

an object but an object known or thought about. This does not indicate that all existents must be thought about, but it does call our attention to the fact that in every case of knowledge or judgment we have a bi-polar situation, involving an object and a thinker or judger or knower. The knower is not an object of direct experience; just because it is a subject it cannot be a direct object. One end of a stick cannot be both ends—if it were there would be no stick. But every stick must have two ends. If you do not believe it, try cutting one of them off.

The purport of these reflections upon transcendence is of course this: that all judging, knowing, and meaning, all outer reference imply the reality of a subject or self; and that without the implicit recognition of a self, transcendence —and with it all possibility of philosophy, science, or ordinary intelligent intercourse—becomes a very dubious, if not actually unstatable, concept.

A distinction has been traditionally made between mediate and direct or intuitive knowledge. Careful analysis of mediate knowledge, however, forces one to the conclusion that it must always involve and contain knowledge of the immediate or intuitive sort: for unless it does this, it is a mere sequence of ideas or experience, but not knowledge. All knowledge is immediate in the sense of being a direct apprehension of truth. "Knowledge about" is in this sense immediate. When a series of considerations or propositions have to be put together to bring about this apprehension, the total process is called mediate knowledge; but only in the actual and direct grasping of the truth does knowledge come in.[5] I here refer to this fact because it seems plain to me

[5] It will be evident to the reader that I here adopt the essential portion of Mr. R. I. Aaron's position, as expressed in his monograph on *The Nature of Knowing* and his paper read before the Aristotelian Society: *Is There an Element of Immediacy in Knowledge?* (Supplementary Volume XIII, 203f).

that this intuitive grasping of truth points to the same sort of knower or subject that is required by the fact of transcendence. No mere physical brain or nervous system, no mere sequence of psychical states would seem to me at all adequate for this direct intuition which knowledge is. In the nature of the case, I should suppose, only a subject or self could perform this task. But the problem of the self will receive detailed treatment in later chapters. What I have written concerning it here is merely thrown out as anticipation and suggestion.

A further consideration involved in the concept of knowledge, more obvious and much oftener discussed than the one just presented, deserves a few words before we close this chapter. Any "true opinion with reason" is a genuine case or piece of knowledge. But our rationally justified opinions are not separate good guesses but are bound up together into systems which we call by the names of the various sciences, and are all, directly or indirectly, related and so united into an at least ideal system which we call human knowledge as such. It has been a commonplace of philosophy for over two thousand years that knowledge, especially in this sense of a system of propositions, is dependent for its nature not only upon the "real world" of the realist, but also upon us and our powers of perception and conception. Even of the simplest knowledge of the external world is this true. Naturalism itself admits, and insists, that all the secondary qualities which we think we sense in Nature are immediately dependent upon the peculiar character of our sense organs and our nervous systems. And when we go beyond perceptual to conceptual knowledge, our higher intellectual faculties make their contribution to the nature of the object in knowledge [6] and lay down conditions without

[6] Not to the object of knowledge. The object itself is not affected, but our knowledge is conditioned by our minds.

the fulfillment of which it would be impossible to know anything. If, as the realist insists, knowledge is the revelation of an independently real world, the form of this revelation is at least in part dependent on the nature of our intelligence.

This, I take it, is the irreducible minimum of truth in Kantian Idealism, a truth which realists and idealists alike admit or proclaim, but which may be, and often is, worded in rather different fashions. It may be propounded in such a way as to seem a most recondite matter, a great discovery of profound truth, the Categories laying down the foundations for our world, the Mind determining the nature of Reality—the "world" or "Reality" being here used to mean the real as it appears to, or is thought of by, us. The same truth about knowledge may also be expressed in such fashion as to seem hardly more than a truism—the statement, namely, that we can know things only in the way we can know them: that our concepts of reality are dependent on our powers of conception. It is, I suppose, because the realist considers this fact so almost tautologically obvious, that he makes so little of it.

The truth about the importance of these considerations concerning knowledge lies, I suppose, somewhere between the idealist and the realist evaluations. Some of the importance attributed by idealists to the fact that the conditions of knowledge condition it, is presumably due, in many cases, to a certain confusion that careless wording of the actual facts naturally induces. For the admission that in order to know at all we must know in our way is sometimes taken to mean that our ways of knowing are categories constitutive of the real as such. To avoid this form of self-deception through words we must keep ever in mind the distinction (which only a solipsist would be justified in rejecting) between what the real world is and what it is "*for*

us." [7] It is natural to slip over the distinction with slippery ease. Green's assertion that "it is only through consciousness that the world exists for us at all" (surely a harmless platitude) has sometimes (and even by Green) been taken as if it meant, "it is only through consciousness that the world exists at all." If the two sentences be taken as equivalents, or the distinction between them be merely neglected, it is possible to found upon the assumed equivalence or the neglect an elaborate system of Subjective or Objective or Absolute Idealism.

On the other hand, while it is no doubt perfectly obvious that we can know the real only through the forms of knowledge which are natural to our intellects, the assertion that knowledge is thus conditioned is still worth the making. Or, to call attention to a related consideration, it is well for us to be reminded of what the pragmatists (especially Dr. Schiller) have so often stressed, that the structure of our science is built up out of the answers that Nature gives to our questions, that the kind of questions asked determines the kind of answer given, and that *we* have to *ask the questions.* The realist insists (and probably with justification) that Kant's doctrine of the Categories with their Transcendental Deduction sounds much more profound than it really is: yet the fact that everything which goes into our science must be "categorized"—made specific, defined—by means of thought, is a fact that needs to be kept before our attention. "The world for us"—our systematized and common beliefs about the real—is not given directly through the senses, is not the writing of Nature upon the *tabula rasa* of a passive

[7] If the distinction here implied between the real world as it is in itself and what it is "for us" suggest to the reader the query, Is not this agnosticism? I would assure him that this question will be discussed at some length in a later chapter (namely, Chapter XIV). For our present purposes, the important point to keep in mind is the fact that there is no reason for identifying the object's existence and its being known. Whoever refuses to make the distinction referred to thereby commits himself to Solipsism.

and merely recipient mind, but is in large part determined by our intellectual make-up and the unescapable conditions of thought and understanding.

Perhaps the most notable corollary from this important platitude is the necessity of postulating the coherence of the real world which we make the object of our thought. The attempt to understand reality is the attempt to grasp its parts together with their relation to each other and in their relation to our experience: to find light thrown upon each part by each other part; to think of it as an interrelated many-in-one. As we saw in Chapter IV, all of the real must be subject, at any rate, to the more fundamental laws of thought—Non-contradiction, Identity, Excluded Middle. That the real is actually subject to these laws can be proved in no empirical fashion, unless it be empirical to point out that all proof of anything depends upon these laws. If the physical world of the realist's hypothesis does not conform to these laws, plainly all attempt to understand it, or to enlarge or intensify our knowledge of it by discussion or thoughtful experiment is utterly vain. Whoever enters into an investigation of the real, or a discussion about it, tacitly admits the universal application of the laws of thought.

We must presuppose this much in all our scientific and philosophic investigations and reasonings; and not only this. We must presuppose also that all the parts of the real are interrelated, and thus directly or indirectly related to us and our experience. And further than this, we must take it for granted at the very beginning of our philosophy and our science that the Real, and every part of it, is at least capable of making a difference to experience. To be sure the "real for us," in the sense of that which we experience, is not to be taken as the whole of reality, or confused with the real as such. But that which could never make even an indirect difference to any experience could hardly be called real in

any significant sense. It might be "real" in some sense not defined, but in the very nature of the case it could never have anything to do with our science or our philosophy, and hence it would be quite impossible for our science or our philosophy to have anything to do with it. The conditions of knowledge are not the conditions of Reality; but they are the conditions of science and philosophy.

Chapter VIII

SOLIPSISM

The order of topics and the course of reasoning thus far presented to the reader, I fear, may seem to him rather haphazard, and he may wonder whether the trees will ever cease hiding from him the forest. If this be the case let me encourage him to hope that the general position and the more constructive suggestions which it is the aim of this volume to present will soon be clearer than they can well be at this point. The seven chapters that have preceded this one have dealt with certain general topics and fundamental theses which had to be made plain before the reader could be expected to accept, or even fully to understand, the later course of reasoning. From this point on, however, it is my hope that we can pursue a less tortuous course and trace forward our line of thought with reasonable steadiness and consistency. The chief purpose of this book, as I have indicated, is to investigate what philosophy can make of the general nature of the existential world. With this aim in mind, now that the fundamental and abstract questions of the preceding chapters have been considered, we shall begin the more constructive part of our work with a consideration of Solipsism, the most complete form of what might be called existential skepticism, and get what light we can from its darkness.

Since there are no solipsists and probably never have been any, it may seem that a serious work on philosophy should

no more have a place for this purely imaginary type of thinker than a treatise on biology should devote a chapter to the Jabberwock. Let me, therefore, say at once that my interest in Solipsism is not for its own sake but for the sake of the light which a study of this ultimate type of skepticism throws on other problems of philosophy. It is easy to say that Solipsism is not true: it is more difficult and more important to see why we are justified in this assertion and how we do logically get out of it, and so begin our progress toward positive beliefs concerning the existent world.

Several refutations of Solipsism have been proposed, and to save the reader's time I shall say at once that in my opinion they have all failed. To say that the solipsist contradicts and refutes himself by asserting that no one but himself exists, since "self" is a social term, betrays a lack of comprehension of the solipsistic position. The solipsist does not say, "I as a self exist and no one else does." If he understands his business he remains purely on the defensive and says simply: there is no compelling reason to suppose that anything exists other than these present sensa, ideas, and experiences. He does not assert even his own past. He merely experiences his present experiences, and his only assertion that concerns us is that it would be impossible to prove that anything besides his stream of consciousness exists.

I do not think that this kind of solipsist has ever been refuted, and I certainly have not the temerity nor the ambition to propose a new attempt at refutation. So long as he remains on the defensive I do not think he can be dislodged. For the proving beyond even a theoretical shadow of doubt that the solipsist is wrong is just the difficulty of proving anything in that absolute fashion; and proof of this absolute sort within the existential world is simply not to be had. The strength of Solipsism is the strength of existential

skepticism in general. If we refuse to consider any hypothesis which, though extremely probable, falls short of mathematical certainty, we must give up all consideration of existent things other than the immediately given, and confine our thoughts wholly to it and to the realm of Essence.

But while the solipsist is unassailable on the defensive, the moment he surrenders his purely negative attitude, compares his hypothesis with rival hypotheses, and submits himself to the judgment of an impartial tribunal, his case is lost. The hypothesis that nothing else exists save these and these experiences, as compared with the hypothesis that there are other existents besides them, is exceedingly improbable. Obviously if the solipsist and his opponent should agree to present their views and arguments to a third party for decision, the very situation thus tacitly recognized would be a surrender of the solipsistic assertion. The reader may recall a somewhat similar situation when a distinguished American philosopher, who for a time called herself a solipsist, complained that she could not get any other solipsists to correspond with her.

Of course the solipsist need not leave his defensive position, and if he remains there we cannot trouble him. But neither can he trouble us—unless we be troubled by the recognition of the fact that absolute certainty about the existential is not to be had. We may, however, profitably consider Solipsism as a possible hypothesis, compare it with its rival, and see which of the two seems the more probable and why. There is no doubt that when such a comparison is made the solipsistic view is seen plainly to be immensely the less plausible of the two. The opponent of Solipsism has a perfectly straight and simple argument. It consists of two parts. The first is the presentation of the hypothesis of other minds. This hypothesis can be shown to be perfectly meaningful and self-consistent. All its terms are drawn from

experience. I know what I mean by a mind or center or stream of experiences because I find at least so much directly. I know what I mean by *other* because I find it in experience. Here is a watch. Here is another watch. Here is a finger, and here another. To assert that there *are* other experiences besides *these and these* may not be demonstrable and may not be true, but it certainly is neither meaningless nor self-contradictory.

The second part of the argument consists in showing that the hypothesis thus proposed is much more probable than that of Solipsism. The gist of this demonstration consists in showing that the hypothesis offers an explanation of the facts of experience, whereas the solipsistic hypothesis does not even attempt to do so. The meaning of explanation, like the meaning of all his terms, the opponent of Solipsism gets from his own experience. Something further will be said on this question of explanation later on in this chapter: for the present purpose suffice it to say we recognize that a number of our experiences are explained by other experiences: they are made more luminous, less incomprehensible, less surprising. Fitting in with the rest of our experience, they form an intellectually satisfactory whole. I purposely dig my finger nails into my mosquito bite and I feel the sensation of pain: and pain needs no further immediate explanation. But not all my experiences are like this. While pondering on Solipsism, suddenly I experience a terrifying auditory sensum —a *crash-bang* that leaves me trembling. How explain it? I wonder about the answer to some puzzling problem and wrack my brains in vain. Suddenly what I instinctively take to be another man whom I see and hear (can he be just one of my sensa?) tells me the answer. If he be just one of my sensa, how did he know the answer of which "I" was entirely ignorant? In short, many of my experiences cannot be explained by means of my other experiences. They come

to me by surprise, willy-nilly, unanticipated. They cannot be unified into a comprehensible whole if the real world consist of nothing but "my" experiences. Hence the proposed hypothesis of other existent reality besides my sensa and ideas. What is the rival hypothesis, the solipsist's proposed method of explaining these astounding facts? He has none. The choice between Solipsism and its rival is not a choice between explanations of different degrees of probability: it is the choice between a proposed explanation and no explanation whatever.

Now it has been my contention from the first chapter of this book that the great task of philosophy is to explain the facts of experience, to make the indubitable existents more luminous, more unified, more comprehensible. The demand for explanation in this sense is one of the fundamental demands of human nature. It exhibits itself in both practical and theoretical fashion. On its practical side it is first seen in primitive man's need for prediction and for social co-operation. Our earliest human forefathers, faced by powerful beasts and the more tremendous elements, were given the option (as we also are) of using Nature or being destroyed by her. To use her, to avoid the impending dangers and to utilize the potentialities spread before them, they (again like ourselves today) must know what to expect in order to know how to act. To act effectively, moreover, they must act together. Co-operation demanded communication and the selection of the essential, the seizing of the describable (and therefore universal) character of the situation. Anticipation of what Nature would do next meant not only observation but generalization, the formation of descriptions of Nature's repetitions, which come later to be known as natural laws. Thus the necessities of practical life lead to generalization; man was able to handle Nature when he had traced inter-relations of natural objects and events,

and had brought conceptual unity into his mental reactions toward things. This meant practical understanding and explanation. On the more purely theoretical side the same development took place—or better, perhaps, there was a theoretical as well as a practical aspect to the one process of growing understanding. What MacDougall calls the instinct of curiosity, or the innate urge to use the human power of thought, made inevitable the situation presented in that first great sentence of Aristotle's metaphysics: "All men by nature desire knowledge." But to *know* is not merely to have experiences. It is to *know about*, to know conceptually. This means to have relational knowledge about things, to unite experiences and events by repeatable relations, to grasp things together so that one of them gains light from all the rest. As we have seen, everything is largely characterized by relational qualities, and nothing is understood or truly known if presented by itself. To know rationally means to know together: to know what things are essentially connected and what things are existentially connected. Thus both the practical and the theoretical urge to knowledge result in much the same thing. We can predict events and we can understand things only when we are able to see them in their relations. To understand any given experience or object of experience we must view it as a part or aspect of a whole which we are able to grasp at once. This seeing the hitherto isolated thing in its proper perspective, in its setting within a larger web or pattern, characterized by its more important relationships—this is what I have in mind by "explanation" when I insist that the function of philosophy is to "explain our experience."

Now Solipsism can explain only a very few of our experiences, and even these to only a very slight degree. If we are to get further explanation, further intellectual insight and satisfaction, we must at least make the hypothesis of more

reality than just the few and limited and separate experiences that follow, inexplicably, astoundingly, in any single stream of consciousness. It may be that these separate experiences are inexplicable: but it is certain that if they are to be explained at all they must be viewed as belonging to a larger nexus of relations. Hence the hypothesis (if one wishes to use so mild a word to indicate an ineradicable conviction which Nature has rooted in the depths of every human mind) that there is a world of reality supplementing the finite experience of any given experiencer.

Before closing this chapter let me add a scholium and a corollary. The scholium is to the effect that, if we are to make progress in our thought, we must decide once and for all whether we mean to remain in the skepticism of the solipsist or to accept the anti-solipsistic postulate that there are other realities besides our own immediate experiences. It will not do to be ever going back to the possibilities of the solipsistic doubt. And the corollary is this: that if we really have decided against Solipsism we have committed ourselves to the reality of existence as distinct from essence, to the reality of other minds, and to the reality of transcendence. If Solipsism be mistaken, then at least other minds—other centers or streams of experience besides our own—exist; and it is possible for us to *mean* them, to think about them, to make statements concerning them, which are either true or false. If I deny that I am a solipsist I *ipso facto* assert that my thought of you is not identical with you, that you have a being which is not just my idea, that existentially your experience and my thought of your experience are two, not one. And conversely, let me point out, that whoever denies this existential distinction between your experience and my thought of it, this "epistemological chasm," this postulate of transcendence, thereby commits himself very definitely to Solipsism.

Chapter IX

COMMUNICATION

The preceding chapter was written not for the sake of expounding Solipsism, but in order that we might see why that theory, though not capable of absolute refutation, was altogether incredible. The reason for its unsatisfactory character as a theory of our experience was that it did not give, nor even attempt to give, any explanation of that experience but left all our questions unanswered and all the details of our conscious lives darkly mysterious. Such a theory could satisfy only beings so low in the scale of intelligence that they care nothing for theory. No animal as philosophic as a dog could possibly be contented with it. In order to understand the individual's experience in any way, we found it necessary to bring in some reality beside his experience and to accept the universal belief in other minds which answer our questions, give us information, and produce upon us sensuous and emotional effects of various sorts. So far as I am aware, no one will challenge this statement.

But this involves an interesting and important question which is not raised as often as it should be: How is it that the hypothesis of other minds helps us out of the solipsist's difficulty and explains many of our experiences which to Solipsism were entirely unintelligible? To ask this question is, of course, to answer it. The hypothesis of other finite minds than my own helps to explain my experience because it really involves the farther hypothesis that these finite

minds communicate with me. If we stopped short, as Leibniz did, with a plurality of finite minds that had no windows and could never influence each other, we should have no advantage over the solipsist, and should have to take refuge in some extravagant and at last incredible hypothesis such as that of Occasionalism or Pre-established Harmony.

If we refuse to accept Solipsism, therefore, we must do so largely because the concept of inter-communication between finite minds is needed to make our experience comprehensible. The question immediately arises: what is implied by the belief in this inter-communication? It is with this aspect of the problem of communication that we shall be busied in the present chapter. There are, of course, other aspects of the communication problem that deserve attention, such as the formation of common symbols, and especially the "principle of verifiability" and its bearing upon meaning. These are important matters,[1] but they do not bear directly upon the course of thought we are in this section of our work pursuing; and it would merely deflect our attention from the present business should we pause to deal with them.

To get clearly before us that part of the communication problem which is relevant to our attempt to see what is needed in order to explain our human experience, let me suggest a concrete and simple illustration. Let us suppose that A in America writes to B who is in China. The letter is sealed in the envelope, put into a mail bag, travels for three weeks in the hold of a ship. During all this time no one sees it, only A knows about it, and he thinks of it but seldom. At the end of the voyage the letter is delivered to B

[1] My position upon the relation of verifiability to meaning is in part indicated in the chapters of this book on Meaning and on Truth and Knowledge; and in greater detail in an article on *Logical Positivism and Professor Lewis* in the Journal of Philosophy for Dec. 20, 1934 (Vol. XXXI, p. 701).

who opens it, reads it, and gains from it certain surprising information which is entirely new to him, and some ideas he had never thought of. I ask now, How is this situation and this process to be interpreted?

Different schools of philosophy will, of course, have different ways of answering this question. The answer of the dualistic realist is plain enough. His interpretation involves, in the first place, the recognition of several (at least two) finite minds which are separate from each other in the sense that the experiences of the one are not existentially the experiences of the other. Their experiences may be similar but they are not numerically, existentially, identical. It is not necessary for the sake of the point here at issue to discuss at length the meaning of the word *mind* as thus used. As a fact, realists may perfectly well disagree in part as to the interpretation of the word, yet agree sufficiently to be at one on the problem of communication. To some of them "mind" will mean a stream of consciousness, to others a center, or subject, or self, which perceives or experiences the conscious content of the stream; but both will agree that communication involves two or more centers or streams of experience, and that the experiences of one are not identical existentially with those of the other.

Further than this, the realist has a theory as to the process of communication between the two minds. Theoretically there is no reason why one mind should not be able to influence another in direct fashion, let us say by telepathy, without the intervention of anything else. It is possible that on rare occasions—it is possible that on occasions much more frequent than most of us suppose—this happens. But most of us, I think, will agree that whether telepathy never occurs or frequently occurs, in the great majority of cases of communication between minds no such direct influence takes place. The usual and normal method of communi-

cation, we all agree, is "through the senses." What, more specifically, is the process here involved? The dualistic realist's answer is as follows. My mind is connected with my body in such fashion either that each of the two can influence the other or that the two work parallel to each other. Furthermore, my body and yours are in the same space and time, and are able to influence each other in the regular manner of physical causation. If we are within sight or hearing of each other, the activity of my body can bring about changes in your sense organs. Your body, with its sense organs and nervous system, in its turn, is united with your mind in the same close fashion as is the case with mine. Thus it comes about that experiences of mine induce, or are parallel to, activities in my body: these produce changes or events in your body; and these, finally induce or parallel events (experiences) in your mind. In case our bodies are not within perceiving distance of each other, my body can affect yours indirectly by producing changes in the common physical environment of us both. Thus in the specific case of our illustration, A's thought and will induced, or ran parallel to, certain motions of his hands which resulted in the production, on paper, of certain conventional symbols, understood by both A and B. This paper with its symbols was a physical existent, not dependent for its continued being upon the perception or the thought of anyone. It existed while invisible and unthought in the hold of the ship for three weeks; and when opened by B, light reflected from it produced changes in B's sense organs and nervous system, which changes were paralleled by, or brought about, the rise in B's mind of certain ideas quite new to him and not derivable from the ideas that were in his mind prior to his opening the letter.

The dualistic realist's interpretation of communication is by no means the only one. His close relative, the realist

who interprets matter panpsychically, will make one change but one only: for he will take the intervening links between the two minds to be ultimately mental in inner nature.

The pragmatist, as I understand him, will go part way with the realists. He asserts, with them, that the letter was in the mail bag, and that the process of opening it was followed by the new ideas and experiences, in the recognized uniform sequence which we call causal. His agreements with the realist, however, is not so close as it seems upon the surface. For what he means by saying that the letter was in the ship is only that *if* someone had found the mail bag and opened it, he *would* have had the experience which we call seeing the letter. To say that a thing endures between observations means for him the assertion of observa*bility*. The ground of such assertion lies in the fact that *whenever* one puts oneself in the proper relation to the thing one *does* observe it. The realist's additional assertion that the letter as a physical thing continues to exist in "physical" space whether observed or not, is considered by the pragmatist as unverified, unnecessary, improbable, and (in the last analysis) unmeaning.

Such, as I understand it, would be the pragmatist's answer to our question. And in its positive assertions—disregarding its denials—it is unobjectionable. But the answer of the solipsist to our questions about his experience was in its assertions also unobjectionable. The solipsist has the data he has, and when (yielding to the conventional habit of his mind) he says that you remained in your room when he went out, he means merely that if he should have the further experience which he calls your room he would expect to have also the experience which he calls you. The logical positions of the solipsist and of the pragmatist, save for one important detail, thus seem to be exactly on a par. Both schools are impregnable when completely on the de-

fensive and both of them have the philosophical weakness of refusing to suggest any explanation at all for the most astounding facts of life which, left by themselves, are quite incomprehensible. The letter of our illustration, according to the pragmatist, while in the ship was experience*able* and observ*able*. If this is true, either there was a letter actually existing when not seen, or there was not. There can hardly be a *tertium quid*. If each of the three hundred sailors and passengers on the ship had gone into the hold and looked at the letter, addressed with a name they had never heard, they all would have had the same visual experience. But how explain this striking fact? How did it happen that three weeks after A had written the letter, B experienced certain visible symbols in ink upon paper, which brought to his mind the identical ideas A had in writing the letter? One might multiply questions endlessly, but that is not necessary to bring home to our minds the fact that all our lives are full of surprises and coincidences, which demand explanation if we are to make any kind of sense out of life and experience. These things cry aloud for some theory on which they may be illumined, unified, conformed into an inclusive view. Surely if philosophy has any task this is part of it. What answer does Pragmatism give to these insistent questions? So far as I can see, exactly none.

I said that Pragmatism and Solipsism made use of the same method with the exception of one detail. Their common method consists in refusing to propose explanations and in being satisfied with writing down the given. The detail on which the two schools are not at one is to be found in the fact that Pragmatism weakens in the actual application of this principle and fails of the courage of its convictions, appealing to other minds to explain the individual's experience: whereas Solipsism sticks consistently by its guns and carries its principle through to the logical end. No great

amount of argument should be needed to show that the pragmatist's refusal to go farther than the experience*able* and observ*able* is exactly that of the solipsist: that the reasons which the pragmatist uses to justify his refusal to risk the admission of an objective physical world are identical with those used by the solipsist to justify *his* refusal to admit your reality and mine; that the pragmatist can say nothing against the actual existence of the physical world (in the realist's sense), which the solipsist could not say with equal force against the existence of anything save his own conscious states. To demand explanation in the one case and to refuse considering it in the other is to blow hot and cold without reason. The pragmatic attempt both to explain and not to explain at the same time is to fall between two stools. If one refuses to recognize the philosophical need of explanation, let one be a solipsist. But once one has gone beyond Solipsism because of its inability to explain anything, one cannot consistently stop until one reaches an hypothesis which would really explain. If one recognizes that explanation is needed in philosophy, one should go on until one gets it.

In spite of first appearances to the contrary, Idealism of the Berkeleyan and Personalistic type is in some fundamental matters much closer to dualistic Realism than is Pragmatism. Like the realists, Berkeley and the personalists believe that it is the business of philosophy to make our experience more comprehensible, to furnish us with some sort of hypothesis which will not leave us altogether in the dark, or comfort us only with phrases that begin with *if*, or words that end in *ble*. Furthermore these types of Idealism recognize communication between finite minds as a real problem and propose for it a real answer. For them there is no physical environment of the realistic sort, but God does the work which the realist throws upon the ma-

terial world. Readers of this volume, however, will need no exposition of Berkeley's philosophy nor of that of his personalistic followers.

The attitude of Absolute Idealism of the Roycean type toward our problem has much in common with the Berkeleyan. The Absolute, indeed, does not create new experiences and ideas in our minds to fit experiences in other minds, but all that the realist hypothesis finds in the material world is fully real in the Absolute experience. Like Berkeleyan and personalist Idealism, and dualistic Realism, Absolute Idealism recognizes the need of explanation and offers us an hypothesis which, if true, will genuinely explain.

I should gladly end my exposition of contemporary thought on the problem of communication at this point; for the school that naturally comes next for consideration, called sometimes Objective Idealism, sometimes Speculative Idealism, is one with whose position I hesitate to deal. A clean cut statement of what it stands for in general I have never been able to discover; and its attitude toward our specific problem is so varied among different representatives of the school that it cannot be called one attitude but several. The answers which it gives to our question may, however, be reduced to two principal classes. One group of objective idealists seems to agree completely with Dualistic Realism. The physical world is admitted to be perfectly real and to mediate communication between finite minds. With some members of this group it is not the physical world but the finite minds that are in danger of disappearing. Why this type of "Idealism" should retain its ancient name it is difficult to say. Since it really differs in little but name from Naturalism and Behaviorism, its retention of the ancient title reminds one of what the wolf did with Red Riding-hood's grandmother. Not that this is the only form of

realistic Objective Idealism. Some forms of it seem to consider themselves justified in their use of the old name chiefly in their opposition to Naturalism. This group of idealists are so near to the type of Realism which this volume will seek to present that our points of disagreement are hardly more than verbal. And since on the question of communication they adopt exactly the realistic view, nothing more need be said of them here.

But there is a branch of Objective Idealism which takes a very different attitude on communication. Far from agreeing with the realistic explanation, it finds the question involved in my illustration of the letter sent to China quite meaningless. The question: Where was the letter when no one was thinking about it? is verbally in the question form, but when analysed (so this school asserts) the words convey no sense. So far as I can understand the matter, this attitude on the part of certain idealists is based on a confusion between what Mr. Broad calls the "epistemological object" and the "physical object." By the physical object is intended the hypothetical existent in realistic space and time, to which our thought refers—the material letter of our illustration. The epistemological object is the essence which I have in mind and which I attribute to the (hypothetical) physical object. It is the definition which I would give it, the *what* of the thing I mean, its definable nature. Now it is plain that this epistemological object is not the object of my thought except when it *is* the object of my thought, *i.e.*, except when I am thinking of it. Taken in this sense, plainly the question, "Where is the object of my thought when I am not thinking about it?" is meaningless. But it is not meaningless to ask, "Where is the physical object of my thought when I am not thinking about it?" The only way, therefore, in which I can make sense of the idealist's denial of meaning to my question about the let-

ter, is by supposing that to him the *letter* means a definable nature or essence and can mean nothing else—a further indication, the reader will note, that a certain type of idealist or rationalist refuses to admit existence and deals exclusively with the realm of essence.

The fact that the philosopher who refuses to have anything to do with the physical object finds my question meaningless does not make it meaningless. It merely shows that he refuses to consider one of the aspects of experience, one of the problems of philosophy. How does the man in China come to have the experiences he does have on opening the letter? Surely this is a meaningful question and one upon which a philosopher ought to have some opinion. If you take the letter only as an "epistemological object," only as an essence, you get no answer: for our question has to do with existences. The fact that the *epistemological* object has to be thought in order to be has nothing to do with the question asked. And I ask you again: Can we make sense of B's (existential) experience if the letter be nothing but an essence? In short, the idealist who avoids answering my question on the ground that it is meaningless, belongs with the pragmatist and the solipsist, not among those who have a poor explanation for our experience, but among those who have no explanation.

It is clear to me that if you admit that the letter illustration has meaning and represents an actual situation, you admit a multiplicity of minds that are existentially separate, and the influence of one mind upon another by changes brought about in entities that are not human minds—in matter or in God or the Absolute. If, on the other hand, you refuse to suggest or to accept any explanation for so simple and constantly repeated a process, your philosophy has "side-stepped" its chief task. And if your philosophy be such that it is impossible for it to put any meaning into

the assertion that one man sent a letter to another which the second man later on received—your philosophy needs no characterization from me. No hostile critic could say anything more severe about it.

Chapter X

CAUSATION

It is evident that a philosophy which deals with the general form of the existential world, and which takes its task to be that of making our experience more comprehensible, must make use of the concept of causation. Although all particular causal relations and "laws" are probably to be learned not *a priori* but purely by experience, it is still true that the fundamental principle back of all causality—the principle (or category, as in Chapter IV, I called it) that there is a certain degree of orderliness in experience and in the world which science studies—is, in a true sense, an *a priori* necessity. This, as I view the matter, is the truth back of the elaborate Kantian machinery, and this no thoughtful empiricist cares to deny. Let experience be as haphazard and chaotic as you will, whenever a mind is developed to an intellectual stage at which it desires to understand reality, it will be able to find, and it will find, some sort of order within it. A mind capable of asking the relations between things and events must already have arranged its experiences in some sort of orderly fashion.

Since things and events have relational characters it is plain that they must be related to each other in various ways. Notable among these relations are likeness and difference. These we *find,* and by means of them generalization and conceptual thinking become possible. Since events happen in space and time, there must be—and we discover there are—spatial and temporal relations between them. In its native

demand for explanation, for a grasping together of events which shall make them more mutually explanatory, and the whole process of change more comprehensible, the mind looks for further relationships which shall make the past and the present throw light upon each other and make the future to some extent foreseeable. Both our theoretical nature and our practical needs urge us to look for these connections which shall supplement likeness, difference, and the temporal and spatial relations. It is hardly thinkable, as I have suggested, that even the most chaotic world could have entirely resisted this demand; a mind like that of man would have made something even of so bad a bargain. As a fact, the world we live in has turned out to be, to a very considerable extent, amenable to our desires. There is, I suppose, an unlimited number of degrees to which the world might have been ordered and orderable. It might have been very nearly a chaos, with only an occasional lucky constellation or repetition. On the other hand, all its events might have been predictable with certainty and ease. The world we actually live in would seem to be somewhere midway between these two extremes. Not perfectly, but to a considerable extent, we are able to explain our experiences and to understand our world. That this is possible is owing largely to the fact that we can view many events not only logically, spatially, and temporally, but also causally, and that we actually find many more causal relationships than can be accounted for by the mind's desire for order.

That causation is a general type of relation between the character of one event or substance and the character of another,[1] and that, as such, it is of great importance for both science and philosophy, is not often gainsaid; but no such

[1] Mr. R. L. Shaw, in his paper *An Aspect of Causal Connexion* (proceedings of the Aristotelian Society XXXV, 1935, pp. 94–112) would not assent to this assertion. As the difference between his point of view and mine grows out of a more fundamental difference, of an epistemological sort, it cannot be discussed here.

complete agreement between thinkers is to be found when we come to the more analytical question of the nature of this relation. For one thing, there are two types of situation both of which are commonly (and I think rightly) spoken of as causal, though some philosophers would restrict the word to one of them. I refer to what are often called coincident and successive causation. In the first of these there is no time interval between the cause event and the effect event. Examples of this type commonly given in the logic books are the action of one billiard ball upon another, and the beheading of Charles I. It would seem plain enough that the first billiard ball's hitting the second is the cause of the second ball's being hit: that the severing of the neck was the cause of the death; and that in both cases there was no temporal interval between cause and effect. In the other type of case a time interval is involved. Here there are two sub-types, although the difference between them is often chiefly verbal. In one we have a continuous process going on within what we call a single object; in the other a continuous process in one object is taken up in and carried on by a continuous process in another. Examples of the first are the motion of a stone flying through the air, the changes that go on in a chemical compound or an organism; of the second, the rolling of billiard ball number two after having been hit by the rolling billiard ball number one. There is some disagreement as to whether the first of these sub-types should be called causal, because only by an arbitrary division can the continuous process within the one substance be separated into events one of which shall be called cause and the other effect. On the other hand to assert that there is nothing causal within a continuous process of this sort save its inception would seem to be a rather arbitrary limitation of the word. As the question is so largely verbal I shall leave it here.

As to the two chief types of causation—the simultaneous and the successive—it may be useful to point out that while both doubtless exhibit the general nature of causality, it is only the successive type that is of value to science in explanation and prediction. It is of no scientific importance to be told that if ball A hits ball B, ball B is hit by ball A. It *is* of importance to know that if ball A, after rolling at a certain rate and in a certain direction, hits ball B, ball B will roll at a certain rate and in a certain direction. It is, of course, important to know that if you cut off a man's head he will die; but it is important because what you are really dealing with here is not a pair of simultaneous events, but an event that follows another. Doubtless death in a sense occurs at the moment when something-or-other (probably the spinal cord) is severed; but death as an important concept for science and for practical purposes is not the severing of the spinal cord but the whole process or continued state of changed organic action, unconsciousness and decay which *follows* the cutting.

Further light may be thrown on the question how we had best conceive of causation if we refer briefly to the probable sources of our idea of it. I use the plural for it is not likely that any one source is the origin of our common, adult notion of cause and effect. Probably the earliest stimulus to the causal way of thinking is to be found in the experience of making an effort to act upon things, and of feeling oneself acted upon by them. When the infant or the grown man, straining his strength, succeeds in pushing some heavy object, or solving some difficult problem, or when against his will and all his efforts he finds himself pushed by some force he cannot resist, he has an experience which he knows as the exertion of power.[2] When he longs for something and at

[2] It is interesting in this connection to note that the Chinese ideogram for power is derived from a picture of a fist.

length, with great exertion achieves it, he feels no need for further explanation. Except in our most theoretical moments, we all regard our active wills as explanation enough, and only in our sophisticated moments wonder how the desired result came about.

A rather later contribution to our notion of causality is the demand of the human intellect for an orderly experience and for intelligibility in the universe. Intelligent man in his intellectual mood is not content "to stand and stare." He wants to know *why* things happen; and to know fully why things happen is to know why they *have* to happen. The merely existential is not the rational, and man's intellect would like to find the real to be the rational, and the causal relation a necessary and logical one.

A third source of our notion of causality and our belief in it as actual is man's empirical observation of the fact of fairly regular sequences. Observation, of course, could never show us that the regularity of events is absolutely unvaried or is really necessary, even were the observed events very much more regular than we have actually found them to be; but observation does show us a very considerable amount of regularity. This steady sequence having been observed, and supplemented by the regularity imagined and believed in because of accepted conventional opinions, it naturally comes about that we get into the habit of expecting it to continue and to apply in unobserved fields. To this habit, based largely upon experience, there is added the force of a pragmatic postulate. For the sake of carrying on the useful arts and for the very existence of science, it is necessary to act and think as if the observed considerable regularity were really universal. This habit of expecting and postulating regularities merges in the general habit of viewing all nature causally and as subject to what is often called the Causal Law.

We come now to the more difficult question of the nature of the causal relation. Most of us agree pretty well that in the case of the two billiard balls, the beheading, the disease germ producing the disease, we have examples of causation. But as to the nature of the relation in these and all other cases of causality, there is no such approximation to unanimity. And on this question we are faced once more with the old division between Rationalism and Empiricism. Here again, also, the attitude taken by each school on the particular question at issue is determined by its attitude on the more fundamental questions considered in the early chapters of this book. Rationalism naturally regards the causal relation as essentially logical and as involving logical necessity, derivable by deduction; and the Law of the universality of causation it considers a necessary category of experience as such. Empiricism, on the other hand, considers the causal relation between two events as something to be learned from experience only and not deducible by logic, and the so-called Causal Law a postulate which we make and which is in part justified by induction.

An extreme rationalist, indeed—a thinker who will have nothing to do with the realm of existence and deals only with definable natures—could hardly, if he were to be consistent, give to causation any consideration whatsoever. In the realm of essence nothing can happen: there can be no events and no relations between events. Few if any rationalists explicitly and consciously go to this extreme (though some of them make assertions which would seem consistent with no other view). But many idealist and rationalist thinkers insist that causation is a logical and necessary relation, rather than an empirical one. It is sometimes expressed by saying that "every cause is a because." One of the grounds upon which this view of causation may be based is the doctrine of the internality of relations taken in its

extreme form. This question has already been discussed at some length in Chapter III. If the extreme doctrine be accepted, that is to say, if it be held that terms have no intrinsic characters, that all relational characters are essential to the nature of the term, that a term cannot leave one group and enter into another, then plainly the causal relation is a necessary and logical one in the sense that from the cause the effect could always be predicted, and from the effect the cause could always be determined. For since the relation which A possesses (and which characterizes it) of being cause to B is one of the things that make A what it is, we know *a priori* that B is necessarily its effect; and we know in similar *a priori* fashion that since one of the defining characters of B is that it bears the relation of effect to A, it is necessarily caused by A. Neither of these things could be denied without sinning against the Law of Identity.[3] It is evident, I trust, that if the view of qualities and relations adopted in Chapter III be accepted, this argument fails. If there be relational qualities which are not essential to the terms to which they belong, it will be quite impossible to show that A "entails" B. It may well happen that A causes B, but from this it does not follow that there is something in the nature of A which logically forces one, on pain of con-

[3] A position which ultimately comes to this is the one adopted by H. W. B. Joseph in his *Introduction to Logic,* Oxford Press (p. 408). "To say that the same thing acting on the same thing under the same conditions may yet produce a different effect, is to say that a thing need not be what it is. But this is in flat conflict with the Law of Identity. A thing, to be at all, must be something, and can only be what it is. To assert a causal connexion between *a* and *x* implies that *a* acts as it does because it is what it is; because, in fact, it is *a*. So long therefore as it is *a*, it must act thus; and to assert that it may act otherwise on a subsequent occasion is to assert that what is *a* is something else than the *a* which it is declared to be. It may be replied that no two things ever are the same, and—what that reply must commit you to—that no one thing ever is the same for two successive moments. The fact of change is not disputed, nor the difficulty of finding two things that are qualitatively the same. But if the second has a different effect, that must be because of its qualitative difference from the first, and not merely because it is a second; and so far as it is qualitatively the same, the effect must be the same also."

tradiction, to assert that A must be the cause of B. As Miss Stebbing has clearly pointed out, the argument for logical necessity in causation here considered is based upon a confusion between material implication and entailment.[4]

A different but closely related way of stating the rationalist position which makes causality a logical relation consists in asserting the ultimate identity of the cause and the effect. They are, it is said, but two aspects of the same thing. Causation is not a relation between two separate events, not a sequence in time, but cause and effect are simply two ways of looking at the same event. From this it obviously follows that an adequate knowledge of the cause would necessarily involve a knowledge of the effect—and *vice versa*. Thus the scientist, Emile Meyerson, insists that the world must be logical throughout in order to be comprehensible, and "the true essence of logic is the principle of identity." Hence it follows that "the principle of causality is none other than the principle of identity applied to the existence of objects in time." [5] The same position is taken by several idealists, and would, in fact, seem necessary for any philosophy which maintains that the real is the rational. The position may be made more clear by the use of a concrete illustration. I have already suggested the production of disease by the reception of a germ into the organism as a typical and generally rec-

[4] *A Modern Introduction to Logic* (Crowell). In answer to Joseph's contention Miss Stebbing shows that he has confused the two following propositions, which are really different: (*a*) A has the causal property P because it in fact has it; (*b*) A must have the causal property P because nothing which had not P could be A. "It is very easy to confuse these propositions, but it is extremely important to distinguish them, since (*a*) is certainly true, but (*b*) will be true if, and only if, P is an internal property of A. Mr. Joseph has either failed to distinguish these propositions or he has simple *assumed* that causal properties are internal. The statement which was quoted from him suggests that he has failed to distinguish these propositions, for he seems to believe that it follows from the law of identity, *viz.* that A is identical with A, that A *could* not lack any of the properties which it does *in fact* possess. This is equivalent to the assertion that every property of A is an internal property. There is no reason to suppose that this assertion is true." (Pp. 286 and 287.)

[5] *Identity and Reality*, Chap. I, especially p. 43.

ognized case of causation. The mosquito bites its victim and malaria results. According to the view under consideration, these two seemingly distinct things, the bite and the disease, are really only different ways of viewing a single event, and the relation between the two is therefore identity. For the entrance of the malaria germ into the human organism, through the bite of the mosquito, *is* the beginning of the disease.

It will be noted that all instances which it is possible for this doctrine to recognize as causal must necessarily belong to the type called *coincident causation.* If temporal sequence or duration were involved, if time elapsed between the cause and the effect or within the cause-effect process, it would be impossible to call the cause and the effect identical. Two events which happen at different times cannot be identical, no matter how much they may be alike. Now in cases of coincident causation there certainly is a sense in which cause and effect can properly be called simply different aspects of one and the same event, and hence identical. Furthermore, since the two are identical, the cause entails the effect; given the cause, the effect is logically necessary and can be deduced by purely logical means from the cause. If billiard ball A hits billiard ball B, billiard ball B is hit by billiard ball A. If the mosquito inserts a germ into an organism, a germ is inserted into the organism by the mosquito.

It need hardly be said that if this is all that can be told us by the "Causal Law," it is as true as the Law of Identity and as barren of new information and insight. It can tell us nothing which we do not know already and it can be of no assistance to our science or to our practical efforts at anticipating what we should look out for, or to our philosophy in its attempt to understand our world. It is plain, moreover, that this is exactly the type of causal theory which should consistently be adopted by a school of thought which denies

or disregards existence, and with it existential changes in time, and confines philosophy to the consideration of general concepts and logical relations. A philosopher who maintains that causation is the relation of identity and never anything else, would therefore seem to betray his fundamental belief that there are no separate events in time with causal relations between them, and the corresponding conviction that only the realm of essence is worthy of a philosopher's investigation or acknowledgment.

The defender of the rationalistic view which interprets causation as identity may, however, assert that the identity doctrine is not the mere tautology indicated in my illustration, but can be, and is, of real value in giving new information and throwing new light upon facts and events. Surely, it will be said, it is by no means tautological to assert that the reception of the malaria germ by the organism is identical with the beginning of the disease called malaria. This seems promising; but a moment's reflection will show that the new and valuable information thus presented is not the statement that the insertion of the germ is identical with the beginning of the disease, but the implication that the beginning of the disease is followed by the rest of the disease. And by the rest of the disease I mean the sequence of bodily changes which may take weeks to run their course. Medical science will not be in the least interested in learning that the reception of the germ is identical with the beginning of the disease if by the beginning of the disease we mean nothing more than the reception of the germ. The whole value of the causal conception for science or for practical life, for prediction or for explanation, lies in its temporal aspect; and, as I have said, if two events are temporally separate they cannot be the same event. If we seek to save the identity doctrine by analysing the course of the disease into a series of cases of causal identity and

deny causal nature to the developments between these instantaneous points, we shall merely be asserting that the only aspects of the development where anything *happens* are the non-causal aspects.

The truth of the matter, of course, is really this. When we say that the introduction of the malaria germ into the organism is identically the beginning of the disease malaria, our statement is just another way of saying that there is a certain kind of germ and there is a certain kind of disease, that whenever this germ is introduced into an organism this disease *follows*, and that we name the germ after the disease. The causal relation that is of importance is the sequence of the characteristic bodily conditions and changes upon the implanting of the germ. That just this disease—*i.e.*, the sum total of these conditions and changes—should follow upon the insertion of just this kind of germ is something that could never be discovered by any analysis of the germ nor of its insertion into the human body. The fact of this particular sequence—and of this usual and regular sequence—is a fact which we must learn empirically if at all. Logical analysis here shows us nothing, and no logical necessity is to be found save in the unenlightening discovery that if event A is the first term in a series A–B–C, the first term in the series A–B–C is A.

I plead guilty to having taken up an undue amount of the reader's time in this exposition of the obvious. But the real problem here involved is one of such fundamental importance as, perhaps, to furnish some excuse. For Meyerson's reasoning, quoted on page 123, is irrefutable. Unless cause be reducible to identity (or some other purely logical relation) the world cannot be logical throughout. It is, of course, the contention of this book that the world is not logical throughout, and that since causation belongs not to the realm of essence but to that of existence, it cannot be

interpreted as purely logical in its nature. What event will follow upon another event in this existential world is something which no cudgeling of our brains or of our logic books will ever tell us. The world we live in contains an element of brute fact, and contains change, temporal duration, and sequence; and while logic can point out many things and events that can*not* be and can*not* happen, it can go only part way in showing what does be and what will happen.

But if causation be not the relation of logical necessity, how are we to describe it? A considerable number of thinkers, belonging to several philosophical schools, insist that it is simply a case of invariable sequence. There are two considerable objections to this view. One is to be found in the fact that common sense rebels against this identification, and that if the identification be consistently and completely carried out, an appreciable loss in the value of the concept of causation for science will result.[6] The example of the sequence of day and night is often and properly used to show that the common feeling about causation finds in it something more than regular sequence. Or take an example which one of my students used frequently to cite. Every morning the Amherst chapel bell rings for the chapel service. At that same moment the students of Williams College, over 50 miles away, start for chapel. Shall we say that the ringing of the Amherst chapel bell is the cause of the Williams undergraduates rushing into the House of the Lord?

The other difficulty in interpreting cause as mere invariable sequence is of a less popular and a more analytic sort. Suppose that two new types of event arise (and new types of event are ever arising). We observe them—A is followed by B. If causation consists in invariable sequence

[6] This was recognized even by Mill, who in most passages of his *Logic* identifies causation with invariable sequence. When expressing himself with special care he insists that invariability must include *unconditionality*. See Vol. I, pp. 391–95.

we can hardly call the relation between A and B causal: a sequence which has happened but once naturally has no exceptions, but to call it *invariable* or *regular* is at least an odd way of speaking. When we have found in fifty cases that A is regularly followed by B we all agree that we have a case of causality. Was the fiftieth case causal and the first not causal? And just at what point, at what number of repetitions, did causality enter? It is evident that the regularity of the relation between two events can have nothing to do with the relation in each particular case, which is, after all, what we are seeking for in our investigation of the nature of causation. If it be true that B invariably arises after A has arisen, so that when A comes, B may be predicted, this invariability is an external and additional fact and does not characterize the relation between A and B in any specific case. Invariability of sequence is an excellent *test* of the presence of causation, but it does not tell us the nature of causation. A significant definition of causation, as Professor DuCasse has pointed out, should be able to define the cause of a particular event "in terms of but a single occurrence of it, and this in no way involves the supposition that it, or one like it, ever has occurred before or ever will again. The supposition of recurrence is thus wholly irrelevant to the meaning of cause: that supposition is relevant only to the meaning of *law*. And recurrence becomes related at all to causation only when a law is considered which happens to be a generalization of facts themselves individually causal to begin with. A general proposition concerning such facts is, indeed, a causal law, but it is not causal because it is general. It is general, *i.e.*, a law, only because it is about a class of resembling facts; and it is causal only because each of them happens to be a causal fact individually and in its own right." [7]

[7] *The Nature of the Causal Relation,* Jour. of Phil. XXIII (1926), p. 61.

We have already seen that the first and the most important source of our notion of causality is to be found in our own early experience, continued throughout our entire lives, of exerting energy and acting upon things (and in turn of being acted upon by them). In this activity of originating movement against resistance, and in the more sophisticated experience of actively choosing and deciding, we know causation from within. I do not think this too daring a statement, for it is from this experience more than from anything else that we form our first conception of causation, and the application of the word to external processes always has in it a certain amount of analogy. Some would carry the suggestion involved in this fact so far as to interpret all causal action, even in the non-living world, entirely on the model of this experience. There is something to be said for such a procedure: but it seems to me to go beyond what we are justified in doing. It is not necessary to carry a rather daring speculation to such lengths. As we have seen, there are other sources of the idea of causation as used in even popular science and by common sense; and to take subjective effort as the inner nature of all causation would be to commit oneself in advance to either a panpsychic or an idealistic view of reality—or to a denial of causality in the non-living world. The latter position would obviously defeat most of our aims in seeking to make use of the causal conception. But though I do not think we should insist that all causation is of the sort we find in our own activity, we should not forget that our first notion of causation comes from it and that it is the kind of causation which we know most intimately and most thoroughly. One might say that causation is known in a subjective and in an objective way, or directly and indirectly. Whether the causal relation which we as outsiders observe between purely physical events—*i.e.*, outside of our own lives and experience—has any "in-

side," and if so what this may be, is not a question which we need solve or even guess at, so long as we are dealing with causation as a scientific concept. Metaphysical hypotheses as to its inner nature are proper enough, but it is not likely that we shall ever be able to make them anything more than interesting guesses.

At any rate, until we are able to make them more than that, it would seem best to accept the suggestion of a number of thinkers, of various schools, that the essential character of causation is, not mere invariable sequence, but continuity of process, carried on within substances or between substances. This continuity of process is characteristic of both the sub-types of successive causation re-referred to on page 118. In the first of these, the reader will recall, "we have a continuous process going on within what we call a single object: in the other a continuous process in one object is taken up in and carried on by a continuous process in another." These two kinds of causation are sometimes called *immanent* and *transeunt*. In the case of a stone flying through the air, or of the processes of metabolism and katabolism going on within an organism, it is, indeed, only arbitrarily that we can sever event from event, and so effect from cause. Yet the process is causal as distinct from logical or merely temporal; and it would not be hard to show that not only in immanent, but in many cases of transeunt causation as well, the division of cause from effect has an element of arbitrariness or at least of artificiality introduced because of human purposes. In the transeunt cases, like the immanent ones, we have again continuity, this time continuity between what we call different processes within different substances. The flying stone impinges upon a window, and the stone's motion flows into and is carried on by the processes within the glass. In all those cases where we deny to invariable sequence the

character of causality, our denial is due to, and is justified by, our perception that the events in question are not parts of a continuous series or a continuous pair of series.[8] What we know as day, *i.e.*, the visibility (apart from clouds) of the sun above the horizon, is an occurrence or event within a continuous series of events involving the motions and positions of the sun and the earth. The same thing may be said of night. Night and day are thus causally related (an assertion which no one would deny), but taken by themselves we do not consider them as constituting one continuous process because we see that each of them is really an end term of a continuous process, the two processes not being continuous with each other but connected indirectly by their continuity with a larger process. Similarly we see plainly that the ringing of the Amherst chapel bell belongs to one continuous process which we can describe in detail, and the activity of the Williams students belongs to an entirely different process.

Observed regularity of sequence is *prima facie* evidence of the continuity of process which *is* causation. And be it remembered that this continuous process must not be taken to mean merely a series of *events*. The nature of glass and the nature of stone are essential constituents of the continuous process by reference to which we explain causally the breaking of the window. When we have noted that B regularly follows A we are justified in supposing, tentatively,

[8] Wenzl presents a closely related view. We do not anticipate the future event on the basis of an invariable sequence experienced many times in the past (as Hume asserts). We anticipate the future event because we feel that it really belongs with what precedes it in a single whole. "Wenn wir also aus der erfahrenen Gesetzmässigkeit in der Vergangenheit auf ihre Fortdauer in der Zukunft schliessen, so ist es nicht die Häufigkeit der Wiederholung an sich und unmittelbar, die unserem Schluss die Überzeugungskraft gibt, sondern wir schliessen aus der Häufigkeit der Wiederholung zunächst auf einen Realzusammenhang, ohne den uns diese Häufigkeit zu unwahrscheinlich schiene, und erst mittelbar aus dem Glauben an diese Realzusammenhänge auf die Notwendigkeit gleichen Verhaltens auch in der Zukunft." *Wissenschaft und Weltanschauung*, p. 65.

that A and B are parts of a continuous process *unless* we can see that two different and unconnected processes are involved. *Post hoc* does not prove *propter hoc* causally any more than logically. But if we have no good reason to believe that B belongs to one series and A to a non-continuous series, we are justified in supposing a causal relation between the two, even though, as in the case of the moon's phases and the tides, we cannot trace any intervening steps, even though the two events be distant in space, yes even though one be spatial and the other non-spatial.

For the concept of causation is unjustifiably limited if it be applied only to material and spatial events. There is no good reason to suppose that all causal relation is motion through space. If I was correct in saying that regular sequence indicated causal relation except in those cases where we could clearly see that one of the processes involved was discontinuous with the other, then we are justified in at least tentatively considering mental and bodily processes causally connected. It would indeed be difficult to find a case of more regular sequence than the relation between retina stimulation and visual sensations, or between conscious impulse and corresponding muscular activity. Unless psychological and physiological events can be shown to belong to disconnected processes, plainly they must, at least tentatively, be regarded as causally related.

Temporal continuity, of course, is necessary to every continuous process, but spatial continuity need not be. There must, however, as we have seen, be in causation some kind of continuity in addition to temporal, for otherwise causation would be mere invariable sequence. We might, in fact, tentatively define causal sequence as temporal continuity united with at least one other kind of continuity. Something more than temporal sequence would be found if one process flowed into a second, if the second began where

the first left off, if it tended in what might be called the same direction in the sense of supplementing the first. Obviously our discussion of causation here finds itself faced by the difficult problem of the relation of mind to body—a problem which will be discussed at some length in a later chapter. At this point I am interested only in showing that the conception of causation here defended is consistent with any of the theories of the psycho-physical problem. The materialist theory which interprets psychological states as ultimately physical need not here detain us, for it does not raise the question here at issue. Neither does that form of Interaction which locates psychoses in space, for the asserted relation between the physiological and the psychical would have the same sort of spatial continuity as that which holds between the flying stone and the window glass. Parallelism, which denies all causal relation between psychical and physical processes, does so in perfect conformity to the principle of interpretation defended in a previous paragraph, namely that even in the face of regular sequence we are justified in denying causality provided we can plainly see, or have good reason to believe, that the two events in question belong to different and discontinuous series. Of course it is incumbent upon the parallelist to point out or vindicate the existence of the two disconnected and continuous series involved in this hypothesis: the question whether he can do so does not concern us here. Thus all three of the mind-body theories we have considered obviously accord perfectly *in form* with the doctrine of causation presented in this chapter. The question of causation and of psycho-physical relation becomes more obscure in connection with that type of the Interaction theory which, while maintaining the causal relation between physical and psychical events, asserts that the latter are not in space. The question thus arises, Is there any conceivable kind of continuity for a process be-

sides the temporal and the spatial? I think there are several. Qualitative continuity would be one: teleological another. There are probably several kinds of continuity which are not immediately obvious because language does not happen to have provided us with names for them. One of these forms of continuity I suggest we might term biological. If, let us say, through the various stages of evolution, natural selection had brought it about that upon the process of the lion's roar, air waves, and electric or other motion along the auditory nerve of an antelope, there followed a process of sensation, attention, conscious urge to flee, and that this conscious process was in its turn followed by a process of innervation of the muscles and rapid motion of the whole organism, should we not be justified in calling these processes continuous with each other in a very real sense? Could one honestly say that the three processes were discontinuous? Would the relation between them really be of the same irrelevant kind as that between the Amherst chapel bell and the activities of the Williams undergraduates? It seems to me that in the physical, physiological, psychical, and (once more) physiological processes of my illustration we have genuine continuity, even though the English language has not provided us with any specific word for it. And if this is the case I see no reason why we should hesitate to call the relation causal.

I trust it will not be said there is here no real continuity for the reason that we do not see *how* the nervous process could produce the conscious, nor the conscious process the subsequent nervous one. Of a critic who made this objection I should ask *how* the motion of the first billiard ball *produces* the motion of the second. Enough has been said to vindicate the causal nature of the hypothetical relation between psychical and physiological events if they can be shown to be parts of two series of continuous processes

which themselves are mutually continuous. And this, I think, has been done.

To return to the more general consideration concerning cause, it is evident that not only those who identify it with continuous process but all who find it in any form of regular sequence make time an essential element in causality. The causal process may take a few seconds or many years, but passage of time is always involved. Substance, in some sense or other of the word, is also essential to causation. As Johnson has said, "the notions of cause and substance reciprocally imply one another, the latter being that which continues to exist and in which alterable states or conditions inhere." [9] The nature of the substance—in the case of our recent illustration, the constitution of the glass—has much to do with determining the outcome. It would thus be a mistake to call causation merely a continuous sequence of events. The nature of the substances involved in the total continuity is an essential factor. As Loewenberg has put it, "causation is but a name for the substance of things conceived as dynamic." [10] Unless there were at the least "existent collections of existent qualities" there could be no change; and without change, of course, no continuous process. If there is to be change, there must be something that changes. "Creation out of nothing" is not inconceivable; but it would hardly possess that continuity which would justify our calling it causation. If the flying stone is to "cause" the fracture of the window, there must be a window to be fractured.

The assertion of the reality and importance of causation in the existential world is thus the assertion of the reality and importance of continuous processes and enduring substances within it. The different parts of the world are inter-

[9] *Logic*, Vol. I, p. xxxvii.
[10] *The Elasticity of the Idea of Causality*, Univ. of Calif. Publications in Philosophy, Vol. 15, p. 37.

related not only by qualitative and quantitative, by spatial and temporal relations, but also by streams of tendency, flowing in specific directions, in such fashion that later events within a given stream can, with a considerable degree of probability, be predicted from the earlier events in the same stream and from the nature of the substances involved. These tendencies or processes are dynamic rather than logical: existent rather than subsistent. We cannot show by pure reason why they are as they are, or how they *must* be. We find them. Which is another way of saying that Nature acts in certain general ways. These processes of which we speak, moreover, are interrelated: and probably in every case the limits which we set to each are arbitrary and made by us for the sake of our convenience. As a fact, though distinguishable on the basis of objective observation, they run into each other. Each leads out beyond itself to others, and indirectly to the most remote. Through causal processes such as gravity and the transmission of light, the most distant stars are bound together. Both macroscopic and microscopic physics find in this semi-organic activity a law more fundamental than is any purely mechanistic formulation. It is illustrated alike in the response of the tides to the moon and in the response of electrons, atoms and molecules to each other in accordance with the nature of their "fields." The structure of the whole, throughout the "inorganic" world, largely determines the activity of the part. Thus Reality is a system of systems, a great Process of processes. It works as it works, and since Reality as a whole has no neighbor and no environment, all causal processes are, from Its point of view, immanent. It is like a living organism except that it is entirely self-dependent. Causality is thus not to be explained but to be accepted "with natural piety." It is the inner life of the World.

Our discussion thus far has centered around the essential

nature of causation, or the relation between cause and effect. A few words should now be said concerning the "Causal Law." This has been stated in various forms, some of them justifiable, some questionable. To assert, for example, that there is a law that everything must have a cause is to be either ambiguous or dogmatic. The assertion is true enough if intended simply to mean that every event is a part of the general nexus of events in Nature. But if one means by it that every recognizable event is connected with some other recognizable event in such fashion that when one of them appears the other must also appear, either one's assertion is a mere tautology or it goes beyond anything that *a priori* reason or the facts can justify. The causal law, I suppose, means the general uniformity of Nature, the conception that there are repeatable events, and that these are related in uniform sequence. So far as this is intended as a description of what we usually find, it has an empirical basis: so far as it means to be a statement of a universal condition, applying to the whole past and the whole future, it is a postulate. There is no way of proving this universality: but it is a postulate which we find useful. I do not see that we can truthfully say that absolute uniformity is essential to science. It would be essential to an absolute science, to any science as absolute as mathematics; but then it is possible that none of our natural sciences can be absolute in that sense. If it turned out that the sequence of events in this world were not absolutely uniform but only approximately so—*i.e.*, if there were occasional exceptions —we should have to make the best of it and we should do so. And for the matter of that, one might well suggest that, for aught we know, that is exactly the sort of world we have. Many physicists, basing their conclusions on the Quantum Theory, are seriously questioning invariable sequence in the minute portions of the physical world; but no one has sug-

gested that therefore there is no science of physics. And if we turn from physics to "sciences" such as meteorology and psychology, can we seriously assert that these are dependent for their existence on the postulate of absolute invariability? No doubt their upholders make the postulate and they do well to do so; but the postulate of a fair degree of uniformity is surely all they need for the kind of products they furnish.

But it is quite true that just to the extent that the processes within reality fall short of absolute regularity, our prediction and our causal explanation are uncertain. This means loss in both the practical and the intellectual spheres. A very considerable amount of regularity in the sequences of Nature is, therefore, a necessary postulate if we are to predict and act with confidence, or to justify our trust in the explanations which science and philosophy proffer. For, as I have more than once pointed out, our chief tool in unifying our existential world and in understanding each of its particular facts is the concept of causation: and we can apply this only so far as the processes of Reality are uniform. Hence, we are bound to make the postulate, which to a large extent we are led to rely upon by empirical observation, that if A causes B today it will do so tomorrow. In short, we live by the largely substantiated hypothesis that there are repeatable aspects in events and situations; and that events or situations with these aspects are related to each other in orderly and regular fashion.

The kind of explanation which causality furnishes is determined by its close connection with time. Since the time flow is all in one direction, a given event must seek its causal explanation in some preceding event. In this respect causal explanation is markedly contrasted with logical explanation, which is not dependent upon the time flow and in most cases (properly enough) neglects the time factor

altogether. Whenever logical explanation is possible it has the right of way. It is the only complete and perfect form of explanation: it alone shows that nothing else could conceivably be than the situation in question. But in the realm of existence this logical procedure cannot go very far; and causal explanation is needed as a supplement to aid us in ordering and unifying and comprehending our world.

Just what are the specific sequences between the various definable aspects of situations or events is a matter for empirical science to discover. No concrete event, with all its characters, is ever repeated, but certain aspects of situations, or general characters of events, may be isolated and then related (perhaps in statistical fashion) to definable aspects of other situations or events. Whether this is the best procedure, or whether it is more promising to follow out and describe the processes involved in the activity of individual substances or types of substance—this is a question for methodology rather than philosophy. But the general principle of causal explanation in any case is essentially bound up with temporal sequence.

Causality as thus understood must be conceived as holding for the entire existent world. There is no good reason for admitting it to "phenomena" and excluding it from "noumena" and from the relations between noumena and phenomena. For that matter, the point of view presented in this volume does not recognize the distinction between noumenal and phenomenal realms, and holds it probable, as I have said, that processes which are repeated in such regular fashion as to be properly called causal laws run throughout all existence of whatever form or forms it may be. It was, in fact, the need of the sort of explanation which only causality can give which justified us logically in deserting Solipsism and making the hypothesis of other minds than our own. If the course of thought in the preceding chapter

was justified, the same need of causal explanation which led beyond Solipsism points also to other existences besides human and animal psychoses. If this hypothesis be justified, and if a part of this extra-human and extra-animal existent realm be non-psychical in nature, then we should maintain that the causal law (as interpreted in this chapter) holds of it, and that it and our experiences are held together causally. Thus all the existent universe, including both psychical and physical, if both psychical and physical existences there be, would form an infinitely complex but largely unified Whole, characterized by constant activity and change of what might be called an organic sort.

Whether we are justified in making the hypothesis of existences other than experiences, is the question to which we must now turn.

Chapter XI

HOW EXPLAIN OUR EXPERIENCE?

If the reader has assented, at least tentatively, to the more fundamental propositions defended in the preceding chapters, we shall agree upon the following expression of the position thus far reached in the course of our reasoning. It is the task of philosophy to explain experience (in the sense previously discussed). The reader's own personal experiences are so limited and disconnected that it is impossible for him to explain them—that is, to grasp them together in a unity such that each will find its place in a pattern and be comprehended in the light of other things—unless he accepts the hypothesis (or acknowledges the truth of his own natural belief) that there are other centers or streams of consciousness besides his own. So much being tentatively agreed upon, we must consider the question: Is the hypothesis of other finite minds (or streams of consciousness) sufficient by itself to explain the experiences which we human beings have? This question has already been raised in connection with Communication. It is so important that it will be well to probe it farther.

Let me remind the reader of some of the characteristics of our human experience. The following cases, surely common enough, will illustrate some of the more important aspects of the situation. I am walking along the street, thinking intently on a philosophical problem. Suddenly I hear the town clock strike the hour of ten. How did the auditory

sensation, how did the thought of ten o'clock, come into my mind? You and I are walking together discussing philosophy, and the clock again strikes. How comes it that you and I get sensations and ideas, and that we get *the same sensations and ideas* and at the same moment? You and I build a fire in my study, light it, and go for a walk. When we return we both find the fire burned out, and we find the ashes and the remnants of the logs in exactly the same condition in which we should have found them had we stayed in the room and watched the fire throughout its course. How are these facts to be explained? On Sunday morning about half past ten, three hundred people, in various sections of a city, have three hundred different experiences of walking through streets, noting different sights and sounds, thinking different thoughts, and then have a common experience of entering into a church. No two of the preparatory experiences are alike: the final experiences of all are almost identical, when, as we say, the three hundred people from every part of the city converge upon the church door. How explain the sudden substitution of similarity for difference in the relations between these three hundred streams of experience? The service opens and the clergyman asks the audience to join in responsive reading. He has the experience of reading a verse of the Psalms and all of the three hundred persons have practically identical auditory experiences. At the close of the auditory sensation each has the visual experience of reading a verse in the book before him, and the motor experience of reading it aloud. They all read aloud the same verse at the same time. How are these coincidences to be accounted for?

There are three things of importance to note about these typical situations. The first is the fact that experiences pop into our minds and do so quite unexpectedly, and that their appearance—*i.e.*, the existence of these psychoses at those

moments—cannot be explained by anything present in our minds at the time or at any previous time. And here be it noted that the question we are discussing is not how we come to *interpret* the sensum as we do, but how it arises at all. It is the question of existence that is puzzling. It will not do to say, My experience of the clock striking ten was due to the previous experiences and associations without which I should not have been able to interpret the ten auditory sensations as a clock striking a certain hour of the day. Doubtless my interpretation would have been impossible without these previous experiences, but this fact does not answer the question how it comes that there is any auditory sensum existing within my consciousness to be interpreted. Nor can it be said that the auditory sensum was deducible from what was already in my mind. Neither the sound of the bell nor the thought of ten nor of time was consciously in my mind until the clang suddenly and unexpectedly and most irrelevantly broke in upon my train of thought. I hope it will not be suggested that the sound was *unconsciously* in my mind; and if the suggestion be made I shall postpone discussion of it until someone tells me what it means. The sound certainly was not among my psychoses at the time. Nor was it logically deducible from any of my mental content. How am I to account for its rise as an existent sensum?

This question is, of course, the kind of question that, in an earlier chapter, led us out of Solipsism. The second characteristic of human experience to which I wish to draw attention arises for us only when we have accepted the existence of several individuals and believe in their reports concerning their own experiences. Not only do I hear the bell but you also hear it, and at the same moment—though neither of us had anticipated or thought of it. Not only do I begin reading verse 2 of the Psalm at the moment

when the clergyman has finished verse 1, but 299 other people do the same. Every hour of life is crowded full of coincidences like these. We are somehow compelled to hear and see and feel the same things; and we experience these closely similar sensa at the same moment. Shall we leave these innumerable and astounding coincidences entirely unexplained?

The third point is the orderly nature of much that we all experience, and the apparent continuance of this order during periods of time when, so far as we know, the order and the things it orders are being experienced by no one. The wood in the hearth turns to ashes through a series of regular states which are the same for all of us and which seem to be identical whether experienced or not. The physical world, however you interpret it, acts *as if* it were following an order of its own, and were quite indifferent to our experience. It is to be noted that this order is not created by us. It is forced upon us. If our eyes are open and properly focussed, we cannot choose but have certain regular trains of visual sensa which we neither wished nor expected and which we cannot change. This order, moreover, is not derivable from logic; nor is it derivable from any of the "laws" of psychology. How account for this obvious independence; or, to phrase it in another way, how account for the fact that we all have these identical trains of experience which exhibit an identical order?

The questions here asked are of course essentially the same as those asked in connection with the problem of communication. For the reasons indicated when we were considering that subject, it seems to me very difficult to understand how any philosopher with a sense of responsibility in his calling can satisfy himself, in the manner of the pragmatists and of many "objective idealists," by refusing to consider the problem. If one rejects Solipsism

and thereby admits the existence of a plurality of finite minds, the rise, within each mind, of experiences which are not to be accounted for by logical or psychological laws, and the extraordinary coincidences between the experiences of these minds would seem to cry aloud for interpretation. The failure to feel the force and persistence of this problem is certainly evidence of a distinguished degree of that "tough-mindedness" so highly prized by Pragmatism.

There are and have been, of course, only a very few philosophers who have made this great refusal. Nearly all have some hypothesis by which our forced and coincidental experiences may be explained. Panpsychism, Berkeley's Idealism, and Absolute Idealism all recognize the force and importance of our problem, and each has its own solution. The answer to the problem which seems to me the most probable is, as the reader of course knows, the realistic hypothesis. The details and refinements of this hypothesis, and the divergences between its upholders will occupy our attention in later chapters. Here only the general realistic hypothesis, of existents which are not made of experience stuff, is at issue—the hypothesis roughly expounded in our chapter on Communication. This hypothesis has the advantage of having been made by the human race, and of having been made expressly for the solution of the problems of this chapter. (This statement of course must not be taken too literally; but the reader will understand what I mean.) It therefore fits the situation exactly. Why did you and I both hear the clock strike at the identical moment? Because, forsooth, there was a real physical clock, independent of our experience or thought, and the air waves (in the real air), which its striking produced, affected our ears and our minds at the same instant. Why did we both find, on returning to my study, that the fire we started was in the same condition it would

have been in had we stayed and watched it? Because, in addition to our *experiences* of the fire, there was a real fire, and neither its existence nor its intrinsic physical characters were affected by our experiences. According to Realism, moreover, our present experiences point not only to something else besides themselves, but to a whole nexus of temporal as well as spatial relations which need not be experienced by any mind. Thus we are led to the conception of a present spatial Nature, and from it (thanks to our experience and our demand for causal explanation) to the conception of physical and spatial reality as having existed in the interminable reaches of past time. We find that there are certain ways in which we may grasp together and understand the recorded experiences of the race as to the physical world; and thus our sciences of astronomy and geology and biology set up their hypotheses by which the present experiences of the race may be explained. Only thus can our experiences be made "coherent," and therefore we believe the theories true. To understand the present we must presuppose the past. Hence the hypotheses of the astronomical and geological ages before the appearance of animal life upon the earth. This raises the rather interesting question as to what a philosopher who refuses to accept the realistic view is going to do with the azoic age. It would appear that he must accept either the panpsychic view, or some form of Absolute Idealism or the cruder Berkeleyan doctrine; or else assert that science is mistaken and that the material world came into existence with sentient life. (Would this, I wonder, be the answer of Gentile and the other contemporary subjectivists?) It would seem incumbent upon a philosopher who seriously takes this position to propose some explanation of the geologic evidence at least as ingenious as that of the anti-Darwinians of the

1860's, who suggested that God made and hid the fossils in the rocks to fool the geologists.

There can, it seems to me, be little doubt that the realistic hypothesis fits the situation more exactly, and with fewer obvious difficulties, than do any of the rival hypotheses.[1] Many idealists, in fact, are ready to assert that if Realism is conceivable it is true. The questions, therefore, at once arise, Is Realism conceivable? What are the difficulties which it has to face? And how, in more carefully considered detail, shall it be expressed? These questions must be postponed to the following chapters.

[1] In the July, 1936, number of *Philosophy of Science*, Professor Everett E. Nelson challenges "the inductive argument for an external world." Two things should be said in reference to his criticism. (1) Realists are perfectly aware that inductive arguments can never give more than probability. (2) The choice between the hypothesis of an external world and the positivistic position, which Professor Nelson prefers, is the choice between a plausible explanation of our experience and no explanation at all. I am using the word *explanation* here in the large sense indicated on page 103.

Chapter XII

THE GENERAL REALISTIC HYPOTHESIS

There are several kinds of Realism, but it would certainly be an understatement to say that they bear to each other a strong family resemblance. In spite of very lively family quarrels, the members form a unified group, well aware of the crucial doctrines which they have in common. The divergences and quarrels will demand some of our attention in later chapters: in this we shall center our thought upon the general realistic hypothesis which they all maintain. This general hypothesis has, of course, been suggested in the preceding chapters, but it may be well to express it here in somewhat greater detail. As I understand it, it runs somewhat as follows.

First of all, let us suppose a real and common space-time. This supposition need not commit us to taking sides in the controversy over the nature of space and time. Space may be considered in Newtonian fashion as a container; or it may be thought of as a name for the fact that physical things have length, breadth, thickness, shape, and size, and that they are related to each other in ways describable as distances and directions. Either view of space is compatible with the general realistic hypothesis; and the corresponding interpretations of time are equally compatible with Realism. Let us now suppose that in the time-space pattern or order there are existent collections of existent qualities, each such collection having its own unique locus

in both time and space. These collections of qualities (which we commonly refer to as things) are not dependent for their *existence* on any mind, and while some of their *characters* may be dependent on mind, others of them are not. Whether or no one accepts this essentially human hypothesis, it certainly contains nothing that is meaningless, nothing that is self-contradictory, nothing that is illogical. These physical things, as thus understood, we shall now add, are dynamically or causally interrelated. Further, let us suppose that among these interrelated physical things some are living and conscious—an hypothesis which can hardly be called irrational and for which surely there is fair empirical evidence. Some of the activities of the non-sentient things, some of the events and processes that go on among them, will affect sentient beings for good, some for ill: some will act upon them lethally, some will be the very condition of their continued life. In such a situation those beings which are capable of noting the advantageous and disadvantageous processes and events, and are able to co-ordinate their actions accordingly, will survive, while the others will be likely to die in their youth and innocence. Thus, given sentient beings and some capability, within living forms, of variation, natural selection will develop the power of nicer and nicer perception—as well as the various instincts, thought, and the other mental endowments of beast and man. Among these mental endowments should be mentioned the consciousness of meaning and those desires and preferences, likes and dislikes, on the basis of which some things are said to have value and to be more valuable than others.

But to return to perception, we must note at this point the kind of perception which natural selection will produce. Sentient beings will be developed to perceive only those qualities of things and those types of events which have

vital and lethal effects upon them. Hence it will come about that man and his animal brothers will be able to perceive such things as structure, process, sequence, order; but not the many qualities of the physical thing's inner nature, so to speak, which have no decisive effect upon the furthering or discontinuance of life. It will thus come about that sensa and other (subjective) experiences will be developed in the human and animal minds which will stand for or symbolize certain external events. There is no reason, biological or other, why these symbolic experiences should resemble the events which they symbolize. Man simply receives certain stimuli and data, and responds to these partly by immediate movement, partly by forming judgments. These judgments are about the structure and processes of the external objects. When these judgments are true, and we have reason to believe them true, we have knowledge.

Lest what I have written be taken to mean (though I do not see how in fairness it could) that the human mind is only a blank tablet on which the external world writes, let me remind the reader of what was said at the close of the chapter on Knowledge concerning the great contribution which our perceptual and especially our cognitive powers make to the form which all knowledge must take. The brief sketch just given of the natural history of mental life is too brief to be inclusive of the whole truth: and I can only assure the reader that in my opinion knowledge would never have been possible had not the evolutionary processes, or Nature or the Creator or what you will, developed a knowing self. My purpose at this stage of our argument has been to express the agreement of all, or nearly all, realists upon the relation of psycho-physical organisms to the external world, the existence of which is the common realistic hypothesis. I have, therefore, been careful to include

in the preceding paragraph only the necessary minimum of realistic theory, leaving out, for the time being, various considerations which seem to me important and true, but on which not all my fellow realists would agree. With this understood, let me return to our common hypothesis.

To put it briefly, the realist, in his attempt to explain his own experience and human experience in general, in his attempt to put together and make sense of the facts which all but the solipsists admit, proposes that there is a world of physical, spatial objects and of psycho-physical organisms—or, as I should prefer to put it, a world of things and of selves. If in accord with the reasoning of the previous chapters it be granted that we have experiences and are able to communicate with each other about them, and further that we cannot explain these experiences on the basis simply of preceding human experiences, I submit that the realistic hypothesis is thoroughly scientific in form, and that a great deal of evidence can be furnished, a great deal has already, in the history of the race and of each individual, been piled up, toward its verification. The formation of the hypothesis and the use of the evidence in its favor are in principle not different from the methods adopted in the investigations and conclusions of the physical sciences. Take, for example, the oft-quoted case of the discovery of Neptune. Certain irregularities in the orbit of Uranus—to be exact, certain irregularities in the optical experiences of the observers of Uranus—could be explained (*i.e.*, put into orderly relations with the rest of relevant reality) most plausibly by the hypothesis of another planet, never yet seen by human eye, situated beyond all planets known. In like manner, the realist points out irregularities and regularities, facts and striking coincidences, within human experience and within each individual's lonely ex-

perience, which demand explanation; he further shows that his hypothesis of a physical world would explain each and all of these peculiar facts; and he challenges those who refuse his hypothesis to produce another as plausible and probable. There is a difference, of course, in the process of verification of the realistic and the astronomical hypothesis. For in the case of the irregularities of Uranus there was tacit agreement that a series of optical experiences on the part of astronomers looking through telescopes would be accepted as proof: whereas on the philosophical question there is no such conventional method of accepted demonstration. Hence the realistic hypothesis remains only probable. It is only probable because there are other hypotheses which possess a certain degree of plausibility, and because it is theoretically conceivable that some new hypothesis which as yet no one has ever thought of, might possibly be proposed. But while it is true that the philosophical hypothesis is only probable, not absolutely demonstrated, it is also true that the astronomical hypothesis is in strict theory no better off. The "verification" of it was, after all, only a series of optical sensations; and the ingenuity which, in opposition to the realistic hypothesis, can do away with the entire physical world, surely would not find it overdifficult to do the like with that minute portion of the physical world known as the planet Neptune.

One more general observation, in order to anticipate a possible (though, I hope, a most unlikely) misunderstanding. Psychical events—sensa, feelings, thought, experiences of every sort—are, as a matter of course, included among the existences which Realism recognizes. To attribute to Realism the view that reality, or existence, is to be defined as that which is *"independent of mind"* (as is not infrequently done) is to indulge in a wholly unjustified cari-

cature. Realism is much more sure of mental than of physical existents. Their reality it never thinks of questioning. It is only the material world whose reality needs discussion or defense.

The realistic hypothesis concerning the physical is so natural, so simple, so applicable to every turn of human experience that throughout the development of ancient and mediaeval philosophy, and through the early years of modern philosophy, none but a few extreme skeptics questioned it. Serious doubt was never thrown upon it until the rise of the Berkeleyan and Kantian schools of Idealism. Since the time of Berkeley, however, Subjectivism or Mentalism in some form has been so popular among philosophers as, at times, almost to be taken for granted. During the last quarter century, to be sure—and especially during the last four or five years—many representatives of that large branch of Idealism which calls itself "Objective" have protested (one might almost say with a sense of injured innocence) that they did not and would not give a subjective interpretation to the real physical world, and that no genuine idealist had *ever* done such a thing. Whatever one may think of these earnest declarations, and whatever the true doctrine of genuine idealists may be, it is certain that the subjective interpretation of the physical world is very far indeed from having been abandoned. Not only do pragmatists and personalists, absolutists and skeptics of various sorts still cling to it as a central and necessary, if not an obvious and unquestionable, doctrine. If the objective idealists have indeed deserted the mentalist army, the vacant ranks bid fair to be refilled by enthusiastic recruits from most unlikely quarters. As the idealists march out, the physicists march in. Under these circumstances the reader will surely understand and (if he is bored) will courteously excuse, the large amount of space given in this

volume to a defense of Realism against the attacks of Mentalism.

And, first of all, it will be useful to note the nature of these idealist attacks upon the realist position. As a rule there has been little question that Realism possesses the advantages of naturalness and of greater probability over its rival provided one admit that the realist and idealist hypotheses as to the nature of the physical world are equally thinkable and meaningful to begin with. The attack made by Idealism is of a much more serious sort than a mere assertion that the idealistic way of conceiving the world is a more probable hypothesis than Realism. It consists, instead, in the insistent assertion that the realistic hypothesis, while superficially plausible, turns out on careful analysis to be either meaningless or self-contradictory. Many idealists, in fact, will say explicitly that if Realism be even conceivable it must be accepted as true. It is this serious assertion of inconceivability which must now be considered.

The arguments used to show that Realism is ultimately meaningless are of two or three principal forms. Perhaps the one best known is that of Berkeley. In the course of his many controversial writings, the Bishop put his thought in different ways, but the central part of his criticism lies in his accusation that Realism is not even intelligibly statable, because whatever is thought of must be thought of in terms of experience. Try to give any account of the physical thing, and you will find that every character you can assign to it is and must be expressed in experience terms.

It is, I should say, pretty obvious that no one can seriously deny this latter assertion. To speak in any terms save those derived from experience is nothing more than to make noises in the air. It would ill become a defender of the general empirical point of view, which this volume has

sought to expound, to deny the truth of this fundamental Berkeleyan principle. But while I should be one of the last to challenge this position, there is, so far as I can see, no reason why qualities already found in experience should not also characterize things in space, even when the things and the qualities are not being experienced. Doubtless it would be meaningless for one to speak of triangularity unless one had experienced lines and angles and plane figures: but I cannot see that from this it follows that a stone which no one is looking at cannot be triangular. Nor do I see what can be said in support of this denial save the assertion that *esse est percipi.* It may be that this famous assertion is true; but it needs proof. And it is hard to see what kind of proof can be given. To those who see its truth "by intuition" it may well be decisive; but those of us who have no such intuition naturally ask for some sort of demonstration. I suppose when it is said that the proposition is intuitively obvious, the meaning is that careful thought will reveal a self-contradiction in the denial of it. The contradiction involved in the denial of the *esse est percipi* has never been clearly indicated. As Mr. Moore pointed out in 1903, there is no contradiction in the assertion that something besides a sensation could be blue, unless you *mean* by blue a sensation. If it really be inconceivable that a triangular stone should exist when no one is seeing or thinking of it, the contradiction should be capable of being stated, and it never has been.

The idealists' only recourse, so far as I can see, is to what Professor Perry has called the ego-centric predicament, which can hardly be better stated than in his words: "No thinker to whom one may appeal is able to mention a thing that is not idea, for the obvious reason that in mentioning it he makes it an idea." The fallacy of concluding from this indubitable situation that nothing but

ideas exists hardly needs to be pointed out. To quote from Professor Perry again, the argument, if one may call it such, is simply the statement of "a peculiar methodological difficulty. It does, it is true, contain the proposition that every mentioned thing is an idea. But this is virtually a redundant proposition to the effect that every idea, object of knowledge, or experience, is an idea, object of knowledge, or experience. And a redundant proposition is no proposition at all. The assertion that an idea is an idea conveys no knowledge even about ideas. But what the idealist requires is a proposition to the effect that everything is an idea, or that only ideas exist. And to derive this proposition directly from the redundancy just formulated is simply to take advantage of the confusion of mind by which a redundancy is commonly attended." [1]

Mr. A assures us that his friend Mr. B never dines alone. He is sure of this because Mr. B has never been alone on any of the innumerable occasions on which Mr. A has dined with him. Some years ago, in climbing "Spur Trail" on the flanks of Mt. Adams with a colleague, I asked him if he could tell me what the numerous mosquitoes which were devouring us fed upon, in that rarely visited part of the White Mountains, when no human beings were there. He answered that he had often meditated upon that problem but had never reached a conclusion; and he supposed a biologist who should try to solve it experimentally would always be baffled by the fact that he could not observe what the mosquitoes ate in his absence without being present. Now one can imagine a biologist who should draw from these facts the following conclusion: It is impossible to observe what the mosquitoes eat without being present as an observer; hence we must suppose that they

[1] *Present Philosophical Tendencies,* pp. 129–131. Practically the same criticism of Berkeley is presented by Pringle-Pattison on p. 192 of his Gifford Lectures on *The Idea of God.*

eat nothing except when under observation. Or he might even insist that no mosquitoes exist except when an observer is present. I leave it to the biologists, and to the reader, to characterize the logical nature of this conclusion. It seems, to say the least, a little daring. But it was reserved for philosophers not only to draw exactly this conclusion but to make the principle universal, and maintain that, not only mosquitoes, but all the choir of heaven and the furniture of earth depend for their existence on the presence of an observer.

Another argument against the existence of non-experiential entities, distantly related to these of Berkeley, is to the effect that such entities would be meaningless and hence cannot be real. The nature and the weakness of this type of argument were discussed in our chapter on Meaning; and therefore, I trust, need little further consideration here. It is perfectly true that the non-experiential objects of the realist hypothesis may be, and usually are, meaningless. But it does not follow from this that they cannot be real. Assertions must have meaning: existents need not. It is not meaningless to assert the existence of the meaningless. To suppose that it is so is to confuse meaning with character. The unexperienced reals cannot be characterless—to assert the existence of the characterless would be to say nothing. But the possession of character is not equivalent to the possession of meaning. The physical things of the realist hypothesis need not be symbolic of anything; but they are not "things-in-themselves" of the Kantian sort. There is nothing meaningless or contradictory in the assertion that entities possessing qualities may exist independent of all experience, even though they do not mean anything.

Royce developed an argument against Realism which to many of his followers seemed decisive, but which is less

quoted in idealistic circles today than it was thirty years ago. It is to the effect that even if the realist world existed, it and its existence would be unknowable and entirely out of relation to knowledge and to all experience. For, it is said, the realists' world is *defined* as being independent of knowledge or experience; such independence is conceived as constituting its essential nature. This being the case, Royce argued, the hypothetical reals are *unrelated* to experience and knowledge, and hence cannot be the object of knowledge and can never be known nor make any difference to experience. Since they are entirely unrelated to experience, either directly or indirectly, they never can become related; for if they could come to be related it would have to be through intermediary terms to which both they and experience were already related, and if this were the situation the reals themselves would be already related to experience. Hence the reals must be absolutely unrelated and *essentially* unknowable. It therefore follows, we were assured, that either the realist is mistaken in asserting that he knows the real, or else what he knows is not independent of being known.

In reply to this it is needful only to remind the reader that independence does not mean lack of relatedness. This matter has already been discussed at some length in the chapter on Terms and Relations, and I have nothing to add to the considerations there presented. Unless we are to reduce all existence to an amorphous jumble, unless we are to surrender the hope of having anything definite to deal with, we must entertain at least the possibility of one thing being related to another and yet not dependent on that other for its existence. As I sit at my desk there is a certain relation—there are several relations—subsisting between me and a certain apple in my cellar. But surely none but a very daring idealist would care to assert, as

a necessary part of his philosophy, that if someone should eat that apple I would cease to exist. I am related to the apple, but I am not dependent upon it for anything save the relational character of being related to it. Or, to put the matter in other words, there is no reason why two objects may not be related in a dozen ways and then cease to be related in one of those ways, yet continue to exist and to be related in the eleven other ways.

Now these considerations hold in exactly the same way when one of the relations between two existences is the noetic relation. When a thing is the object of knowledge or of thought it is of course related to it—no realist would deny this. Moreover, it is related to the thought not only noetically but temporally, in many cases causally, and sometimes in several other ways. In fact no two things in the universe are entirely unrelated. But there is no reason why the thing in question might not cease to be noetically related to my thought or to any existent self or psychosis, and still not only continue to exist but also to be related to various cognitive centers in various other ways. The Roycean argument, therefore, has done nothing to show that a physical real must be an object of knowledge in order to be.

We come now to a criticism of Realism of a rather different sort. The realistic hypothesis supposes existent collections of existent qualities having loci in the common space-time pattern. Realism thus stands or falls with the conception of a space which is in some sense and to some extent independent of any experience. It is here that the Kantian, as distinct from the Berkeleyan, form of Idealism attacks it. Realism needs an objective space (in some sense or other) for its physical objects; and an objective space, Kantian Idealism affirms, is unthinkable. Instead of being objective and independent, this school maintains, space

is a universal form for all physical being and is, therefore, a category. From this the further conclusion is drawn that space cannot be independent of experience or apply, ultimately, to anything but that which is experiential.

Such a conclusion would seem to be quite unjustified. Far from being an essentially idealistic concept, the notion of categories or universal forms, as we have seen, originated in the West with Aristotle, and in the East with the Nyaya and Vaiśesika schools—all three of which philosophies are realistic. No realist philosopher of my acquaintance denies the reality of categories, and two of the leading realists of our time (Alexander and Sellars) have made special studies of them. There is, therefore, nothing in the concept of category that is any more idealist than realist. It is not the reality and importance of categories, but their purely experiential origin and nature which the realist denies. The Kantian argument that since they are universal they must derive from and be dependent upon experience or thought is no longer impressive. There is no reason to suppose that if there were a realistic world it could not be subject to categories. And so far as space is concerned, it is plain that since by physical objects we mean objects that have spatial characters, it is necessary to suppose that all physical objects are in some sense spatial—are subject to the category of space.

Kant's attempt to show that space cannot be objectively real because of the antinomy that it must be both infinite and finite, both endlessly divisible and the reverse, will not bear serious examination: the arguments in favor of infinite divisibility and extensibility being so very strong and the arguments on the other side so very weak. The progress in mathematics since Kant's time has banished the difficulties which he found in the conception of infinite divisibility: and plainly space is infinitely extensible.

Bradley has an argument of the antinomy type against the objective reality of space, copied obviously in form from Kant's.[2] Space, he maintains, cannot be seriously taken as real because it can be proved to be a relation, and also can be proved *not* to be a relation. Bradley's antinomy shares the lopsidedness of Kant's. He has no difficulty in showing that space is not a relation. But his argument to prove that it *is* a relation is fundamentally dependent upon his attempt to show that space is a collection, and his surprisingly facile mode of taking it for granted, without either argument or even assertion, that a collection is a relation.

There is no uniform and detailed doctrine of space held in common by all realists. But most realists, I think, would assent to the following rather general statements. In seeking to make explicit our notion of space we start, as usual, with experience. Our perceptual experience has various qualities—colors, smells, tastes, sounds, temperatures: and also shapes, sizes, directions, angles, lengths, distances. These latter we call spatial qualities, and we get them from, or find them in, our visual and tactual sensa as directly and natively and naively as we do color or pressure. This process we carry on all through our lives. It begins in infancy; and at first space is, for us, confined to the sensuous. As developing intellect begins to work upon these immediate data, we start analysing out relations within the field of our awareness and of our thought. The spatial relations which we first sensed come to be specific objects of attention. We rationalize and (if I may coin a word) *relationalize* our spatial experience and learn facts about it. We also learn to compare and relate different spatial qualities and different spatial entities with each other. We discover specifically that *this* book is larger than

[2] *Appearance and Reality*, pp. 36–38.

that book, this ball has the same shape as that ball, the same shape as the full moon, and that the moon is farther distant than the ball. In this fashion, beginning with our immediate experience, and extending what we learn from it through imagination and conception, we build up images and concepts of different *spaces:* we think of our house and your house and of our grandfather's house which burned down before we were born, and finally of *space-as-such,* space conceived as a single whole. This conceived space we think of as common to all observers and as the common medium in which our bodies and all other bodies exist.

So much for the genetic and psychological side of the question. Now the hypothesis of Realism is that this natural belief to which we all come, this conclusion of Common Sense, in its general nature, is sound. Realism as such does not and need not take sides between what might be called an absolute and a relativistic view of space. Space may be a container of the Newtonian sort, or it may be a name for a common character which all physical things possess. But, in one sense or another, Realism believes in space as containing or characterizing all physical objects including our bodies. It believes that space thus understood is objectively real and is continuous with the space of the objects which we perceive: that if we should move to any distance and in any direction we should still have spatial shapes and sizes for our objects, with no break between there and here. Thus space, either as a container or as a unified aggregation of all actual bodies and the distances between them, is related causally and otherwise to all actual centers of experience and thus "makes a difference" to them, but is not dependent for its existence on being perceived or thought of by them. The space common to all existent bodies is not to be identified with anyone's

subjective experience; but our (subjective) spatial experiences may be symbolic of it or of parts and aspects of it. We can imagine other spaces than this "real" space: but it has the unique character of being the space in which our bodies exist, or of which they are parts. It is the common system of the actual objects which you and I perceive and of the innumerable objects which society perceives, and of the infinity of objects which actually might be perceived, or might have been perceived, in various situations. There may be innumerable imaginary spaces: the real space is one only and is made specific and definite by its existent objects and their relation to actual and existent centers of experience.

The doctrine of time which this volume, at any rate, would defend is quite parallel to the doctrine of space just presented. For our knowledge of time, as for our knowledge of space, we go back to experience. Time is not known originally through thought, but is a name for certain characters of being which we directly experience. We apprehend it in our experience of duration and of the "specious present." Here we have an immediate knowledge of change, of sequence and endurance, of past flowing into present and anticipating a future. Just as our conceptual faculty extends and also analyses the spatial experience, so it extends and analyses the temporal experience. We become directly aware of temporal relations and we come to conceive of times past and times future, and of changes and sequences taking place not only in other minds than our own but also in the wilderness wherein there is no man, in the purely physical regions of the farthest stars. This is certainly the view which all of us by nature share; and Realism maintains that in this question, as well as in the question of space, our native and almost irresistable beliefs are correct. Clock time, time as a measure of motion, may

indeed be a construction of the intellect: but time in the sense of duration and change is objectively real. It is one of the characters of the existent world, and is thus independent of being experienced. It is to be distinguished not only from the measurements of time but also from merely imagined or imaginary time. There are as many imaginary times as we care to make. There is but one "real" time, the course, namely, of events and changes and durations within the existent world: the time that makes, or is capable of making, a difference to actual centers of experience.

This question of the distinction between real and imaginary time, together with the corresponding question of the distinction between real and imaginary space, is of importance, partly because of its obvious and inherent significance, partly because realists often distinguish between existent and imaginary things by saying that the former have loci in the real space-time, whereas imaginary objects, though they possess definable natures, have no place in the real space and the real time. If we are to use this mode of distinguishing the real from the imaginary (and it is a convenient method), it is plain that we presuppose a real or existent space and time: and it is therefore incumbent upon us to suggest how these are to be distinguished from imaginary space and time. Obviously we cannot define the real space as that space which has a locus within the real space-time. We must, therefore, go back (as in the preceding paragraphs I have tried to do) to the fundamental principle which marks off the real from the non-real. That principle, as the reader will recall, is this: the real is that which is capable of making a difference to experience. The existent, as contrasted with the merely subsistent or conceptual, comes into touch, somewhere and somehow directly or indirectly with some actual experience. If this

principle of distinction be accepted, we may say that real, as compared with imaginary or purely conceptual, space is continuous with the space of the bodies of sentient beings (or with the space perceived by bodiless beings if such there are), and thus is capable of influencing and being influenced by, or of making a difference to, experience. Similarly the real time is the form of those changes and events which are coexistent and continuous with the events and changes and sensed durations of experience. With so much understood we may properly make use of the convenient formula that defines existent things by their loci in the real time or the real space-time.

I say the real time or the real space-time rather than referring to the real space-time alone, because in my opinion (an opinion not shared by all realists), while physical objects are in both space and time, psychical existents are in time only. An existent physical object, being in both space and time, and being necessarily capable of making a difference to experience, must be, as Professor Lovejoy has expressed it, "a factor in the executive order of nature apart from being perceived"; and must be "potentially common to the experiences of many percipients as an external cause of their sensations, if not as an actual datum; and must conform to the laws of physics."[3] This reference to the causal relations which a physical thing sustains both to nature in general and to percipients is obviously central to the concept of physical reality defended in this chapter. The causal nature of the physical is much more important than the kind of qualities which it possesses.

This chapter has sought to present the general hypothesis of Realism, without as yet going into the epistemological niceties of the question, or the distinctions and divergencies between the various realistic schools. Before the chapter

[3] *Revolt against Dualism*, p. 106.

closes the reader should be reminded of one part of the realistic contention which has already been stressed in this volume, but which is frequently forgotten by the critics of Realism. I refer to the fact that Realism need not, and usually does not, involve atomism. For it, as for many forms of Idealism, the world, though teeming with variety, is still a whole. Spatial, temporal, causal, noetic relations, likeness and difference, and many other forms of linkage run through it in every direction. Just how numerous and how close are these relationships of the many parts, just how great is the unity of the whole, are questions upon which both realists and idealists may differ among themselves. But in the general realist hypothesis there is nothing to prevent the conception of the world as a true cosmos.

Chapter XIII

REALISM WITHOUT DUALISM

In the preceding chapter I sought to present the general position to which, so far as it goes, realists of nearly all schools would assent. In doing so I purposely left out of consideration a number of the more technical and complicated questions—some of them profoundly important—which are involved in a realistic epistemology. As one begins the consideration of these matters, one sometimes wonders whether the exact statement of the realistic position be not more difficult than its defense. In fact the critics of Realism not infrequently maintain that the assertion of its truth, when all its implications are faced, is incompatible with the possibility of knowing that it is true. It will be the aim of this and the following chapter to work out a formulation of the realistic position which will be consistent with itself, with the facts of science, and with such a degree of probable knowledge as there is any good reason to suppose that we possess.

The realistic theory of knowledge, in a vague and general sense, was rather taken for granted in philosophical discussion up to the Seventeenth Century. But when John Locke made an attempt to state it with some nicety, the trouble began. As all readers of this volume will remember, he based his discussion of the question upon the following fundamental assertion: "Since the mind, in all its thoughts and reasonings, hath no other immediate object but its own ideas, which it alone does or can contemplate,

it is evident that our knowledge is only conversant about them. Knowledge, then, seems to me to be nothing but the perception of the connection and agreement, or disagreement and repugnancy, of any of our ideas."

It was not long after these words were written when some of the serious implications involved in them began to crop out. If Locke's statement be taken literally and be carried out consistently (a course which Locke himself was, perhaps, too wise to follow), it would seem to deny the possibility of knowing anything except one's own immediate mental content, and to force one into a hopeless agnosticism. But perhaps this is too mild a statement. For if Locke's words in their most extreme sense were true, we should not even be capable of agnosticism. Agnosticism is, I suppose, the belief that we cannot know certain things or possible truths which we should like to know; but if Locke's sentence be taken literally (as Locke probably never intended it to be taken), it would be impossible for us to imagine or conceive of anything that we do not know: we could not even think of or mean anything but our ideas, and these we already know. It would thus transpire that agnosticism instead of being inevitable would be inconceivable. We should be not only solipsists but contented solipsists, who by the very nature of thought would be necessarily precluded from even wondering whether there were anything outside of or in addition to our subjective, mental furniture.

It is not surprising that for some minds this imprisonment within the iron ring of our ideas became intolerable. One of the earliest, and by far the most influential, of the proposed methods of escape was certainly startling in its radical simplicity. How dreadful that we can know nothing but our own ideas! Not at all, replied Bishop Berkeley; because, forsooth, there is nothing but our own ideas

to know! That this way out had implications almost identical with the extreme form of subjectivism depicted at the close of the preceding paragraph—the position of the solipsist who cannot even think of the possibility of anything but his own psychoses—did not prevent the Berkeleyan view from gaining a large following in the philosophic world. It was, to be sure, watered down with the inconsistent admission that we can, after all, think of other selves and God, in addition to our own ideas, and in this hybrid form it became one of the most important elements in several types of Idealism. I do not mean to assert that all Idealism is Berkeleyan: Kant and many of his followers have very explicitly rejected the subjectivism of the "good" Bishop. But it can hardly be denied that there is a large admixture of Berkeleyanism in much Idealism even of the neo-Kantian type: and, furthermore, that if you are confronted with Locke's difficulty, the idealistic way out of *it* is through subjectivism.

In the course of the century after Locke's death, Realism, which had for so long ruled almost unquestioned, was nearly driven from the field, and the various schools of Idealism—Berkeleyan, Kantian, neo-Kantian—reigned supreme. Reid and his school did not quite understand the situation, and made no great impression. The Austrian thinker, Brentano, who offered Realism a new and promising way out of its difficulties, was pretty generally disregarded in the English speaking countries; and in Germany very few were interested in the question, Hegel and other neo-Kantians having spoken the last possible word. In the last half of the Nineteenth Century it was all that a philosopher's reputation was worth to suggest that there might be something in Realism, after all. Not that all philosophers were convinced idealists: Realism might, indeed, be true. But, after Locke's disastrous performance, how

should, how could a realistic epistemology be stated in a fashion that would not imply at least an extreme agnosticism? At last in the year 1903 (a date which might well be remembered like 1776) a brave Englishman took his courage in both hands and published a Declaration of Independence. The Declaration was boldly entitled "The Refutation of Idealism," and the Englishman was Mr. G. E. Moore—to whom all honor! Thus came into existence, and immediate prominence, the epistemological doctrine since known as the English New Realism.

It is no part of my intention to give a history of the development of realistic epistemology, and a very brief statement of the general position of Mr. Moore, Professor Alexander, Professor Laird, and their followers must therefore suffice. Mind is stated to be activity only, *not* content, —nothing but the acts of awareness and of willing is mental. This being the case, the entire content of the mind—sensa, percepts, concepts,—are non-mental, are independent of mind, and, in fact, are physical. The mind is aware of these its objects, it contemplates them: it cannot contemplate or be aware of itself, for it *is* the activity of awareness. It can, however, and does "enjoy" itself: for the act of being aware of an object is an inner and immediate kind of awareness of awareness, quite different in its nature from the awareness of objects. Since all the objects of awareness are called physical rather than mental, something like the position of Naive Realism is restored: perception and knowledge are immediate; and the representative or correspondence theory of knowledge is denied.

Here was an ingenious and simple method of getting out of Locke's difficulty. Not only was Locke's statement found untrue—that the mind hath no object save its own ideas: it was discovered that, as a fact, the mind hath no ideas at all and that it knows the external physical world di-

rectly, with no intervention of psychical content. What Whitehead calls "the bifurcation of nature" was almost completely avoided. *Almost,* but not quite; for acts of awareness (and perhaps also of will) were still said to be different in kind from physical things. But, according to the theory, there is no difficulty about knowledge, because we know everything directly.

One's first reaction to this simple and complete solution of all epistemological difficulties is to wonder why no one ever thought of it before 1903. One's next reaction is to recall that a great many people had thought of it before 1903—in fact long before Locke; that it is simply a more careful formulation of the old pre-commonsense belief in direct perception and knowledge, with no really new solution of the difficulties which made the old and naive view unsatisfactory not only to Locke but to the originators of Common Sense (if so one may speak) a good many thousand years ago. For if all the objects of our sight and thought are immediately apprehended, how can there ever be any mistake about them? Are such things as illusions, errors, dreams denied? And if not, how are they to be explained? Is the "straight stick bent in a pool" really straight, as touch and indirect measurements show it to be; or is it bent as sight asserts? It can hardly be both straight and not straight at the same time; and since either our visual or our tactual percept must, therefore, be different from the real stick which all realists believe in, it is plain that the perception of the mistaken sense does not give us direct knowledge. The illusory image, though it may indeed be physical in the sense of having "physical qualities," is not physical in the sense of having a locus in real space or of being a part of the causal system of physical nature. And an appearance which has physical qualities, but is not spatially nor causally a part of the common and independent

physical world, is exactly what most of us mean by a real but purely psychical image.

Similar difficulties arise in connection with memory and anticipation. If there be no "ideas," no mental content, no memory image, as distinct from physical objects, if thought be always direct and never representative, what shall we say of your memory of yesterday's breakfast, or your expectant thought of your next Christmas dinner? When you think of the assassination of Julius Caesar, is the assassination present, or the thought past, or are they out of time, —or what will you do with them? It is indeed perfectly possible to say (and this would be my position) that the thought is present and the assassination past, and that a present thought can perfectly well *mean* or stand for a past event. But this is not and cannot be the position of the English New Realism. For the representational character of thought content which makes possible the answer just suggested, is exactly denied by this school. It recognizes no subjective content, no memory images or imaginations, no "ideas." Your thought somehow jumps back 2000 years and infallibly hits the actual event, not in the sense of meaning it, but in the same direct fashion with which it intuits a blue sense datum that you now visually experience. I picture the scene of the assassination in the Senate House. I have, we are told, no subjective image (there is no "bifurcation of Nature"): the actual event is my immediate object, for there *is* nothing save physical things and events and mental acts. Is, now, this visual experience identical with the probably very different scene that took place in 44 B.C.? And if it be not identical what shall I do with it? To sum up the matter very briefly, the attempt of the New Realism to do away with the concept of mental content has very grave difficulties. The belief in ideas, which all mankind share and probably have always shared, is not

a superfluous invention but arises inevitably from the very attempt to take seriously and apply generally, the position of Naive Realism,—a position which was, for that reason, given up thousands of years ago and which the English New Realism has attempted to resuscitate. Surely not thus are John Locke's difficulties to be avoided.

A related attempt to avoid these difficulties while retaining the realistic view of the physical world was made by a group of American thinkers [1] not long after the rise of the doctrine we have just considered. The proposal they brought forward, commonly referred to as Neo-Realism, is too well known to readers of this book to need lengthy exposition here. Its aim is not only to escape Locke's agnosticism, but also to avoid even the minimum of dualism preserved by the English realists. For the authors of the movement felt—as have other realists—that it was the dualistic or representational nature of Locke's realism that got it into trouble; just as it was the psycho-physical dualism of Descartes' philosophy that raised up for it the difficulties which, more than anything else, prevented its general acceptance. Both epistemological and psycho-physical dualism, moreover, are very difficult to reconcile with a thorough-going Naturalism, and one of the leading aims of Neo-realism was (and always has been) to furnish an epistemology of an essentially naturalistic type. This new school of realists, from its inception, has therefore explored the possibilities of formulating a thoroughly realistic epistemology which shall avoid the dangers of agnosticism that Locke fell into, and free itself from every taint of dualism. Its authors stress this aspect of their theory by calling it an epistemological monism. The subjective or mental activity, which their English colleagues accept, is denied by the

[1] The view thus suggested was later adopted, in its chief outlines, by Mr. Bertrand Russell.

American school quite as insistently as subjective states or content, and an epistemology is thus presented admirably fitted for the uses of a naturalistic metaphysics. Not that the subjective is made over into the objective in the way of a crude Materialism; but both the terms of the old dualism are (in words at least) abolished, and the suggestion is made that reality is composed not of subjective and objective existents, but of "neutral entities," in themselves neither mental nor physical, but which come to be called one or the other according to the particular situation in which they are found. In such a partnership, as might have been foreseen, the objective naturally has the deciding vote, and the point of view is often quite frankly called by its authors a Pan-objectivism. The conception that an identical thing may be, and often is, physical in one connection and psychical in another is very central to the whole position; and is, in fact, the chief original suggestion of the school. It is by means of this conception that both the seemingly inevitable agnosticism of Locke's Representative Realism and the traditional puzzles of the mind-body problem are avoided. There is no difficulty in the question how the mind can know physical things, or how it can get outside of the imprisoning ring of its own ideas, because knowledge is not, as English New Realism asserts, a relation between the mental act of awareness and its various physical objects: it is, instead, a relation between things,—between things which are primarily neutral entities. The same identical tulip is in the garden, in your mind, and in my mind. In so far as it is bound up with the other flowers in the garden, with the soil and the sun, it is called physical; in its relations to a nervous system it is called mental. And as there is thus no chasm between the garden and your mind, so there is no chasm between your mind and mine: the identical tulip is in both.

The originality of the view thus suggested is so great as to arouse both admiration and wonder. It is in some respects so revolutionary that it is difficult during the first year of one's acquaintance to do it justice. The admiration which one feels, and should feel, for its ingenuity should not, however, blind one to the real difficulties which it has to face. For one thing, its attempt to break down the real chasm between individual minds cannot honestly be called as successful as it is indubitably daring. There is, to be sure, something in common between my hiding from you what is in my mind and my hiding from you what is in my purse. But while I may tell you what is in my mind, very few, I think, will be convinced that I can actually transfer to you my identical sensation or emotion in the same sense in which I may take a coin out of my pocket book and put it into yours. In fact, I do not see how anyone can really admit this possibility who has not first confused essence with existence. Part of my mental content may be the act of conceiving a triangle, and I may define the triangle so completely that, as a result of my words, you may conceive of a triangle, describable in exactly similar terms, this act being part of your mental content. But while the two "ideas" would be alike in essence, they would still be two, not one, in existence. The very fact of our discussion of this question, the very possibility that our ideas may be alike or that they may not be alike, and the certainty that we can never be certain whether they are alike or not, presupposes that, existentially considered, they are two, not one.

Similarly, one must seriously question whether my image of the tulip at a distance of twenty feet is identical with the image, twice as large as mine, which you may have at a distance of ten feet. Yet, obviously if they both be identical with the physical tulip they must be identical with

each other. And if they be not identical with each other, at least one of them cannot be identical with the physical tulip. One might, of course, with Berkeley deny the physical tulip altogether; but if one retains it, as all realists must and do, it is hard to see how one can face this situation without admitting the existence of subjective or mental images which are not physical (save in the Pickwickian sense of having "physical" qualities). If this be admitted we are back with Locke and his ideas, and with Aristotle and his representative theory of knowledge.

A related difficulty, which was pointed out a number of times during the discussion that followed the launching of Neo-realism, arises from the question what epistemological monism would do with the processes of perception as taught by physiological psychology. Between the actual apple and the indubitable round, red sensum, there is a considerable series of physical and physiological events which in time separate the two, and which make the scientists, at any rate, very dubious as to whether the physical apple and the red sensum even resemble each other in anything but shape. Since the round red sensum or image is declared, by Neo-realism, not to be mental but to be identical with the physical apple, it seems to follow that the term at the beginning of the process of perception—the physical apple and the reflection of light waves from it—is identical with the term at the end of the process, the sensum which is separated from the physical apple by several stages of the causal chain and by an appreciable lapse of time. It is to be noted that the difficulty here pointed out is not the identification of something that is given (the sensum) with something that is not given (the "physical apple");[2] if

[2] *Cf.* D. C. Williams, *The Innocence of the Given,* Jour. of Phil. for Nov. 9, 1933; and *Truth, Error, and the Location of the Datum,* Jour. of Phil. for Aug. 2, 1934.

that were all, it would be conceivable that, since we do not know the non-given, it might be identical with the given. The important point is that we know what we mean by the given sensum and that we know what we mean by the hypothetical physical apple, and we know that we do not mean the same thing by these two concepts. They may be as like as two peas, but that is neither here nor there. One of them is conceived as the term or event beginning a series of events, the other as the term or event at the end of the series, and nothing in mathematics itself could be more certain than that by one of these terms we do not mean the other. It may, of course, be possible to challenge the teachings of physiological psychology (some schools of Idealism do); but so long as Neo-realism accepts them (and I do not understand that any neo-realist has ever questioned them) it is at least exceedingly puzzling to see how, for it, the two separated terms can be identical.

The attempt to avoid a dualistic form of Realism by means of identifying the physical object with all the so called mental images of it, whether real or merely possible (and a little reflection will show that possible as well as actual images will have to be included) results in a picture of the physical universe so confused as to be hardly statable. A physical object, on this view, is a system of aspects, or appearances, centering in concentric spheres, around what Common Sense would call the physical object, and extending infinitely outward. This (on the proposed hypothesis) is true of every physical object. Each includes the appearances of it (real and possible) at every point of space where an eye or a camera could be. Such a way of conceiving things is, of course, quite unjustifiably partial to the sense of sight; but I shall not stress this palpable prejudice, for if all the other senses were added and each made its contribution to the collection of appear-

ances which *is* the physical thing, it would only make confusion worse confounded. Since each physical thing thus (in any case) occupies the whole of infinite space, each thing is as large as, and of the same shape as, everything else, and all things merge and interpenetrate in a fashion more repugnant to the interests of physical science and of clear thinking than the most anti-scientific Bergsonianism. This may seem an unjustifiable accusation in view of the recent careful attempts to defend the doctrine; but the measure of success which these attempts have attained is exactly proportionate to their recognition of a real distinction between the actual physical object and its radiating appearances or perspectives,—a recognition which is dualistic in everything but name.

The difficulties about time are not less formidable, and have, indeed, been so frequently pointed out that, doubtless, the reader needs only to be reminded of them. On the hypothesis of Pan-objectivism, the visual sensation of seeing a star is to be identified with a physical event, presumably with the initiation of the light ray at the star, an event which took place many years before the visual sensation with which it is now identified. How two events, one of which happened an even century before the other, can be existentially identical has never been satisfactorily explained. For it is no explanation of *this* difficulty to define vision as "the relation in which the organism stands" [3] to the star and other bodies and events. It is surely unnecessary to remind the reader that the visual image whose subjective nature I am contending for is not a relation between objects but the thing we all know as the consciousness of a particular light at a particular moment. It is the identity of the physical object with vision in *this* sense which must

[3] See Prof. McGilvary in *Contemporary American Philosophy*, Vol. II, pp. 113 and 118.

be demonstrated if the dualism of the mental and physical is to be avoided.

Doubtless "perspectives" of a given object or event radiate in all directions from it, decreasing in size and ever becoming later in date. Doubtless, also, both the shape and the size of an object will appear different from different distances and different angles. Doubtless the qualities of these various possible appearances or perspectives of the physical thing will be "physical" in the sense of being the kind of primary and secondary qualities which physical things and mental images of them share in common.[4] But all this is nothing to the point so far as the question of the identity of mental images and physical things, and the whole question of Dualistic and Representative Realism, are concerned. By "mental image" as used in this discussion we mean a particular sort of visual experience which we all have and which all of us, no matter what our theory, would have no difficulty in identifying; while by "physical object" we do *not* mean merely an image with physical qualities, but an existent entity in space and time which is "a factor in the executive order of Nature apart from being perceived," and which is causally linked up with other physical things so that physics must take cognizance of it, and with sentient beings in such fashion as to be "an external cause of their sensations." We have given many reasons in the preceding chapters in favor of the hypothesis that physical things in this sense are real. Every school of Realism is committed to their reality. The facts of perception, the varying shapes and sizes of mental images of objects, the differences in date between mental images and the physical events with which they are cognitively allied, would

[4] *Cf.* McGilvary, *"Perceptual and Memory Perspectives,"* Jour. of Philosophy for June 8, 1933: and Ushenko, *"The Date of a Temporal Perspective,"* Jour. of Philosophy for Nov. 8, 1934.

seem to make impossible an identity between the mental and the physical in this sense of the word.

To make the matter still plainer, let us revert once more to an illustration from the sense of sight. I see at the same time a star and the branches of a tree over my head. It is admitted that the star event and the tree event are not physically simultaneous: one antidated the other by many years. But my star-sensum and my tree-sensum are simultaneous with each other. From this it would plainly seem to follow that the sensa cannot be simultaneous with both the star event and the tree event, and presumably are not simultaneous with either, and hence cannot be identical with them. So far as I can see, the only way of even attempting to avoid this conclusion is by challenging the implied premise that "all the elements of one conscious field have *eo ipso* the same date." [5] But I do not see that it is possible successfully to challenge this premise: when its meaning is understood it seems to me a self-evident proposition. The expression "all the elements of one conscious field," in the premise as stated above, means the conscious content of one identical moment. The act of perceiving and the conscious content that goes with it (and *by means of which,* as I should say, one perceives a physical object) are inextricably fused parts of one another. All the elements of the conscious field must necessarily begin and end with the perceiving act, and will therefore be simultaneous with each other and hence cannot be identical with an event that ended before the perceiving began.

The difficulties which the English New Realism had to face in dealing with the unquestioned facts of error and illusion are no less insuperable for the American school. Both schools would seem to have been so eager to avoid

[5] See Prof. Williams' article, *Truth, Error, and the Location of the Datum,* in the Jour. of Phil. for Aug. 2, 1934, p. 434.

the agnostic implications of Locke's Representative Realism that they quite forgot the uncertainties and frailties of human knowledge,—facts which are sad but true. The problem of error has been so minutely analysed and discussed that it would be presumptuous to attempt an adequate treatment of it in less than an entire long chapter. I will, therefore, spare my reader the task of skipping a few pages in this volume and shall, instead, refer him back to the many excellent discussions of this theme with which he is, very likely, quite as familiar as am I.[6] Two observations only I shall make in passing. The first is the very obvious, but, I take it, by no means superfluous, reminder that the problem of error is not solved for epistemological Monism, or Pan-objectivism, by pointing out various ways in which illusions and mistakes arise,—*why*, for example, we see the straight stick bent in the pool. The relevent fact is that we do so see it. The other comment is this: that the difficulty in reconciling Pan-objectivism with the facts of illusion does not rest on the assumption that the identification of mental image and physical object should necessarily assure us complete knowledge of the latter.[7] It is, of course, possible to be mistaken in our judgments about what is actually given. The real difficulties which the facts of error present to Pan-objectivism are other than this, perhaps the central one being bound up with the definition of a physical object—a topic already discussed. The definition suggested at the close of the last chapter, which insists upon the causal connections of the physical object quite as much as upon its physical characters, was the outcome of the long and careful analysis of the reasons for believing in physical

[6] I should particularly commend Prof. Lovejoy's incidental treatments of error and illusion in the *Revolt against Dualism*, and Prof. Rogers' chapter in *Essays in Critical Realism*.

[7] *Cf.* D. C. Williams, *Truth, Error, and the Location of the Datum*, Jour. of Phil. XXXI, 432.

objects at all. We as realists felt that the great balance of probability was in favor of the hypothesis of physical objects because only by means of them could we explain our human experience and make it coherent. The recognition of objects having physical qualities but not causally related to the experiences of sentient beings would have helped us no whit in our attempted explanation. The causal quality of the physical objects is therefore central and essential to the conception of the physical. Now if all that the neo-realist means in his assertion of the identity of the psychical and the physical be that images, both veridical and illusory, have physical qualities, the assertion is so harmless that it is a waste of breath or ink to make it. If the assertion is really significant it must mean that images are identical with physical objects in the full sense of the word. The neo-realist must aver, therefore, that the pink rats which the generous imbiber sees beside him are a part of the causal nexus of Nature, capable of affecting all physical things in the neighborhood and all sentient beings within seeing distance of the place where the sufferer sees the rats to be. And the neo-realist knows perfectly well that if he makes this assertion he is stating something that is not true.

The question of the meaning of the physical is at the bottom of much of the apparent disagreement between Dualistic or Representative Realism and another of the realistic schools, the one usually referred to as Objective Relativism. The central thesis of this group of thinkers is the assertion that what are commonly known as images, percepts (both veridical and illusory), ideas, emotions, are physical: and that they are physical because they have physical qualities. One should hesitate, I believe, in assenting to the view that emotions have physical qualities, or that all the qualities of what we know as percepts, memory images, ideas are physical. There are certain qualities of

the mental content involved in perception which appear plainly to be subjective, such as, for example, clearness and affective coloring; but quite aside from this demurer, it is important to repeat the fact that the attribution of physical qualities to images and percepts is in no wise incompatible with Dualism, and that the implied definition of the physical as that which possesses physical qualities leaves out of account the most central thing in Realism. There is no reason why Berkeley and the entire school of Subjective Idealists should not accept the objective relativist's use of words: such a use of words would be in no wise inconsistent with anything in the subjectivist *philosophy*—it would be merely the substitution of the prefix *ob* for the prefix *sub*. It is therefore a serious and a difficult question whether Objective Relativism is a genuine attempt to get away from Dualism, or merely the proposal of a new terminology.

Things, we are told, have not one but two sets of qualities. Some of them are dependent upon a dual system of relations, some upon a triadic set. An object is square if the essence or character squareness coincides with, or is located at, the object's locus in space-time. But if it is to be blue, the blueness and the locus must be related to a third existent, namely a percipient event. The object is blue only in this relation or from this point of view. And this is true both of what are commonly called veridical and of what are called illusory references. The characters thus dependent upon a triadic relation come into existence only on the appearance of these percipient events (or the physiological changes of organisms which correspond to them, or *are* they?—which is intended is not certain). Some of these "physical" characters thus dependent on percipient events are observable by all organisms within perceiving distance—*i.e.* they arise in conjunction with percipient events happening in all such organisms; in which case

vulgar speech refers to them as veridical percepts. Some of them arise only in connection with the percipient events of one organism, even when many other organisms are as closely related as it is to the given locus in space and time —that is, these qualities are observable only by one organism even when others are present and gazing in the same direction; in which case vulgar speech refers to the qualities as illusory. All are equally physical because all consist of physical qualities.

Now if this be the thesis of Objective Realism I say once more that I see in it nothing that differs in anything but words from the thesis of Dualistic Realism. The dualist not only admits but asserts that everything is related to everything else; that everything is in part characterized by its relations; and that, since physical objects are related to percipient events, the relations they bear to these events give the physical objects some of their qualities. Since when I look at white paper through blue glasses I see it blue, this character of appearing blue to me at that moment is one of the paper's qualities. It does indeed seem to me more in accordance with good usage to call blue in this case subjective; but I shall not quarrel over words; since the objective relativist likes the word *objective* and dislikes the word *subjective,* I do not object to his using it. And certainly it is true that the paper is "objectively blue" *in the sense* that it *will appear blue* to one looking at it through blue glasses. Or let us suppose that you are looking through blue glasses at a white flash of light so distant that when you see it the flash has gone out. It may be a bit awkward to say that the blue sensum belongs not to your mind but to the no longer existent white flash. But when it is explained that the meaning of the assertion, *The flash was blue,* is that some seconds after the white flash ceased to exist you experienced a blue sensum at a

certain spot in your visual field—we can all agree. Whatever we call this kind of quality, however, no one, I fancy, will deny that there is a pretty sharp line between those qualities of "a physical thing" which it owes to its relation to percipient events and those which it owes to its relations to non-percipient events. Common speech has always marked this undeniable difference by using the word *subjective* for the former and *objective* for the latter—but never mind. No philosophical or epistemological issue is here involved. For whatever words we use, the actual dualism remains. A "physical" object that has no locus exclusively its own in space-time, that has no part in the direct causal interplay of the world that physics studies, neither cause nor effect of any of the objects which are seen adjacent to it, often observable by only one percipient center (or psycho-physical organism), always dependent for its existence wholly upon percipient events, coming into being and vanishing with them, this sort of "physical object" is certainly as far removed from the type of physical object discussed in the recent chapters on Realism, as are "subjective images." And it is not a possible reply for any realist to deny the physical objects of the preceding chapters; for, as we have seen, if he does so, he writes himself down as a follower of *"der gute Berkeley."*

If my exposition of Objective Relativism be correct, it seems plain that this school of Realism has offered no way out of Dualism. But it may well be that my exposition has been faulty and that there is a real difference between its position and that of the dualist. Now if this be the case, if there be a real and not merely a verbal difference here, what is it? So far as I can see, only one answer is possible. The objective relativist can escape Dualism only if he asserts Pan-objectivism in the absolute fashion of the neo-realists, and means thereby actually to deny the exist-

ence of consciousness. There will indeed still be one apparent difference between the two schools. The various things that Common Sense and Dualistic Realism put into the mind—sensa, veridical and illusory perception, memory images, anticipations, pure imaginings, abstract "concepts," hallucinations, emotions, conative urges, purposes and resolutions—in short the totality of what is commonly called "psychical content," which Neo-Realism writes down as in large part pre-existing in the external world and selected by the organism, Objective Relativism will regard as non-existing in Nature until, somehow, induced to emerge when certain physical processes take place in the organism. This is perhaps a more plausible suggestion than that of Neo-Realism, although it is doubtful whether upon careful analysis any real difference between the two views would be found. However that may be, it seems plain that all of the difficulties which in an earlier part of this chapter were placed before the neo-realist, will have to be faced by the objective relativist.

And, more specifically, there is one question which I find peculiarly puzzling. I should like to know under exactly what circumstances these emergent qualities come into existence. If the reply be: "With the rise of percipient events," meaning, by these words, conscious perceptions and experiences in the ordinary sense of the terms, the theory, as we have seen will differ from Dualism only in words. If, on the other hand, one really denies consciousness, and if "percipient events" be taken to mean certain processes in the nervous system, the resulting position will come to this: Physical objects take on new physical qualities when they come into a certain relation (not fully specified) to the unconscious activity of the nervous system of organic bodies. Thus in the star Sirius a new quality emerges whenever a certain unconscious process occurs within the visual centers of

my brain, and it goes out of existence when that process ceases. The question will at once present itself to every curious mind: Why and how do the unconscious activities of the nervous systems of organic bodies have this unique power of causing new qualities to emerge in distant objects, and why do not other physical objects possess this power? Objective Relativism is plainly here suggesting a new type of causation, different in kind from any form of causation known to the physical sciences: so different, in fact, as to imply a New Dualism, quite as bold as the older dualistic hypothesis.

The assertion of this new type of physical causation is so startling that I cannot but ask myself the question what reason there is for believing it. What evidence is there to prove that the processes going on in the nervous systems of animals actually do possess this alleged extraordinary and unique power? How do my brain events cause physical happenings in Mars? I can imagine no answer to this serious question that is not eventually reducible to the assertion that *we find* something of the sort to be the case in our own experience. Whatever might be the value of such an attempt to prove the remarkable hypothesis proposed, I shall merely point out that the appeal to the kind of evidence suggested comes dangerously near to recognizing *consciousness* in the old and dualistic sense.

And I have one more question which I think the reader will allow to be relevant and fair—for the hypothesis of Objective Relativism in this extreme monistic form is so important and is becoming so popular that it deserves to be taken literally and considered seriously. It is only to living organisms that the new and extraordinary causal power under consideration is ascribed. Why to them and to no other physical objects? Of course everyone knows the answer. It is because (in company with pragmatists

and neo-realists) the objective relativists recognize, just as the rest of us do, that living organisms are unique in possessing consciousness. It is this alone that makes them unique and singles them out (as Objective Relativism properly singles them out) from all other physical objects.

The same unavoidable implication of consciousness or mind is involved in the attempt of both Objective Relativism and Instrumentalism to deal with the question of knowledge without reference to anything subjective or mental. For them as for Neo-realism, knowledge is a relation between objects and involves no subject. There are several formulae by which this "plan of action" is attempted. A good example of these is the substitution of the phrase "the given" for *mental content*. We are assured "that the given is composed of attributes of physical objects, that given events are not intrinsically mental or cognitional" etc.[8] The solution of many a riddle is found in the contrast of the given to the not-given. But the question at once arises what *"given"* means, and *to* what the given is given. This is the crucial question and should have an answer. Does it mean that something is given (or not given) to the organism or to the nervous system?—and if so, what does *that* mean? When I think of Julius Caesar and behave to the present given image of him as if it involved something not given (this, I believe, is the approved formula for the situation), what do the words *given* and *not given* actually mean? Neither of the words can mean that Julius Caesar is given to the senses. Is it, then, to my brain that the great Julius is given? And how is he given (or, for that matter, not given) to my brain? As a matter of fact, is this form of expression anything more than a disguised way of referring to a conscious mind or self? And if this reference to conscious mind be what is actually intended,

[8] *Cf.* Morris, *Six Theories of Mind*, p. 270.

I ask again, Has Objective Relativism done anything toward the avoidance of Dualism save to invent some rather bewildering ways of expressing the old view?

This implied reference to a mind or self which seems to be lurking in the very word *given,* brings up one last objection to both Objective Relativism and Neo-realism, in which, I fear, not all my dualistic colleagues would join me, but which from my own point of view seems quite as fatal as any of the difficulties discussed in this chapter. I shall not dwell upon it here, for the chapter is already too long, but merely suggest it to the reader and leave its further consideration to a later page. The objection is this. Both Neo-realism and Objective Relativism, as we have seen, make knowledge a relation between objects. Nothing subjective, in either content or activity, is recognized by them. Now the picture of knowledge thus resulting appears to me, personally, I confess, as unrecognizable as Hamlet without the Prince. In the mere relation of objects to each other, or to a nervous system, or to the action of a nervous system in the presence of "given" objects, I can find nothing even remotely resembling what I know and experience as the act of knowing. I can put no meaning into the assertion of knowledge when there is no subject to do the knowing.

For the reasons I have tried to make clear in this long chapter—a chapter with all its length too brief for the subject undertaken,—I can as yet see no promising way to a formulation of Realism that can dispense with Dualism. In the next chapter, therefore, we shall attempt to see whether we may not stick to a dualistic or representational form of Realism, and yet avoid John Locke's difficulties.

Chapter XIV

DUALISTIC REALISM

We have seen how Locke's early attempt to formulate a realistic epistemology led to a despair of knowledge through his sharp division between one's mental content and everything else, a division which, taken literally, made it in theory impossible for us to have any object save our own ideas. The skeptical outcome of this form of dualistic epistemology, as we have seen, prompted at least three considerable schools of realistic thought to seek to avoid Locke's difficulties by rejecting his fundamental dualism between mental content and external things. But each of these attempts to get on without dualism, I have tried to show, has got itself into difficulties quite as great as Locke's. The question, therefore, naturally presents itself, have we come to an *impasse?* Must we conclude that a realistic epistemology is unstatable? This is, of course, the conclusion which idealistic thinkers draw from the situation. And at first sight, I confess, it seems natural enough.

Such a conclusion, however, would be far too hasty. There is no good reason to suppose that Locke's formulation of a dualistic hypothesis, attempted at the very beginning of modern epistemological discussion in the Seventeenth Century, is the only way, or the best way, in which a Dualistic Realism can be presented. And, more specifically, it may be worth while to ask ourselves whether it be not possible to remove the objectionable aspects of both

Locke's Dualism and the New Realism, and, by preserving what was sound in both, come to a formulation of realistic epistemology which shall be thoroughly defensible.

The weakness of Locke's view was its refusal to allow us any object save our own mental content. The weakness of the New Realism was its claim that the mind can directly intuit physical things. Now the query I would raise is this: While it is true that we cannot directly intuit physical things and other existents outside our own mental content, can we not *refer to* them, or conceive them, thus making them our objects or referends; and can we not, at the same time, conceive particular combinations of qualities which have a logical rather than an existential status? If the mind can do these things (and it seems to me experience shows that it can), it plainly is able also to attribute to the conceived but not intuited existents the qualities thus directly intended. To put it in briefer and more technical terms, I can see no reason to doubt that the mind can have an epistemological object and conceive it as characterizing an existent or ontological object. Thus Locke's difficulty would be avoided—the mind would have other objects besides its subjective content; and at the same time the almost incredible part of the New Realism (the theory of direct apprehension of existents), and its inability to deal with error, would also be avoided—the mind would not be pictured as literally *including* existent things other than its subjective content. The mind could thus make judgments about existent things, some of these judgments might be true and some might be mistaken, and discussion about identical objects between two minds would be possible.

The point of view I have just indicated is, of course, that of "Critical Realism." [1] The name, Critical Realism,

[1] This name has been used for several different theories of epistemology. My friend Dr. E. H. Henderson informs me that as early as 1887 Alois Riehl

has never pleased me too well: Dualistic Realism seems to me to indicate more clearly the hypothesis intended. There is, of course, the danger that the adjective *dualistic* might be interpreted to refer to the mind-body problem, while, as a fact, the hypothesis presented is purely epistemological and would fit a Berkeleyan universe as well as a Cartesian. But the epistemology intended is emphatically dualistic. In fact the first thesis of "Critical Realism" is the insistence upon an existential difference between the content of the mind and its objects—be they physical things in the materialistic sense, physical things in the pan-psychic sense, other human centers of consciousness, their ideas and experiences, or logical entities, or essences. As Professor Sellars has expressed it, "knowledge of external things and of past events is an interpretation of these objects in terms of understood predicates, and does not involve the literal presence of these objects in the field of consciousness of the knower." [2] That is to say, knowledge (in the sense of scientific "knowledge about," not as "acquaintance with" or intuition) is always indirect and representative. It is a (mental) interpretation of something other than itself. Knowledge may be *about* one's own mental events, but if so

adopted it in his *Philosophische Kriticismus* (Vol. II). Andrew Seth did the same in 1891, in a course of lectures on Realism (not published till 1933). Sellars was probably the first American to use the term, which he did in 1908 in an article in the Journal of Philosophy, entitled *Critical Realism and the Time Problem.* The seven American realists, who collaborated on a book presenting the general point of view found in this chapter, adopted the name Critical Realism, and called their volume *Essays in Critical Realism.* It was published in 1920. Since then two Europeans have adopted the name—Baron von Hügel, and Prof. Aloys Wenzl; and Hartmann has been called the founder of Critical Realism. Neither Hartmann's nor von Hügel's doctrines resembles the American doctrine of the same name. Wenzl's *"Kritischer Realismus"*—expounded in his *Wissenschaft und Weltanschauung,* which was published in 1936—is very similar indeed to that presented sixteen years earlier by the American group of realists. In typically European fashion, both Wenzl and von Hügel fail to make any reference to the prior use in America of the term they adopt.

[2] *Journal of Philosophy* for April 28, 1927.

the events it is about are other than the act of knowing them. In most cases, knowledge is about objects which are not part of one's own mental processes, but about other people's experiences, or about physical existents or logical constructs. These objects are all external to the individual mind which has the knowledge. The mind refers to them without *being* they. It represents them symbolically, and by means of its symbols makes judgments about them. This does not mean the "copy theory of knowledge" in the often-ridiculed sense (a theory confined chiefly to the imaginations of the critics). The mind is not a mirror nor a picture gallery. Knowledge is, in a sense, the response of the mind to a stimulus. The content of the mind does not need to resemble the objects for which it stands: it suffices that there be a logical correspondence to them. Thus knowledge is an interpretation of, or a judgment about, its objects.

What might be called the second thesis of Critical or Dualistic Realism consists in the assertion that not two but at least three factors are involved in the knowledge situation: namely, the conscious subject, the mental content, and the object (whether epistemological or ontological). There is nothing new in this interpretation of knowing. It was presented persuasively and adequately by Aristotle. In his monograph *De Memoria et Reminiscentia* he raises the question: "When one remembers, is it the impressed affection [the memory image] that he remembers, or is it the objective thing from which the impression was derived? If the memory image, it would follow that we remember nothing which is absent; if the objective thing, how it is possible that, though perceiving directly only the impression, we remember that absent thing which we do not perceive? Granted that there is in us something like an impression or picture, why should the perception of the mere impression be memory of something else, instead of being

related to this impression alone? For when one actually remembers, this impression is what he perceives [by which Aristotle obviously means that this image is what one finds on introspecting his mental content]. How, then, does he remember what is not present? One might as well suppose it possible also to see or hear that which is not present. In reply we suggest that this very thing is quite conceivable, nay, actually occurs in experience. A picture painted on a panel is at once a picture and a likeness: that is, while one and the same, it is both of these, although the 'being' of both is not the same, and one may contemplate it either as a picture or as a likeness. Just in the same way we have to conceive that the mnemonic presentation within us is something which by itself is merely an object of contemplation, while in relation to something else it is also a presentation of that other thing. In so far as it is regarded in itself it is only an object of contemplation, or a presentation; but when considered as relative to something else, for example as its likeness, it is also a mnemonic token." [3]

This passage seems to me not only an anticipation of and a complete answer to Locke's difficulties, but an outline of a sound and defensable epistemology. The suggestion is that our mental images are not only psychical entities, but are also symbols to us as thinkers of something beside themselves. Unless we recognize with Aristotle that by means of them we can think of or intend objects which are not identical with them, we make it impossible to have common objects, and thus, with Locke, make communication and discussion, agreement and disagreement, unthinkable. And unless we admit their subjective or mental nature we make error and illusion equally unthinkable. We must, therefore, with Aristotle—and I might add with Plotinus,[4] with

[3] *Op. cit.* 450 *b*.

[4] *Cf.* Enneads VI, 5: "We think intelligible objects, and not merely their images or impressions."

Brentano, with Meinong—distinguish between the conscious subject, the mental content, and the intended object; and recognize that the mental content—the "ideas" of Locke—are not usually the objects of our thought but the symbols by means of which we think of our objects or referends.

The first of the three terms involved in the knowledge situation will demand an entire chapter to itself, and the detailed discussion of the subject must for the present be postponed. Let me here merely say that while some upholders of Critical Realism speak of the subject in knowledge as the organism, or (with perhaps intentional ambiguity) as the "psyche," for my part I cannot make sense out of knowledge without recognizing as the subject a thinking, feeling, willing, judging self.

The second factor in knowledge—the existent mental content—includes whatever one would find by introspection, so far as this has anything to do with knowledge. Sensa and images, the processes of perception and conception, effort and activity constitute at least the major portion of this content. The aspect of this factor in knowing most difficult to describe is probably the consciousness of meaning and the sense of outer or objective reference which goes with all knowledge of existent and external reality. The difference between a psuedo-hallucination and a genuine hallucination consists chiefly or wholly in the fact that the former lacks the sense of objective reference. The process of perception is only partially and incompletely described if one merely enumerates the sensa and the reproduced images which introspection may discover in the perceptual process; there is in addition the active attribution of the various characters experienced to an object which is *not* one's experience. "We may perceive sound or light," as James Ward pointed out in his justly famous article on Psychology in the Britannica, "without any presentation of

that which sounds or shines; but none the less we do not regard such sound or light as merely the object of our attention, as having only immanent existence, but as the quality or change or state of a thing, an object, distinct not only from the subject attending, but from all presentations whatever to which it attends." Professor Stout expresses the same thought in possibly extreme form when he says that external objects "are cognized as existing independently of us, just as we exist independently of them," [5] and that although the external physical object "is never actually experienced as sensations and feelings are," our knowledge of it "is immediate, not due to inference." [6]

This sense which we all have when perceiving physical objects, that our knowing somehow lights directly upon them, and which explains the natural tendency to Naive Realism, is by no means inconsistent with Dualistic Realism and is explicable by a number of considerations. We have, for one thing, an implicit sense of the incompleteness of our sensa and images if taken by themselves and cut off from all the rest of the real world. It is, in fact, only after considerable training in the technique of introspection that one can partially distinguish sensa and images from their meaning; it is doubtful whether we ever succeed completely. As John Laird has pointed out, our psychical facts, in adult life, are all "sign-facts." That our imaginal mental content should thus become drenched with meaning is the natural outcome both of the biological or pragmatic "purpose" for which "Nature" endowed us with sensations and images, and of the habitual ways of using them which we have practiced since infancy.

Our sense of immediately apprehending that which is, at the same time, recognized and felt as external, finds further

[5] *Groundwork of Psychology*, p. 90.
[6] *Mind and Matter*, p. 213.

explanation in our essentially active natures and in our motor and conative response to the stimuli of the physical environment. The human body is an active organism in the midst of a world of objects which affect it and to which it must react if it is to survive. The consciousness which goes with these activities *is* an implicit recognition of this environment and of the physical objects which constitute it. One of the chief parts of the mind's content, and the part that is regularly the most dominant over the attention, is awareness of one's own activity, of what one does and what one suffers. To be aware of struggling against a force not ourselves is to be aware of that force as well as of ourselves: although it remains true that the "force" is not an identical part of one's conscious content, and that the whole situation is describable not in terms of Naive but of Dualistic Realism. Consciousness of being acted upon and consciousness of the force that is acting upon us are not two experiences but one; yet the actual conscious content which is the bearer or vehicle of this meaning or realization consists of one's sensa, images, and conative and emotional experiences. These "ideas" (if we may use the term in its inclusive and Lockian sense) are not the objects of our perception and cognition but the means by which we perceive and know.

The third factor suggested above—the object of thought—has been already discussed in several of the preceding chapters. Speaking very generally one may say that the object of thought may be physical things (intended but not intuited) of the sort discussed in the chapters that dealt with Realism in general; or logical entities, definable natures, universals, essences. The positions adopted in this volume upon transcendence and upon universals, especially as found in Chapters II and IV, are here in point. In fact the germ and kernel of the epistemological doctrine I am trying to present is involved in and deducible from the admission of

transcendance. If the mind can think of, and intend, other things beside its subjective content, it can think of and intend existent referends and logical referends—there is nothing else for it to think of. And if it cannot think of these, the game is up, and both philosophy and science and ordinary practical communication are inconceivable.

What I have called the logical referends of thought are sometimes (rather helpfully) designated epistemological objects. An epistemological object, at least as I shall use the term, is a character complex or definable nature or group of definable natures, which one is thinking about. As *definable nature,* it is logical rather than either psychological or physical. The pink rats which the sufferer from delerium tremens sees and means are not physical (in the sense in which *physical* is used in this volume); nor are they psychical. It doubtless is true that the sufferer has visual images which are pink; but the objects which he invites you to look at, the objects he means, are not his images. The rats which he means and perceives, his objects, are rats, with insides as well as outsides, with farther and hidden sides as well as hither and visible sides, and with lives and frightful intentions of their own. Doubtless he also believes they are physical in the full sense and would define them as such: although by hypothesis they really are not. They are definable collections of definable qualities. Similarly in every case of perception, whether illusory or veridical, there is a logical as well as a sensational element—by which I mean a character complex or definable nature, which is imagined or intended, as well as a directly experienced sensum. The sensational part of my percept of a house is but a small part of what I "perceive"; the rest of it is made up of what I imagine and conceive. The house that I mean is not my mental content. It is a character complex that I

am thinking about and to which, in addition, I attribute a locus in the real space-time.

In dealing with this question I am, of course, on dangerous ground; for no part of the theory of Critical Realism has been more discussed or has led to greater uncertainty; and, as the reader doubtless knows, it is here that the members of the school have not been able fully to agree among themselves. This disagreement and the correlative difficulty in making the position of Critical Realism entirely clear to its critics, is, in my opinion, largely consequent upon the vagueness and ambiguity of the term *datum,* so commonly used in the discussions of realistic epistemology. It will, perhaps, have been noticed that I have not used the word; and my avoidance of it has been deliberate. I am not entirely clear as to just what some of the critical realists mean when they say an essence is "given," but I suppose the reference is to an immediately intended quality complex which is yet not to be identified with the subjective, psychical content which analytic introspection would discover. If this is an adequate statement of the meaning of *datum,* it seems to be equivalent to what I have called the epistemological object. It is, in short, a definable nature which one refers to, conceives, thinks about. To say, however, that it is *given,* that it is a *datum,* is in danger of leading one to believe that it is an intimate part of the furniture of one's mind, in the way that images and feelings and sensa are. Yet it is explicitly *not* a part of the mental content. Hence the resultant ambiguity and confusion. This ambiguity can be avoided, and at the same time all that was truly of value in the concept of the datum can be retained, by simply recognizing that the thinking subject can, in its thought and meaning, transcend its mental content (its images and the other mental furniture discoverable by introspection), and can refer to objects,

quality complexes, or definable natures not a part of its present (psychical) experience.

This explanation will, perhaps, clear up some of the uncertainties about the oft-quoted and much discussed assertion of Santayana's: "Nothing given exists." Since the thing "given," the datum, is (as we have just seen) a definable nature, the assertion is obviously true. A definable nature as such is an essence, not an existent. The truth of the proposition when converted is equally obvious. Nothing that exists is "given," or is a datum or epistemological object: for no existent is, as such, a definable nature or essence. From this it does not follow, however (as is sometimes implied), that an existent such as a feeling or sensum cannot be immediately experienced, or known in the sense of acquaintance with. Our mental content we immediately apprehend: but when we begin making statements about it, we begin separating the *what* from the *that,* and find ourselves thinking about the *definable nature* of the existent psychic content. And the definable nature of an existent is an essence and does not, as such, exist.

If some repetition be pardoned we may, perhaps, make clearer the nature of knowing, here defended, by a genetic approach. The lowest forms of conscious life, let us suppose, possess only unsymbolic sensa, with correlated affective motor fringes. These fringes, or vague tendencies to response, impel or direct useful reactions—hence the biological explanation of the development of the psychic. There comes a point in Nature's constant experimenting when a creature is produced whose sensa bear with them conscious implication of more than themselves,—they have for it the kind of outer or objective reference already discussed, they are for it cues of experiences to be expected, and signs of the presence of things that are not experiences at all. By means of this new type of mental power a biologically valuable re-

sponse to distant objects and a wider environment is made possible. It is at this point that the consciousness of meaning and the power of transcending the psychic state as such comes into being, and it is preserved and developed—as are all other characters of living beings—because of its survival value. Perception is thus developed out of sensation, and ultimately imagination and conception are added, not for their own sakes, not for the purpose of contemplation, but because of their symbolic value—because they *stand for* something not themselves. We all recognize the difference between having images and using them as representatives of realities outside of our experience. This symbolic form of consciousness, this consciousness of meaning, does not consist of further images. It is a form of mental *activity* rather than a "flat piece of psychological surface." We have images but we mean by them something quite other than themselves. In fact the nature of the image does not greatly matter. Ask a dozen historians to think of the Roman Republic, or of the characteristics of Roman Law, and then to analyse introspectively the images in their minds at the time, and almost certainly you will have a dozen different introspective descriptions. Yet the historians were all thinking of the same epistemological object. (If you deny the possibility of this you do not deny the possibility of this, for my "this" cannot be yours unless we can mean the same.) Conversely, identical, or nearly identical, images may be used to symbolize quite different referends. We consciously transcend our symbols, and use them as tools by means of which we mean much more than them.

Living and conscious beings have thus passed through two stages of mental development. In the first stage (on the genetic hypothesis suggested above) meaningless and unsymbolic sensa and affections constituted the totality of the mental content. Something like this is, presumably, the case with

the human infant during the first few hours after birth: its sensations, which are "the first things in the way of knowledge," have not as yet acquired meaning or symbolic significance. The second stage is reached, both in the story of the race and in the story of the individual, when the sensa and images begin to be representative of something more. This is the stage which we grownup humans find ourselves in most of the time. By means of our images we think of character complexes or definable natures which are not our images, and we often take them to be the characters of existent objects in definite spatio-temporal loci. They are tools used in the process of outer reference. A third stage of development is conceivable: one, namely, in which the mind (or, as I should prefer to say, the self) is able to perform this act of outer reference without the mediation of images. If we are to trust Professor Woodworth and several other contemporary psychologists, we are already beginning to enter upon this third stage, the stage of "imageless thought."

If, now, we are asked to describe more exactly the consciousness of meaning, whether through the use of images or without them, I confess there is little to be added. One can put the suggestions already made in other terms. One can say this sense of reference to that which is not present psychic content is in part an incipient awareness, or recognition, that we could, in imagination or sense perception, evoke an immediate presentation of the qualities intended; or that by acting in a certain way we could have certain experiences. But we also are aware that even the most vivid images would not *be* the object we conceive and mean. Somewhere we must make the leap from symbol to thing symbolized, from act of reference to referend. And this leap is hardly to be explained or described further.

But I cannot see that the impossibility of putting the act of transcendence in terms other than its own is in any

way an objection to its reality. Let one try to describe yellow, or any other unanalysable quality or unanalysable act, in terms drawn from other things and other acts, and one will encounter the same difficulty. The fact that yellow can be described only as yellow is no argument, to anyone with normal eyes, against the possibility or the actuality of yellow. The only question is, Have we seen, and do we see, yellow? In some such way the facts of experience show us the power of transcendence. Not in exactly the same way, to be sure. But we have a native and immediate conviction that we do refer to things other than our own psychical content, and we see, moreover (as I have so often contended) that if this power of the thinking subject be not granted, the possibility of this very discussion, or of the denial of transcendence, is ruled out. Transcendence is presupposed in the very attempt to deny it. No further explanation, therefore, of the meaning and nature of transcendence, of outer reference and meaning, can properly be asked. For awareness of this sort is of the very essence of thought, and to demand that it be analysed into something else is to overlook the fact of its essentially unique nature.

To admit what I have asserted is, indeed, to admit the unique nature of the thinking subject. The activities involved in knowing as depicted in the account I have suggested are, frankly, incompatible with a view of the mind which would make it either a physiological process of the organism, or a passive succession of psychoses—just so much passing content. The activities of thought, of meaning, of transcendence which are involved in anything that I can regard as an adequate account of the knowing process presupposes the reality of an active self. In spite of what seems to me its manifest superiority to the other forms of realistic epistemology, I do not see how Critical Realism can really

be "worked" without the recognition of mental activity and a subject which acts.

Whether or not the reader agrees with me in retaining the belief in a subject of knowledge, and in the further beliefs that this subject directly experiences its "mental content" and also thinks of various definable natures (its epistemological objects), I trust he at least understands what I mean by these propositions. He may, however, naturally ask for further light on the relation between the epistemological and the ontological objects. In sense perception we naively and instinctively believe—and in our theoretical moments we make the hypothesis—that the quality group which we are thinking of (our epistemological object) characterizes the ontological object. This ontological object may be another's mind, or it may be a physical object (as defined toward the close of Chapter XII). The question arises how the epistemological object is to be distinguished from the ontological, *i.e.*, what we mean by one which we do not mean by the other. This question was in principle answered in anticipation in the chapter on essence and existence. For by the epistemological object we mean a logical nature, by the ontological we mean some kind of *existent* being. The epistemological object has no locus in the real space-time, and in the executive order of Nature: the physical or psychical object has. To put it in other words, we naively take it for granted, or, in full sophistication, we make the hypothesis, that there is a physical object in a definable locus in the real space-time, and in the existent causal chain, which is in part characterized by the character complex (or part of the character complex) which is our epistemological object. The difference between the two is the difference between existence and essence, or mere logical status. Personally I do not see how anyone can seriously deny the distinction involved; and I am inclined to think that those

who find it difficult to accept existence are really trying to interpret it as a special kind of essence, or have conscientious feelings, because of their rationalistic upbringing, against admitting into their reality anything but the thoroughly rational. On the other hand, once accept the position proposed in the early part of this volume concerning existence, and there will be no difficulty in distinguishing what is meant by the epistemological and the ontological objects.

I realize, of course, that the analysis of experience in the preceding paragraph, into images, consciousness of epistemological objects, conscious reference to ontological objects, and belief that the epistemological objects characterize the ontological objects, is far too elaborate and sophisticated to be a true description of what we commonly live through. It is intended not as a psychological description of everyday experience, but as an account of what an analytic introspectionist could find on reflection. As I said, we naively take it for granted that there is a physical object in a certain place and that it has certain qualities or characters.

But since the ontological object (psychical or physical) is not to be identified with the epistemological object, and is not a part of the subject's conscious content, the question, of course, arises (and it is this question that has most generally been raised by the critics of Critical Realism), How is knowledge of existential objects possible? In attempting to answer this question, it is important first of all to remind the reader of the two senses in which the word knowledge is used, and of the kind of knowledge of the physical world which Critical Realism believes to be possible. Very frankly, immediate experience of, "acquaintance with," one's ontological or existent object (except perhaps in the case of introspection) is not possible. Only *"knowledge about"* can

be had concerning any existent outside one's own immediate mental concept. It is not possible for any of us to know physical objects or other people's minds from the inside. In the case of other minds, we can imagine what they may be like, and we may have excellent evidence that our opinions are true; but this is not *"acquaintance with."* As to the inner nature of physical objects we cannot do so much as this. Our best knowledge about them consists of highly probable opinions concerning their texture and the sequence of events within or among them. This does not mean that physical objects have no intrinsic or inner characters, nor that the view I am supporting would depict physical objects as quality-less *Dinge-an-sich.* They have their own intrinsic qualities as well as their relational characters, but we have no way of finding out what they are.[7] But about some of their relational qualities—order, texture, arrangement, sequence,—we can and do have probable knowledge. When our claim to knowledge is reduced to these modest dimensions, I see no reason why it should not be accepted.

The contention that Dualistic Realism fails to make knowledge possible is sometimes put in this form: Since the ontological object is said to be different from both the epistemological object and the mental state, there can never be direct perception; the existent object can never be given directly, and so must remain always hypothetical and unknown. This very natural criticism should be welcomed by the serious student of realistic epistemology, for it contains a mixture of truth and misunderstanding that is quite com-

[7] The question may be raised: If you have no way of finding out what their intrinsic qualities are, how can you have even *probable* knowledge concerning these qualities? The answer is, *We cannot.* Dualistic Realism makes no claim to probable knowledge concerning their intrinsic qualities. It claims probable knowledge concerning two things: (1) the existence of physical things, and (2) some of their *relational* qualities. The reasons for the realistic hypotheses concerning both of these things have been given at length in the preceding chapters.

mon, and challenges the realist to make his position more sharply definite. The process of perceiving, as we have seen, in both the race and the individual, grows out of the process of sensing. The child's body (or the animal's) is an active organism in the midst of a world of active objects which affect it in various ways and to which it responds. The consciousness which goes with these reactions may be at first purely sensational, but at a very early point becomes also representational. Memory, imagination, conception, and the inborn tendency to outer reference build up the process of perceiving; and the quality group thus perceived and constituted in part of sensed qualities, in part of only conceived qualities, is referred to, and taken to be, an external, physical object. It is, I think, a rather misleading expression to refer to the process just described as "a percept." I greatly doubt whether there is any such psychical existent as "a percept." Introspection reveals the detail of various types of sensa, and also a (conscious) activity or process; but it does not discover percepts in the same sense. The use of the word *percepts* often seems to imply that percepts are on all fours with sensa, and this seems to me a palpably mistaken notion. Perception is an active process, not a passive image.

With this understood, we can consider more intelligently the accusation that Dualistic Realism makes knowledge impossible because it denies direct perception. The question arises, What part of the description of perception outlined above would the critic challenge? It is certainly quite in harmony with the general doctrine given by most psychologists. If the activity of perceiving as here presented be not direct, what would a direct perceiving be? You may, to be sure, call it "indirect" as compared with the immediate experience of having sensa. But no activity or process involving meaning can ever, in the nature of things, be "di-

rect" in that simple sense. No psychologist would deny that in perception as distinct from mere sensation a conceptual or thought element is involved; and the question of the directness or indirectness of perceiving, therefore, raises the question of the directness of thinking. Think of your absent friend directly: what is the process? Roughly speaking, it is this: You find in your mental content an image of your friend (presumably visual or verbal); and by means of this image you conceive your friend. Aristotle's illustration of the painting which is both a decorated panel and a representation is here in point. As Professor Strong has so well put it: when you look at a photograph of your absent friend, you do not look *at* the photograph: you look *through* it. You look through it and by means of it you think of your friend. When you conceive of Niagara Falls you think of it directly: that is, your thinking is as direct as *thought of* anything can conceivably be. The question whether the thought is direct or is indirect is really a rather meaningless and inappropriate question. And the same thing is true of perception. When I am actively aware of an object, through the use of that combination of sensa, outer reference, and meaning-process which psychology describes as perceiving, I perceive the object; and to ask whether this process is direct or is indirect is not to ask a very significant question. To have "a percept" of a chair *is* to perceive the chair.

Of course the critic may go on and ask how we dualists know that our "percepts" are veridical. To which question I think the *tu quoque* would be an entirely appropriate response. How does the critic know that *his* "percepts" are "true?" How does any one distinguish the veridical from the illusory? The dualist, I suppose, does it in the same way as other people. On the other hand, one must admit that there is a real difference here between Dualistic Realism and

the various non-dualistic realisms which we have studied—namely this: that Dualistic Realism plainly recognizes the possibility of the illusory; and it is very difficult to see how its rivals can do so.

The question how we can know the physical object is a double one, and resolves itself into two questions: (1) How can we know that there is a physical object: and (2) How can we know its nature? The first of these questions was discussed at length in Chapters IX, XI, and XII, and no amplification of the realistic position is here needed. The second question has, in large part, been the theme of the preceding paragraphs. We do not know the inner nature of the physical object, but we usually can and do know so much of the relational nature of the object—namely structure, behavior, etc.—as is useful for the practical and "biological" purposes which (to use the familiar mythical symbolism) "Nature" had in mind when she developed our knowledge processes and powers. The hypothesis that a physical object of a certain definable nature occupies a certain time-space locus and a certain causal locus, tallies exactly with my inborn tendency to "believe my senses," and is entirely coherent with my total experience and with the realistic conception of Nature as a whole which, for the reasons stated in previous chapters, seems to me more probable than any other. This hypothesis also "works" in the pragmatic sense: by trusting it I get successful guidance, and by using it science is able to predict future experiences. The experiences of other people point in the same direction as my own, and without the hypothesis in question it would be difficult to understand the endless coincidences between their experiences and mine. In short, the hypothesis of Dualistic Realism is clearly statable, meaningful, self-consistent, and harmonizes perfectly with the sum total of human experience. It shows how knowledge in the sense

of probable opinion is possible, and how mistake and illusion are also possible. It does not, indeed, assure us that we can without fail "know that we know what we know." But, as a matter of fact, can we? Our theory has the great disadvantage, if such one wish to call it, of picturing our human knowledge of existence as always fallible. But if we are honest with ourselves, must we not admit that this is the actual situation? The task of epistemology, as I view it, is not to build up a theory of knowledge for infallible knowers —to lay down the constitution for an epistemological Utopia: but rather to work out the probable principles of the merely probable knowledge which we human beings actually possess. And, as it seems to me, Dualistic Realism has done just this.

Chapter XV

THE ALTERNATIVES TO REALISM

It would hardly be compatible with the empirical point of view adopted throughout this book should I now claim that the realistic thesis had been definitely established and Dualistic Realism proved true beyond the shadow of a reasonable doubt. The preceding chapters have, I believe, shown that Dualistic Realism is a meaningful and self-consistent doctrine, that it is perfectly compatible with all actual and relevant facts, and that it has a large measure of probability. I do not claim that it is the only conceivable or the only possible hypothesis concerning the ultimate nature of the world. In the course of the discussion that led up to my exposition and defense of Realism, some propositions do seem to me to have been pretty well demonstrated; the most important of which, perhaps, is the following: If we reject Solipsism (as, I take it, nearly all of us do) the logic of our rejection, and the logic of our attempts at the explanation of our human experience, drives us on to admit, or to postulate, an existent being, or group or collection of existent beings, in addition to human (and animal) minds, capable of affecting those minds, and therefore capable of contributing to the explanation of those experiences which we cannot trace to human (or animal) sources. The fact that unwilled and unforeseen and surprising experiences are forced upon us, the regularity discoverable within these experiences, the coincidences between the experiences of

different minds, and the hardly deniable facts of intercommunication, make the conclusion irresistible, to the non-solipsist, that some existent other than human minds must here be involved. It was but one step—and a very obvious one—from this conclusion to the realistic hypothesis. But the realistic hypothesis is not the only one that can offer an explanation of the facts and situations which demand clarification. And it is to a brief consideration of these other possible hypotheses that the present chapter is to be devoted.

An interpretation of non-human reality closely related to the thesis of Physical Realism is to be found in Panpsychism. The two schools may, and often do, unite on epistemological questions, and on the surface there is little difference between the explanations they give of the facts and situations that lead both schools away from Solipsism and from Subjective Idealism. Below the surface, differences begin to appear; Panpsychism accepts the physical world as real, in a sense, but insists that its inner nature must be interpreted as consisting of experience. Matter as it appears to our sense-perception is the effect upon us of psychic centers of a very low grade of mentality, such as the weakest conceivable sensitivity or the faintest conation or motor urge. This interpretation, it is felt, meets all the demands, and includes all the real advantages of both Realism and Idealism. It makes physical reality independent of our perceptions: it explains the regularity of physical law, the origin of our unexpected and unintended sensations, the coincidences between our experiences, and the facts of communication. Not that the explanation is always clear. Particularly would further light be appreciated on the method of communication. The first great proponent of Panpsychism insisted that his psychic centers or monads had no windows, and hence did not and could not communicate with or influence

each other at all. The illusion of influence and communication he accounted for by a divinely pre-established harmony. Few panpsychists of our day care to follow Leibniz into this rather fantastic conception; but it is not at all clear what they would substitute for it. It would seem, however, that, since there is no genuinely material reality between psychic centers to act as a means or substratum for communication and influence, Panpsychism must interpret causal action and communication as telepathy. What shall be done with space and spatial positions and relations on such a world view presents a pretty problem. But the logic of the situation points to the conclusion that space ought to be interpreted in the same way as physical reality, that is, as mere appearance—as indeed Leibniz taught. The more one thinks about it, the more perplexing does the situation become.

Increasing uncertainty results from the attempt to identify or point out the monads or psychic centers of whose appearances the physical world is composed. Is the mountain a psychic center, and the stone another; and what shall we say of the stone *in* the mountain? Are artificial objects monads? Is the book a psychic center? And the page in the book? And the ink in one of the letters on the page? Panpsychists usually discourage such questions—not unnaturally. But it would seem that if we are to take the conception seriously, and are to consider the physical world a collection of monads, we ought to know where to find some of them. Moreover, once we start trying to delimit the monads and define the members of a group over against each other, our bewilderment and uncertainty may well increase. The only solution of the problem which promises to be both definite and defensible would apparently be found in the hypothesis that the monads are to be identified with, and only with, the ultimate atoms or electrons or whatever be the final and indivisible appearances discoverable in

the material world. Such a view as this would be an atomism of a form much more extreme than any that could be attributed to Physical Realism. There is no good reason why Physical Realism cannot consider wholes prior to parts. It may perfectly well start with any given whole, or, if you like, with the Universe entire, consider this the genuine reality, and regard its parts as merely the conceptually possible products of analysis. But Panpsychism can hardly do this, for minds or psychic centers are not susceptible of analysis and synthesis as physical objects are. Any ordinary physical object can be divided into a thousand parts, and each of these parts is itself a physical object. Since each physical object is, according to Panpsychism, the mere appearance of an inner psychic center, each of these thousand objects is a psychic center, and presumably was a psychical center before it was separated from its neighbors in the original object. (You cannot cut a mind into a thousand slices, each of which is a mind.) Thus the original object *was* a collection of parts, and our world is shown to be atomic to a degree not at all necessary for the world of Realism. A Panpsychism such as that of Josiah Royce is, of course, not open to this charge of atomism. But in Royce's philosophy, Panpsychism plays a subordinate role: and I do not include it in my criticisms.

Most of the difficulties that I find in Panpsychism are met with over again in that variant of Panpsychism which goes by the name "the Mind Dust Theory." Some of the difficulties are here a little less marked for the reason that the Mind Dust Theory lacks the definiteness of Panpsychism: it is less sure of its disagreements with ordinary Realism. But it is plain that so far as it differs from Realism it is essentially at one with Panpsychism, and has, in principle, to face the same difficulties as the older formulation. I will not say that Panpsychism and the Mind Dust Theory have

been shown to be altogether inconceivable. But I have yet to learn any good reason for thinking them true. It is conceivable they may be true: but they impress me as being exceedingly improbable.

Panpsychism is not the only alternative to Realism. There are two forms of Idealism which give perfectly definite and, as it seems to me, tenable explanations for our human experience. As has been already indicated, I cannot see that mere Subjective Idealism (such, for example, as that of Gentile) has any explanation to offer. There must be other reality in addition to human minds and their experiences if the experiences and the minds are to be at all comprehensible. No one ever recognized the truth of this proposition more fully and keenly than Bishop Berkeley. And the God whom he proposed to do the work which Realism assigns to matter is quite adequate to His task. The Berkeleyan position seems to me entirely meaningful, self-consistent, and compatible with all the established and relevant facts. I greatly doubt whether anyone today believes it (in its literal and extreme form), or whether in the future more than a very few will ever find it persuasive. The reason for this is that in its literal form it presents a picture of God which a modern man can only with great difficulty take seriously. By the "literal form" of the doctrine I mean the conception presented in the earlier part of the *Principles of Human Knowledge,* in which the Author of Nature is referred to as imprinting on our senses those impressions which we call "real things," these "real things" being, apparently, not parts of His experience, but merely sensations which He puts into *our* minds—and always at the proper time. Such a picture of the Supreme Intelligence, busily presenting me with auditory sensations that shall tally exactly with your motor sensations when you speak and I listen, is no more persuasive and infinitely less digni-

fied than Leibniz's proposal of a pre-established harmony. Logically the proposition is conceivable: God being defined as omnipotent could doubtless do all the agile things which the hypothesis suggests. But nobody believes that He does. I do not think Berkeley believed it. His real opinion is probably to be found in his less anthropomorphic references to the Author of Nature which suggest not a limited personal Being whispering personal messages into personal ears, but something very much more like what we know today as Absolute Idealism.

The Absolute Idealism of thinkers like Lotze, Green, the Cairds, Royce, Hocking, and the Personalism of Ward, Bowne, Brightman, are in part descended from Berkeley, in part from the Neo-Kantians. As it is no part of my aim to give a detailed exposition of contemporary schools of thought, but rather, taking a knowledge of them for granted, to seek a just evaluation of their contributions, I shall not go into the distinctions that differentiate Personalism from Absolute Idealism, and the differences discoverable between sub-divisions within each of the schools themselves, but shall merely express in this place my conviction that the general point of view which is common to all these philosophies is not only meaningful, self-consistent, and compatible with the established facts, but also that it is free from the somewhat fantastic characters which make Berkeley's earlier doctrine increasingly incredible. Idealism of this larger form recognizes the need of explaining the rise of our human experiences, the coincidences between them, and the other facts which played so large a part in our argument in favor of Realism; and the explanation which it offers—the concept of a World Mind, whose experience Nature is—presents us with a picture of Reality that answers all our questions and is not susceptible of ultimate refutation. Of course the irrefutable is not necessarily true; and there are

difficulties in Aboslute Idealism—some of them centering around the conception of the World Mind and its relations to finite minds, some of them expressible in the query why we should construct so elaborate an hypothesis when the simpler realistic view is ample for our theoretical needs—which make the idealistic conception seem to me, on the whole, less probable than Realism. Yet I must admit—in fact I gladly assert—that in my opinion Absolute Idealism, in either its less personal or its more personal form, is one of the lasting, one of the eternal possibilities. In fact I go further. Inasmuch as we are forced, by the facts of experience and the demands for explanation, to go beyond Solipsism and Subjective Idealism, and inasmuch as both Panpsychism and the more limited and anthropomorphic form of Berkeleyanism, though conceivable, appear to me hardly credible, my mature opinion is that the solution of the world riddle narrows down to a choice between Realism and Absolute or Personal Idealism, and that neither of them will ever be proved false and, therefore, neither of them will ever be proved unquestionably true. The question between them is one of relative probability; and so many factors are involved in the judgment of probability that I doubt whether this question can ever be settled with objective certainty.

To some this may be a very unsatisfactory conclusion. Whether it is satisfactory is not nearly so important a question as the question, Is it true? The reader may well disagree with me, and be much more hopeful of definite and demonstrable certainties in philosophy than I am. But even if he accepts my less sanguine opinion, he should not feel that nothing has been accomplished by all our labors thus far. It is something to have come to a conclusion concerning the nature of one of the ultimate problems of the existential world, something to have seen what solutions to it have been

and can be suggested, something to have narrowed down these possible solutions to two or three.

At this point the reader may naturally raise the query whether, in my discussion of the possible alternatives to Realism, I have not been guilty of two notable omissions; for I have said nothing of Pragmatism, and nothing of that impressive form of philosophy known as Objective or Speculative Idealism. In answer to this very natural question I can only reply that I do not think I have been guilty of an omission, for I am not aware that either Pragmatism or Objective Idealism is an alternative to the philosophies thus far in this chapter discussed. Neither of them is an alternative to these because neither of them has, so far as I am aware, any solution to propose for the problem we have been discussing. This is patent in the case of Pragmatism, and I think all pragmatists would agree that this is so. As to Speculative or Objective Idealism, there can hardly be the same unanimity, for the reason that there is no unanimity as to what Speculative or Objective (as distinct from Absolute) Idealism is. By some the name is used to refer to the investigation of the categories or ultimate laws and forms of thought, and the interrelation of concepts and essences. This form of Idealism (if it be called by that name) has much of value to contribute; but since the field of its investigation is not the existent but the subsistent, it is not necessarily incompatible with Realism, and it certainly has no solution for, since it is not interested in, the problem how the rise of particular experiences, and the coincidences between them, are to be explained.

As to the other forms of Objective or Speculative Idealism, one cannot speak with the same definiteness. Those who call themselves members of this school inform us, with no uncertain voice, that their form of Idealism is not to be identified with any kind of Mentalism, whether Subjective,

Berkeleyan, or Absolute. The central thesis for which they stand seems to be that Reality is a systematic or organic Whole. The exact interpretation of this assertion is difficult. If it intends to deal with the existent world at all, and hence to be relevant to the problem of this chapter, two possibilities at once present themselves. It might mean that all things are parts or content of an all-inclusive Mind. But if this is its meaning, Objective Idealism is another name for Absolute Idealism:—a conclusion which the objective idealists rule out in their decided rejection of a World Mind or of any form of Mentalism. There would seem to be left only some form of realistic hypothesis—either old-fashioned realistic Theism, or new-fashioned realistic Naturalism. Whichever of these views it accepts, Objective Idealism presents us with no new explanation of the problems for which we have been seeking a solution; and we must conclude that Objective or Speculative Idealism is in no sense an alternative to Realism, Absolute or Personal Idealism, and possibly Panpsychism. I am, therefore, convinced that in our attempt to explain the facts of human experience we must choose between these three philosophies.

Chapter XVI

THE UNAVOIDABILITY OF THE MIND–BODY PROBLEM

At the close of the preceding chapter I pointed out that if the argument of this book is sound, the explanation of our experience in this existential world must be sought in one of three philosophies. The choice one makes between these philosophies will, of course, determine one's answer to a number of questions. There are some questions, however, and some important ones, which cannot be so easily settled, and which still press for solution no matter what our theory of knowledge, and no matter which of the philosophies recently discussed we adopt. One of the most crucial of these is the problem of the relation of mind to body. It is important to be clear about this at the very outset. No philosophy which recognizes the existential world can fail to give some interpretation to what is commonly known as psychic experience (I feel forced to this outrageous pleonasm because of the ambiguity with which many idealists and pragmatists use the word *experience*),—no philosophy, I say, which deals with the existent can fail to give some interpretation to *experience* and some interpretation to *body*. No one of the three philosophies accepted in the preceding chapter as possible denies that the psychical and the physical are in some sense real, and that there is at least enough difference between them to make them distinguishable. And indeed a philosophy which should assert that it could find no difference or distinction between what is commonly

called body and what is commonly called mind would need no characterization from its opponents; no critic could say of it more damning things than just that. And, as a fact, both panpsychists and absolute idealists are, as a rule, quite as aware of the mind-body problem, and quite as interested in its solution, as are the realists. Nor does the choice of either of these philosophies determine the theory of the mind-body relation which shall be accepted. The absolute idealist can perfectly well be a parallelist or an interactionist; [1] an "objective idealist" can be (and sometimes is) a materialist; and the same thing could be said of the panpsychist.

There are, indeed, a number of objective idealists who believe that the problem (so far as there is one) can be settled by purely epistemological methods, and insist that the difficulties which Interaction, Parallelism, and Materialism quarrel over are entirely artificial. Such a position seems to me so astonishing that I must believe it to be based upon an entire misconception of what the mind-body problem is. First of all, therefore, let us see what the problem is *not*. It is not the purely epistemological problem of the relation of consciousness to matter, or of subject to object. It may be true, as some idealists insist, that there is no object without a subject, or it may not be true. But the question of its truth is not the mind-body problem. It may be that *esse est percipi* and it may not; but this is not the mind-body problem. The problem is this: What is the relation between stimulus and sensation; or between brain activity and consciousness? And also, What is the relation between my conscious will to act and the (physical) action of my body? It is probably the fault of Spinoza that so many of our idealists have failed to grasp the simple ques-

[1] The leading German proponent of Interaction, Dr. Busse, for example, is an absolute idealist. Professor Hocking also seems to be an interactionist.

tion here at issue: for he badly confused the external object of one's thought with the bodily concomitant of thinking, and his influence has been as wide-spread as it has been unfortunate. Once it is really brought home to idealists as well as realists that the mind-body problem is not concerned with cognition and its object, but with the non-cognitive relation between a psychical existent and a physical existent, it should at last be recognized even by them that, no matter how uninteresting the problem may be, it is at least real and natural. Under some interpretation or other, I suppose, even speculative idealists will admit that Shakespeare had, or may have had, a brain. Also that in some sense he had thoughts (or thought thoughts, or was thoughts). If so, it is difficult to see how anyone can seriously maintain that the question of the relation of his thoughts to his brain is purely arbitrary and artificial.

Of course it can be said that this question of the relation of a psychical and a physical existent is not a philosophical question. And certainly if philosophy be confined wholly to the realm of essence and is prohibited from having anything to do with existents, then the question of this relation is not a philosophical question. Of course such an assertion is largely a verbal one and therefore not very important. But quite aside from that, let me point out that if the mind-body relation is not a philosophical question, neither is it a psychological question. Psychology cannot solve it, for it has to do with many things quite outside the realm of psychology. Neither is it a question of pure epistemology: nor of pure physics, or physiology. It involves data from many of the sciences, and also philosophical considerations concerning knowledge, concerning the universal validity of the law of the conservation of energy, concerning the nature and meaning of causation. No science and no group of sciences can solve this problem.

Furthermore, whether or not it is interesting or uninteresting to certain philosophers, it is a tremendously important problem. A great deal of one's ultimate *Weltanschauung*, of one's estimate of man, his freedom and his destiny, will depend upon the conclusion one comes to concerning the relation of body and mind. And so far from being artificial, the problem is inevitable: as the history of human thought quite adequately shows. The problem presses for a solution, it asks itself; and if the philosopher does not deal with it, it will be left to untrained guess-work, prejudice, or, at best, to one-sided treatment.

The problem cannot be really shelved by a refusal to do any hard thinking about it, nor by vague generalities concerning artificial categories. But I would not be taken to imply that all idealists treat the subject in this easy and careless fashion. A recent and able attempt to avoid the mind-body problem by means of an idealistic epistemology is that of Robert Blanché in his work *La Notion de Fait Psychique* (Paris 1935). In a large part of his argument he seems to make the same mistake concerning the nature of the psycho-physical problem that characterizes most of his school—namely the substitution of the relation between subject and object, or thought and the physical world in general, for the relation between particular experiences and particular activities of the body or of the cerebrum. He remedies this, however, before finishing his discussion, and tries seriously to face the problem, though his epistemology leads him to state it in a rather peculiar form. Dualism having been banned from the mind-body relation, breaks out again within the body itself. For, as Blanché recognizes, my body is, on the one hand, a physical object among other physical objects, and it is also a unique link between my thought and the physical world; it is peculiarly my own, in a sense it is even myself. It is absolutely determined by the

laws and events of the physical world; at the same time it "submits to the direct influence of the mental" (p. 53). The contrast between these two aspects is so great that it is almost as though I had two different bodies; and indeed it would seem that I must have, so mutually contradictory are the aspects. Here is a new and fundamental dualism, which Blanché recognizes as real and unavoidable. What then is the relation between these two aspects of my body—or between these two bodies of mine? Blanché has no suggestion to make. "We shall not hide the fact," he writes in conclusion, "that the conception of the individual body to which our analysis has led is purely negative, and that, far from solving for us the difficulty we face, it leads us into a fundamental obscurity" (p. 339). The outcome of the book is thus, in fact, a recognition of the reality of the mind-body problem, verbally restated, but accompanied by no suggestion for its solution. The author has merely put his question in such a way as to show that it is still a burning question, and at the same time to make all answering of it hopeless. A situation which surely will suggest to some of his readers that his difficulty is of his own making, and that there must be something questionable with an epistemology which necessarily issues in so utterly skeptical a conclusion.

The objective idealists are not alone in their attempt to avoid the psycho-physical problem by epistemological considerations. Realists of ability, like J. C. Smuts and Alexis Carrel—and sometimes even Lloyd Morgan—occasionally take the comforting attitude that the problem is artificial and we need not trouble our heads about it. But as to the first of the three authors named, a little careful thinking will show that so vague a concept as "Holism" will do nothing to explain, or explain away, the pressing problems of the relation of mind states to brain states. In fact, when Mr. Smuts (in a single paragraph) gives real attention to the problem,

his solution is essentially that of Interaction, as is also that of Dr. Carrel; [2] while Professor Morgan, who is much more serious in his treatment of the question than the two others, defends Parallelism.

A more careful and explicit attempt to show that the relation of mind and body may be shelved has been made by a few realistic thinkers of the monistic schools who believe that their epistemological hypotheses will prove adequate to the task of ridding us of the puzzles of the ancient problem without our directly attacking it. The positions of Professor Dewey and Professor Woodbridge should, perhaps, here be discussed, were space and the reader's patience considerations of no importance. But I shall merely say that Professor Woodbridge's view of mind does not, in my opinion, enable us to avoid, but only to evade, the mind-body problem; while Professor Dewey's position is a quite unstable mixture of Naturalism and Interaction. Of Neo-Realism I have said enough in Chapter XIII, and the reader can, with no help from me, apply the criticisms there suggested to the neo-realistic attempt to avoid our present problem.

One of the most recent schools of Realism possibly calls for less cursory treatment at this point. I refer to Objective Relativism. As we saw in a previous chapter, this school believes that the dualism between the bodily and the mental can be avoided by asserting that whatever has physical qualities is physical. Since it adds to this the further assertion that every content of consciousness has physical qualities, the conclusion is reached that everything is physical, and hence there can be no question of a relation between the physical and something else. Two observations upon this very easy method of solving an agelong problem by the mere use of an old word should be made. The first

[2] *Holism*, p. 167; *Man the Unknown*, pp. 118 and 141.

is this: that the renaming of percepts, judgments, emotions and the rest does not destroy nor change them nor do anything to throw light on the question as to how, under their new names, these "physical" objects are related to the physical objects known as conditions and events in the nervous system. The other needed observation is this: that the basal and decisive reason for rejecting Subjective Idealism (and I understand the objective relativists would reject it) is to be found in the fact that human perception and experience need to be explained; and that, if we cannot feel a lively faith in Berkeley's very busy God or Royce's Absolute, the hypothesis of existent physical objects which affect our sensibility is the simplest form of explanation. It must be noted, therefore, that (as we have seen in earlier chapters) the important thing about physical objects for the realist is, not that they possess "physical qualities," but that they stand in causal relations to our experience. Once this important point is understood, it becomes impossible to equate the illusory rats of the generous imbiber with the real rats that actually gnaw holes and that have a place in the common space-time, on the simple ground that both kinds of rats have physical qualities. Whether you *call* psychical states psychical or physical, they differ in certain very important respects from what are *commonly* known as physical objects, and the relation between these two kinds of "physical" objects remains a very real question.

Nor can I feel that Logical Positivism—whether in Austria or in America—has been any more successful in its attempt to avoid this ancient problem. As we saw in Chapter II, it starts with a pragmatic doctrine of meaning, and maintains that only those propositions are meaningful which conceivably might be verified. Now, since the subjective experiences of other minds, in the very nature of the case,

could under no conceivable conditions be experienced by me, the assertion of their existence must be for me essentially meaningless. Or to put it in another way, only that is meaningful which can be verified inter-subjectively. The minds of other people could never be my experience, nor could the purely subjective ever become a part of public or intrasubjective and scientific knowledge. Hence it means nothing to call them real. Human bodies, however, and their behavior can be observed and their existence verified by every human observer. It follows, therefore, that all we can ever mean by the mind of another is his body and its behavior. As Carnap has most succinctly worded it: "*Es gibt kein Fremdpsychisches ohne Leib.*" In this manner the dualism of mind and body is avoided, Behaviorism is justified, and the need of solving the mind-body problem evaded.

As I pointed out in an earlier chapter, the failure of Logical Positivism to distinguish meaning from knowledge is fundamentally misleading. It is certainly true that all scientific facts must be verifiable and that no assertion deserves the name knowledge unless it is in some sense demonstrable. But I can conceive of no reason for supposing that a belief or proposition must be capable of verification in order to have *meaning*. If all the terms of a proposition can find their cash value in my own experience, they still have meaning when I extend them by imagination to the experience of others; for *otherness* itself finds its cash value within my own experience. To assert that unverifiable propositions are meaningless, in fact, flies in the face of what we all know. As Professor Lewis has pointed out, "it is entirely meaningful to think of those inventions which no one has ever thought of or those numbers which no one will ever count; we can even frame the concept of those concepts which no one will ever frame." [3] Indeed, the very assertion

[3] *Experience and Meaning*, Phil. Rev. VII, p. 144.

of Logical Positivism we are discussing—namely that it is meaningless to assert the existence of other people's subjective experiences—refutes itself, because we know what it means and what its terms mean. Unless the term "other people's subjective experiences" meant something to us, the arguments of Logical Positivism concerning them would lose their point. Nobody really doubts that we know what we are talking about when we are discussing this question. To attempt to defend a behavioristic view of mind and thus to avoid the mind-body problem because of the alleged lack of meaning in the concept of other people's minds is therefore quite out of the question. We may be behaviorists, but we cannot be behaviorists on the grounds provided by Logical Positivism.

If, moreover, the idea of other people's qualia be meaningless, intrasubjective data become meaningless and for the same reason,—they cannot be verified by me nor by anyone. All thought about them becomes "a life-long soliloquy." With the disappearance of common data goes also all possibility of science. Nor will it help matters to distinguish between direct acquaintance with other men's subjective qualia and the relational knowledge of their form, structure, and sequence. For if the existence of these qualia be meaningless, there can be no talk of their form, structure, or sequence. The identity of physiological processes with subjective states, observed by introspection, is sometimes maintained by this school on the basis of their isomorphism; our observation of another's nervous system may some day, it is hoped, enable us to tell what his thoughts and dreams and images and emotions are. But the very hope thus expressed, the very isomorphism pointed out, is a recognition of the other man's subjective qualia and of the dualism in words denied. In brief, we are faced with the following dilemma: either the reality of subjective qualia within the

experience of other people is admitted or it is not. If it be admitted we have Dualism and must recognize the mind-body problem. If the subjective experience of others be denied on the basis of Logical Positivism, we have Solipsism.

Though Logical Positivism has certain behavioristic aspects, in fundamental theory it differs notably from what is commonly known as Behaviorism. For this latter school so far as it means to be purely methodological I have a certain sympathy—though it is hard for me to see how in the long last it can confine itself strictly to method. By its very nature it would seem bound to the assertion that consciousness is entirely and always inefficient. So far as this is the case, Behaviorism as a method is plainly committed to epiphenominalism. The more theoretical and more extreme branch of the school which explicitly identifies consciousness with the unconscious activities of muscles and glands is, with equal obviousness, a sub-case of that type of Materialism which asserts that mind *is* matter or matter in motion. As both of these forms of Materialism will be considered in the next chapter, I shall say nothing more of Behaviorism in this place. It is not really an attempt to show that the mind-body problem can be avoided, but a positive and very ancient proposal for its solution.

I am not certain whether the Gestalt psychologists should be classed among those who believe they have discovered a new way of avoiding, or evading, our problem; but at any rate they often speak as if they felt so. They reject Materialism because of its error in making matter more important than mind, and because meaning and significance, the spiritual and cultural values of mankind, are so real and fundamental that they cannot be explained by the merely physical.[4] But, in the opinion of the Gestalt school,

[4] Koffka, *Principles of Gestalt Psychology*, pp. 12, 19–21.

Vitalism and "Spiritualism" are equally to be rejected.[5] What we need, they tell us, is a way of envisaging the problem that shall retain all the scientific values of Materialism, yet find as firm a place as Vitalism and Spiritualism do for all the mental values, and at the same time avoid the difficulties of either a materialist, parallelist, or interactionist theory. This consummation, so devoutly to be wished, is promised us by Gestalt.

This desirable way out of the mind-body problem is difficult to state. As presented by Koffka, in the most elaborate attempt yet made to expound the Gestalt view, it is so involved in figurative speech that to see exactly what is intended is not easy. But after one has, with many rereadings, translated *"molar"* and *"molecular," "behavioral"* and *"geographical"* into what they appear to mean, the position of the school seems to be something of this sort. Consciousness is recognized as real and is distinguished from the physical things that make up the "geographical" environment, from the body as such, and from the unconscious activities of the body. The behaviorist psychologists are criticized for their denial of consciousness and their refusal to make use of introspection. Nor are the body and its activities to be interpreted in any panpsychic or idealistic sense. But physiological activity is found to be not "molecular" but "molar." The meaning of this expression is that we must regard physiology not analytically but synoptically: the whole determines the part rather than the reverse; the concept of the field must be substituted for that of separate pushes and pulls. Physiological processes "are not a sum or combination of independent local nerve processes, but nervous processes in extension, such that each local process depends on all the other local processes within the molar distribution."[6] In this, physiology is not peculiar: "physics

[5] *Ibid.*, p. 12.

[6] *Ibid.*, p. 59.

also is a molar science." [7] The concept of the field dominates all the physical as well as all the behavioral world.

Further than this, there is a close relation between psychical and physiological processes—a fact to which Köhler and Koffka refer as "the principle of congruence or isomorphism." [8] By this principle is intended the fact that many of the relations of space, time, intensity found in conscious processes may be paralleled by similar relations within the "underlying processes" or "physiological fundamentals." The general hypothesis of the Gestalt school is, in short, "that the concrete order of actual experience is a true representation of the dynamic order of corresponding physiological processes." [9]

From these considerations what follows? Let us admit with the Gestalt school that physiology and physics are both "molar" and that physiological and conscious processes are "isomorphic" in the sense explained. What light do these hypotheses throw upon the mind-body problem? I cannot see that they throw any. The old question as to the relation between the two processes still stares us in the face. Both Parallelism and Epiphenomenalism have always insisted upon isomorphism, and there is in the concept nothing incompatible with Interaction. To be sure, the "physiological fundamentals," the "underlying processes," or (as Koffka calls them) the physiological "correlates of consciousness" are not "*purely* physiological" because they "reveal themselves" in a "conscious aspect." But do not the epiphenomenalists say the same? Merely to assert that physiological processes are "molar" and that they express themselves in conscious aspects is to say nothing at all concerning the questions raised by the mind-body problem

[7] *Ibid.*, p. 57.
[8] Koffka, *ibid.*, p. 62; Köhler, *Gestalt Psy.*, p. 61.
[9] Köhler, p. 67.

and to do nothing to avoid that problem save by talking of something else.

As a fact, Koffka does incidentally and inadvertantly suggest a real solution to the problem. After having vehemently denied that his theory is purely physiological, he adds the significant sentence: "True enough, this conscious side of the process does not enter into our causal explanations." This tell-tale sentence was really inevitable: for, had it been left out, the writer would have been untrue to the entire aim and presupposition of the Gestalt School. This aim is to explain behavior, and the presupposition is that all behavior is ultimately explicable only in the physiological processes that underlie consciousness. "Direct experience," writes Köhler, "is not a 'force' interfering with the chain of physical causation." [10] "In our *ultimate* explanations," writes Koffka, "we can have but one universe of discourse, and it must be the one about which physics has taught us so much." [11] Quotations might be multiplied from various Gestalt writers, but this is needless. The patent fact is that this school has no way of avoiding the mind-body problem, and that its solution is be found in the regulation materialistic view, though *"mit ein bischen andern Worten."* What becomes of the promise to free the spiritual and cultural values from determination by the merely material, is too patent to need comment.

One of the most recent and elaborate attempts to avoid any of the dualistic solutions of the mind-body problem is to be found in Professor Stout's Gifford Lectures on "Mind and Matter." The attempt seems to me entirely unsuccessful. As I view it, Professor Stout's hypothesis draws what superficial persuasiveness it possesses from a confusion between the object, or referend, of a perceptive or ratiocinative process, and the cerebral correlate of that process—a con-

[10] *Op. cit.*, p. 59.

[11] *Op. cit.*, p. 48.

fusion which, as we have seen, both Spinoza and several of the objective idealists have shared. Professor Stout would avoid the dualistic problem by postulating that our sensa are parts of a world continuum, which is also inclusive of physical objects. Physical objects and our sensa are thus continuous with each other, "of a piece with each other." The distinction between them is based wholly upon the different ways in which they are known. Now it is plain, from a careful reading of the passage in which this argument appears, that the physical objects thus known by us and thus continuous with and "of a piece with" our sensa, are the physical objects of our perception, not the sections or activities of the brain and nervous system which are correlates of the sensa. The problem of the relation of these two, that is, the real mind-body problem, has thus been simply omitted in the proposed solution. And although, doubtless, brains and their activities would, on Professor Stout's hypothesis, also be parts of the world-continuum, the problem would still present itself for solution: What is the relation of these physical parts to those parts known as our conscious sensa? Even aside from this apparent misunderstanding of the problem, Professor Stout's position seems to me quite unpersuasive. It is possible that conscious impulse is somehow an aspect of all physical activity even in the inorganic world, as Professor Stout and the panpsychists assert; but I see no good reason for believing it. It is even more difficult to accept Professor Stout's view that sensa in some way logically imply body, and that our experience of "the embodied self" is an experience of sensa as aspects of the physical. It is very difficult for me even to conceive of this latter suggestion as meaningful; and I certainly can find no reason whatever for believing it to be true.

I do not pretend to have treated, in this chapter, all the

various methods that have been suggested for avoiding the mind-body problem, but I think those we have considered are the most important and promising. One of the commonest ways of evading this difficult topic I have, indeed, not even mentioned; namely the thoughtless confidence that, somehow or other, "Emergent Evolution" answers all such questions and that the acceptance of it absolves one from the necessity of cudgelling one's brains about mind and body. The fallacy of such a notion is, I trust, too obvious to need comment. The failure to recognize the reality and the crucial nature of the psycho-physical problem is to me one of the most astonishing features of contemporary thought. For, as we have seen, there is really no way of dodging it. The two following chapters will, therefore, be devoted to a serious consideration of the proposed solutions.

Chapter XVII

MATERIALISM AND PARALLELISM

The failure of the many ingenious attempts considered in the previous chapters to avoid the mind-body problem would make it seem at least extremely probable that the various activities and contents of consciousness and the various activities and conditions of the body with which they are correlated are in some sense distinct and distinguishable. Physiological psychology insists that they are related, and no one who admits that they are distinguishable denies it. What, then, is the relation? Doubtless there are many relations between them. They have, certainly, some kind of temporal relation; they are in some ways similar, in some ways different. But common sense, science, and philosophy have all been convinced, since the very beginning of man's thought, that they have a bearing upon each other of a more specific and more significant sort than that of simply being related in the very general ways suggested above. The stimulation of the retina seems to have something to do with the sensation of sight; the impulse to run seems to have something to do with the actual motion of the feet. In other words, it is the universal opinion of mankind, both illiterate and learned, that if we take stimulus and sensation as two events, impulse and reaction as two events, the members of each pair are related to each other in a way that has something, direct or indirect, to do with causation.

Now if we take mind and body and consider them from the point of view of possible influence and determination, it seems pretty plain that they must be related in one or another of the following ways: (1) Either mind completely determines body and body never influences mind; or (2) body completely determines mind and mind never influences body; or (3) neither of them ever influences the other; or (4) they influence each other mutually.

The first of these views must not be interpreted as being Absolute Idealism or Panpsychism; for it will be recalled that within our psycho-physical dualism the brain state can perfectly well be interpreted as a psychic center, or as an experience in the mind of the Absolute, but in both cases it is distinguished from and related to that other experience which we call the sensum or urge or the individual's conscious content. The idealist hypotheses *reinterpret* body; they do not deny its influence. So much being understood, I think we shall all agree that probably no one has ever maintained the first of the four logically possible hypotheses just recited: no one will seriously assert that the stimulus or its correlative brain state is caused by the sensation. The possibilities are therefore reduced to three.

The second and fourth hypotheses—Materialism and Interaction—are both very ancient. Interaction is probably the older; but the materialistic hypothesis goes back, in the West, at least, to Leucippus, and in India to the Carvakas, who antedated the Buddha. The influence of Plato and the Platonists seriously repressed it until the time of the Renaissance. But beginning with Hobbes, La Mettrie, and Holbach, it enjoyed a new lease of life until the close of the 19th Century, when Parallelism, deriving from Spinoza, attracted many of the keener minds with naturalistic tendencies, some of whom wished to say just about what the materialists had said, but found in the Spinozistic

formula a less blatant and more gentlemanly way of saying it, some of whom felt the force of the criticisms which the interactionists, following after Descartes, had levelled against Materialism.

It is hardly necessary to remind the reader of this volume what these criticisms were. The materialistic doctrine always was, and still is, ambiguous. At times it asserts the identity of consciousness and its bodily correlate; at times it distinguishes the two but asserts that all mental content and activity is completely determined by bodily conditions and processes and in its turn it never determines or influences anything. The first of these formulations of Materialism—the identification of psychical with physical events—is completely armed against every attack, and can never be refuted. Not, however, because it is so obviously true but because it is so obviously false. It is impossible to do anything with a man who does not see that by the molecular activity of a group of brain cells we *mean* something different from what we mean by the sensation of red or the idea of God. The man who does not see that must be left to the uncovenanted mercies of a kind Providence. To aver that my thought of the mind-body problem *is* a certain nerve process going on in my frontal lobe, or (as Paulsen humorously suggests) that the emotion of love *is* "a right-handed spiral motion of the molecules of the brain,"—to assert such things as these is merely to make noises in the air. We know what we mean by the experience of thought or of emotion, and we know what we mean by physical processes going on in the nervous substance of the brain, and if we know anything at all we know that we mean different things by these two expressions. To object that in our ignorance of what goes on in the brain, it is possible that a nerve process may turn out to be a thought or *vice versa* is completely to misunderstand the argument. Our denial of the identity of these things is not based on

the vagueness of our knowledge but on the clarity of our meanings. If we know so little what we mean by a "nerve process" that it may turn out, for aught we can see, to be an emotion or a toothache, we have no business to use the term "nerve process" at all. A word to have a meaning must have a meaning of at least some definiteness; and just to the extent that "nerve process" means anything it certainly does not mean conscious thought or emotion. Surely this much should be plain in a kindergarten.

The second (and until recently more popular) form of Materialism recognizes plainly that consciousness *is* not brain or brain activity, but, as I have said, maintains that it is always caused by the brain, entirely determined in its nature by the brain, and in its turn never determines or influences anything, whether bodily activity or further mental content. This view is meaningful and involves no self-contradiction. It can, therefore, presumably never be completely refuted. The central and essential part of it, however—the complete denial of all efficiency to consciousness—is so extraordinary and tremendous an assertion as to be, for most minds, very nearly incredible unless backed up by very weighty reasons of either an *a priori* or an empirical nature. To suppose that never, in the history of the human race, has an emotion or an idea or a conscious purpose or impulse had any influence upon anyone's actions or speech or writing or further thought, is about the most astonishing assertion that one can conceive of outside of the logically contradictory. Upon such an hypothesis, no explanation (unless it be divine creation and interference!) can be given for the origin and development of consciousness; for if consciousness be entirely inefficient it is entirely useless and contributes nothing to the biological advantage of those individuals and species who happen to possess it. If thoughts are connected with each other only in-

directly through the processes of matter and physical energy, it is difficult to see how there can be such a thing as logical necessity, or even the establishment of reasonable probability. We should thus be compelled to think as we do, not because one hypothesis is a more reasonable conclusion from the facts and premises than another, but because the physical laws that hold in the nervous system produce *this* hypothesis and not *that*. If this is the case it would seem to be impossible to show that Materialism is more reasonable or probable than Interaction or Parallelism; those who believe it, do so, not because it is a rational conclusion from the facts, but because the physical laws grind out this particular consequence in their brains, just as they bring about the fall of the avalanche and the spray of the waterfall. Materialism would therefore seem to be one of those theories which are necessarily suicidal. And if, momentarily forgetting that reasoning is ruled out, we ask for the reasons or for the evidence upon which this incredible theory rests, we are presented with no *a priori* considerations, but with facts that are quite as compatible with each of the rival theories as they are with Materialism.

It was considerations such as these that brought about, in the concluding decade of the last century, a rather lively exodus from the ranks of Materialism. Many of those who left it accepted in its place Parallelism—a doctrine which preserves to Naturalism most of what it desires, yet seems to do justice to all the proper claims of mind. Parallelism in its simple form, however, satisfies no one, and, so far as I am aware, has never been seriously held. There is no use trying to persuade anyone—even oneself—that sensations, will-acts, emotions, meanings, reasonings and the rest run along absolutely parallel to certain definite conformations of brain activity, with never-broken concomi-

tance, and that all this happens without any explanation. Such an extraordinary and infinite series of inexplicable coincidences is too much for even the most enthusiastic soul to take seriously. Hence parallelists have properly searched about for a possible explanation which should be loyal to their fundamental principle, that there is no direct influence of either series upon the other, and yet should enable them to understand why the two always run absolutely parallel. Two such explanatory hypotheses have been devised. One of them suggests that mind and body are merely two aspects of a Tertium Quid,—a Something-I-Know-not-what. This Tertium Quid, of course, cannot itself be either material or mental: to interpret it in either of these ways would be to desert Parallelism, or at least to transform it. It would indeed be possible to hold that both mind events and body events are to be interpreted idealistically as the experiences of an Absolute Mind or parts of a World Continuum, and that they run parallel because thus the World Mind acts and lives. For such a position much might be said; and if the conception of causation suggested in Chapter X be accepted, I cannot see that there would be any distinction between such a view and an idealistic form of Interaction. My only objection to such a doctrine would be the difficulty involved in the conception of an Absolute, and the seemingly unnecessary complexity of the hypothesis. But at any rate it is not this form of Parallelism (if indeed we *can* call it Parallelism) that I am criticising. If the *Tertium Quid* be taken in the way usually proposed by advocates of this type of Parallelism—an unknowable and unimaginable being, about which we can suggest nothing save that it is *not* matter and *not* mind,—then all attempts to explain by it things so well known as human minds and human brains would seem to lead only to confusion worse confounded. And if it be said

that matter and mind are not parts or aspects but *appearances* of this *Tertium Quid,* then *all* attempt at explanation is thrown to the winds; for an appearance means, if it means anything, an appearance *to* some self or mind; and the admission of this mind would make all the theory's subtle efforts at explanation wholly vain. We should have to start all over again and show the relation of this witnessing mind to that which it witnessed.

The other hypothesis sometimes used by the parallelist is a combination of Parallelism with Panpsychism. The familiar hypothesis that the inner nature of each material object is a psychic center, and that its physical qualities are merely its appearance, that is, its effects upon the minds of observers, is applied specifically to the human body. Each part of it is the appearance of an inner psychic center. This general doctrine gets application to the mind-body problem through the interpretation given to the personal consciousness. The inner psychic center of each part of the body save one (it is asserted) is no more directly known to us than is the center of any external physical object; but the psychic center of the cerebral cortex *is* the personal consciousness. Or, to put it from the other point of view, the appearance of the personal consciousness *is* the cerebral cortex.

Thus a peculiar and most ingenious type of Parallelism is proposed. The psychic events of my mind are not strictly speaking parallel to the physical events of my brain; but (apparently through some sort of telepathy) they cause psychical events in your mind, or they *might* cause psychical events in your mind; and these actual or possible psychical events in your mind are of course your actual or potential percepts of my brain. And since the *esse* of all physical objects is *percipi,* these percepts of yours *are* what is known as my cerebral cortex. As a fact, of course—since I do

not wear my brains on my sleeve—no psychical events of the sort are ordinarily produced. Inasmuch, moreover, as my skull has never been trepanned, strictly speaking, I have no actual brain and never have had one. I get on very well without one, however, since I am a psychic center, and since my brain, if I had one, would be absolutely as inefficient and useless as on the materialistic doctrine my mind would be. Normal men and women never have brains at all, though a few attain them after they are dead, if post-mortem examinations are held.

But though the brain is non-existent in nearly all cases, and quite inactive and inefficient when it does exist, this purely potential, inefficient, non-existent brain absolutely runs and dominates the mind and the behavior of all the lower centers of the body. So at least Parallelism asserts. For the only thinkers who consider it worth while to adopt this extremely elaborate hypothesis are intent first of all on saving and serving Naturalism. If they had not this purpose in mind they would pretty obviously accept the much simpler theory of Interaction. The most fundamental purpose and principle of Idealistic Parallelism, as an actual school, is to vindicate the naturalistic assertion that the laws of the physical sciences completely determine human behavior, and that the purposes, meanings, emotions, ideals of consciousness are merely "a lyric cry in the midst of business." It is thus a necessary part of the parallelist hypothesis, that though the brain is in nearly all cases non-existent, all of a man's thoughts and acts work out *as if* the brain were real. All human bodies, in fact all material objects, are unreal in themselves—their *esse* is *percipi;* only minds are actual. Yet all minds are invariably careful to preserve appearances, and to act *as if* the laws of the merely apparent physical world dominated the potential brain, and as if this always inefficient and usually non-

existent brain dominated the psychic centers which alone are real.

Some may think this thing improbable. Fortunately there is a simple and final laboratory test to which the supporters of the theory may appeal for its vindication. Since the cerebral cortex is, according to the hypothesis we are considering, the appearance of the personal consciousness, it is plain that it would wholly vanish if the personal consciousness should cease to exist. Now there is a situation in which everyone, I suppose, is agreed that the personal consciousness either ceases to exist, or at any rate loses all connection with the brain: I refer, of course, to death. The parallelist theory may, therefore, be definitely tested by trepanning the skull of the dead man and looking for the cerebral cortex. Oddly enough, we shall find that it has not disappeared. Odd, I say, on the basis of Parallelism; for almost the only time when the cortex actually does come into existence (as an appearance in an observer's mind) is the one time when, according to the theory, it should have ceased to be even a potentiality.

This experiment seems to me completely decisive: it entirely refutes Idealistic Parallelism as the theory has been presented by its advocates. The hypothesis may be modified, of course, in an attempt to save something from the wreck, by proposing that it is not the (perceived) cortex but the (perceived) *activity* of the cortex which is the appearance of the personal consciousness; and thus, it may be suggested, one may avoid both the fatal outcome of the dead-man experiment, and (since the cortex itself is now taken to be the possible appearance of a lower conscious center) the rather queer-looking hypothesis that living and thinking men have no cerebral cortex. As to the possibility of getting out of this second difficulty in the manner suggested, I do not begrudge the parallelist this last straw, if it will really make him feel

better to assert that living and thinking men do have brains, though these brains are entirely inactive—just as sleeping and dead men's brains are; and that a man's cortex could be made to act only by trepanning and observing it.[1] As for the avoidance of the dead-man argument, it will be observed that the substitution of cerebral activity for the cerebrum itself as the appearance of the personal consciousness would completely transform Idealistic Parallelism. It would entirely cut its connection with panpsychism, or if (quite irrelevantly to its purposes) it retained the panpsychic interpretation of the hypothetical lower psychic centers, it would have to give it up for the only psychic center that is at all involved in the mind-body problem—namely, the personal consciousness. For the modified proposal suggests that the personal consciousness is not to be identified as the psychic center of any physical object, but as the psychical center of the *activity* of certain physical objects, which are, in turn, the appearances in our minds of certain hypothetical lower psychical centers which we know nothing about directly. . . . Doubtless even more complicated hypotheses might be devised. . . . Is anyone really interested in prolonging the discussion of Idealistic Parallelism?

For reasons such as these, I gather, the supporters of Naturalism during the last few years seem to have felt considerably disillusioned concerning the brilliant claims of Parallelism, and some of them have turned again to Materialism, to see whether new life might not be given to that ancient doctrine. One rather surprising method proposed for this purpose consists in conceiving mind as "experienced body." "Feelings," we are told by Paul Cohn, "are, in the last analysis, indefinite perceptions of bodily events." [2]

[1] The proposed theory does not identify the personal consciousness with the activity of the cerebrum (that would be Materialism): but with the *appearance* of the activity.

[2] *Die Seele Ist Leib* (Hanover, 1931), p. 1. I should add that the

It is needless to point out that this new form of Materialism, when clearly thought out, proves to be not Materialism at all. It presupposes an experiencer, a perceiver of bodily events; and the relation between this perceiver (or these perceptions) and the bodily events perceived presents anew the mind-body problem. So far as any solution is implied in the suggestion made, it would seem to be Interaction.

It is interesting to note that most of the attempts to rehabilitate Materialism have chosen that form of the doctrine which identifies consciousness with brain or brain activity. Their upholders have, that is, seen the futility of any doctrine that denies efficiency to consciousness, and have preferred the very daring task of finding an identity between what seem to be quite different and distinguishable things. Thus Durant Drake, who had formerly been a staunch defender of Idealistic Parallelism in its outright form, seems to have had much less confidence in it toward the close of his life, and in his latest work—his delightful *Invitation to Philosophy*—he mixes his Parallelism so inextricably with Materialism that it is hard to say where he should be classed. And the form of Materialism which he chooses is the assertion of the identity of mental activity with physical. The defense of Naturalism is ably conducted, but a careful and analytic reading of his chapters on mind and body will show a frequent alternation from Materialism to Parallelism and back again, as occasion demands. It is only because he is—perhaps unconsciously—supporting two mutually inconsistent hypotheses that he seems able to defend his position against the attacks of Interaction.

"Human mental life is . . . a set of elaborate, integrated

conception quoted above is only one of several theories upheld by Herr Cohn, and that his usual view (though explicitly ridiculed in our passage) is that suggested by the title of his book, namely, the identification of psychic events with brain events.

impression-reaction nervous processes."[3] This was Drake's final position upon the mind-body problem—a position in no significant way different from that of Hobbes. Mr. Russell's identification of our ideas with the insides of our brains is even more obviously a repetition of Hobbes' view. A more recent writer proposes that "the mind *is* simply a wave-system of the brain as a whole." Another says "thought is a flow of particles through the cortex." Assertions of this sort, identifying consciousness with the brain or its activity, are increasingly common today. I cannot see that their modernity, or any discoveries of the last three hundred years, make them any more meaningful than they were in Hobbes' time; to me they are just as far as ever from making sense. I cannot conceive of a statement more obviously false than the assertion that thought *is* a flow of particles. I cannot imagine an intelligent discussion with a man who may at any moment thus change the meaning of his terms. For one who plays fast and loose with words in so omnipotent a fashion, all things would seem to be possible. If my experience of this white paper with ink marks upon it, or my thought of the philosophic problem before us, may identically be a "flow of particles," then the flow of particles can perfectly well turn out to be a mountain in South Africa, and the mountain may be a new book by Bertrand Russell, or the beauty of a painting by El Greco. Consider what would happen in History or in Mathematics if our colleagues in those fields for a moment permitted so outrageous a use of terms. The assassination of Julius Caesar might "be" the price of cotton in 1861, and a right angled triangle might "be" 47 to the ninth power. In a society where such misuse of language was indulged in, not only philosophical and scientific discussion, but ordinary conversation would be impossible. For the very first of the

[3] *Invitation to Philosophy*, p. 388.

Aristotelian Laws of Thought—the Law of Identity—is violated by it. As Aristotle says, "not to have one meaning is to have no meaning"; and a man who does not see this, in the opinion of the Founder of Logic, "is seen already to be no better than a vegetable." Surely it is a disgrace to Philosophy that more than 2300 years after the death of Socrates it should still be necessary to labor this point.

Not all the defenders of Materialism in our day, however, are guilty of so outrageous a use of terms. For some of them I have great respect: and most of all for Professor Sellars. Chapter XVI of his *Philosophy of Physical Realism* seems to me the best attempt I have read to restate Materialism in a way that shall neither deny the efficiency of consciousness nor make nonsense of language. Accepting the critical realist's epistemology, Professor Sellars reasserts that in the case of most physical things we know only structures and processes: Nature has not enabled us to know their inner quality. But he suggests the possibility that in the case of one physical object we know not only structure and process but inner nature as well; and that one object is the brain. This, and this alone, we know from both the outside and the inside. Brain physiology, to be sure, knows it only from the outside, as physical science in general knows things; and this external knowledge of the anatomy and physiology of the brain is true knowledge. It tells us of structures and processes that are really there. But as our scientific knowledge of other physical things, though genuine and sound, is never complete, so our scientific anatomy and physiology give us only incomplete knowledge of the brain. Fortunately introspection is able to supplement this incomplete and external knowledge, and to show us the inner nature of the brain,—which should properly be called the brain-mind. This inner or qualitative nature of the brain-mind is, accordingly, consciousness. Consciousness

is thus *in* the brain and is spatial in the same sense in which events are spatial or are in the objects which participate in the event. More important still, consciousness *is one of the qualities* of the brain. It is "the qualitative dimension of a brain event. It is the patterned brain event as sentient. It is because of its status that we, as conscious, participate in the being of brain events. Here and here alone are we, as conscious beings, on the inside of reality."

Let me interrupt Professor Sellars at this point to comment upon the difficulty of carrying on a discussion of knowledge, even when the attempt is being made to disprove a knowing subject,—the difficulty, I say, of pursuing any such discussion without refering to exactly the kind of knowing subject which Materialism must deny. The reader will note how naturally, almost inevitably, Professor Sellars uses the words "we, as conscious, participate," "we, as conscious beings, are on the inside of reality." The natural and very proper use of these words in a discussion of introspection indicates the need of a real self if there is to be real knowledge. Further than that, it suggests that the essence of the mind-body problem is to be found in the relation which this knowing self bears to the objects of its introspection, even more than in the relation of sensa to brain.

With apologies to Professor Sellars for this interruption, let us return to the consideration of his hypothesis. The philosopher's task, as Professor Sellars sees it, "is to think consciousness as a complex and changing event adjectival in some sense to the organism. It is evident that the categories which apply to physical things and their parts do not apply to it or to any of the factors in it. This means that consciousness is not a substance. It is more of the nature of a qualitative complex intrinsic to nervous-acts." Nerve cells are substances; consciousness is a quality or event in and of the total synthetic pattern of the cerebrum.

It is as completely identical with the cerebrum as are the various physical qualities of that organ. We may say that the brain *is* painful, *is* joyful, *is* hesitant or perturbed or thoughtful, in the same sense in which we may say that it *is* of a certain size, shape, and chemical constitution. The only difference between the two sets of qualities consists in the different ways in which we (!) know them, or in which they are known (to us!). The psychical data given to introspection are not the whole of the brain, nor its only qualities, but they are qualities *of it*.

If it be objected that there is a manifest repugnancy (as Berkeley would put it) in asserting that a given brain state *is* painful, or has pain (an obviously psychical quality) as one of its characters, Professor Sellars, as I understand him, would reply that the seeming contradiction is no greater, nor of a different nature, than the verbal contradiction involved in the unobjectionable and universal belief that a given round object may be red. Circularity and redness are not identical, but when one says the circle is red one does not assert that circularity is redness. So of brain cells and consciousness. Consciousness is a quality, not a substance, and a substance may have many qualities.

Everyone, I think, must admire the judicial frankness of Professor Sellars' treatment of this difficult question, and the ingenuity and subtlety of his suggestions. But further analysis is here desirable. The hypothesis he presents, that consciousness *is* a quality of the brain, is tied up with the uncertainties and possibilities of misunderstanding that commonly attend an assertion of identity. For identity is an ambiguous word, and before accepting or rejecting a judgment that something "is" something else, one should scrutinize carefully the sense in which this is intended. Let us then examine the illustration I have just suggested, that a given circle is red, and see how it should be interpreted.

If we start with the denial of objectivity to secondary qualities, as Professor Sellars does, and ask the meaning of this assertion that the circle is red, the answer may be expressed in one of two wordings. We may mean (1) that an object which is circular—let us call it a circle—produces in us a red experience or sensum; or, (2) that a given physical object (shape not specified) produces in us the experiences of circularity and of redness. I do not see that under the given conditions there is any third interpretation. In what senses, now, can Professor Sellars' assertion of identity be taken? The physical structure and motion of the brain as an essence is plainly not identical with the essence "painful." It would seem, therefore, that pain can be identified with the brain cells only in one or the other of the two ways in which we can say that a circle is red. If we interpret the assertion in the sense that the brain is a substance and pain its appearance we shall have on our hands the relation between the brain and the self to whom it appears, or between it and his psychoses—*i.e.*, we shall have done nothing to solve the mind-body problem. If we say that the brain is a psychic center, and pain its appearance, we shall have exchanged our materialistic position for that of Idealistic Parallelism—with all its difficulties. If we take the assertion that the brain is painful in the sense that a given object (called brain) affects us in two ways, the theory turns out to be something very like the Double Aspect view already considered (and rejected as unquestionably by Professor Sellars as by me). Or perhaps, by taking the words in an unnatural sense, we might say that the assertion, "Pain is an identical quality of the brain," is to be interpreted to mean that the brain *produces* the experience of pain; and this, plainly, would be simply old-fashioned Materialism of the second sort (which Professor Sellars rejects)—or else Interaction.

This analysis of the assertion of identity has been based on the assumption that secondary qualities are not objective and therefore cannot belong to physical objects as such. It is, however, conceivable that secondary qualities may be objective—as would seem to be indicated by the fact that so many able philosophers so conceive them. If we accept this view of secondary qualities (Professor Sellars does not), our problem is put in a new light. If they are objective, why should not the brain possess them as well as primary qualities? And, indeed, I can see no reason why, if they be objective, it should not. If so we should have to admit, or assert, that the brain in its own right is in part gray, in part white, that it is soft, warm, silent, tasteful, odorous, etc. But do these admissions really throw any light upon the mind-brain problem? *Are* the various characteristics of consciousness—emotion, awareness of meaning, adoption of purpose, determination, reasoning—*are* these properly to be classed under the same category as color and taste and the other secondary qualities? It seems to me that they are very different. I realize, however, that not all see the question as I do. Thus, in the opinion of Mr. Dawes Hicks it is "far from being unreasonable to conceive of a highly intricate configuration of physical elements, such as we find in the cerebral system, as being characterized by those features which reveal themselves in what we call modes of consciousness. Is there, in truth, any more difficulty in supposing that the *consciousness* of blue characterizes a certain configuration of physical elements than in supposing that the colour blue characterizes another such configuration?"

Very much more difficulty, I should answer. Personally I must confess that, with most of the English New Realists, I seem to find a profound difference between a secondary quality and the awareness of a secondary quality. I can

understand that the brain might in itself be gray—gray whether seen or not; that gray might be one of its intrinsic qualities; but I cannot—let me avoid dogmatism and say I cannot *as yet*—see how the *awareness* of gray could be one of *its* qualities. If I were told that the awareness of gray was one of the qualities of the brain I should find the assertion entirely meaningless until I had interpreted it to mean that the brain somehow *produced* the awareness of gray. It is quite conceivable that there is something essentially queer about the structure of my brain-mind, something which makes me constitutionally incapable of putting meaning into the asserted identity, something which compels me to believe that certain acts or states such as thinking, feeling, willing, are psychical and not physical. Whoever writes an honest book about philosophy writes his own "Confessions"; and here is one of mine.

Many people may have brain-minds quite different from mine; but I am sure that a good many also share my limitations. And for all of us who are thus limited, the decisive question, in the long last, is this: Do we, or do we not, *mean* by thinking and feeling anything that can be said to qualify a physical object in the way in which primary and perhaps secondary qualities qualify it? We understand that these essentially psychical activities conceivably might be caused by brain processes; but we can make nothing of the assertion that any physical object could *be* feeling and thinking; or that *it* could feel or think. If the reply be made that it is not the brain as a physical object that thinks, but the brain-mind, a newly-realized whole, which thinks and feels, as well as having shape and size, then we can only say that this solution seems to us purely verbal, and that within this newly conceived totality, the question of the relation between its mental and its physical parts or aspects or qualities will break out again, and we shall once more have upon

our hands the old psycho-physical problem. Some of us are suspicious of this new term "brain-mind." It seems to be a word to conjure with: and some of us wonder if it be not a royal road to missing the point. In other words, it seems to many of us that the recent attempts to resuscitate Materialism have run upon the same essential difficulty that made the old Materialism so hard to accept: the difficulty, namely, that we do not mean by consciousness what we mean by matter or by any of the qualities of matter.

The outcome of our discussion thus far is disappointing, and would seem to be wholly negative and skeptical. But it is something to have analysed three of the four possible solutions of the mind-body problem, and to have faced their very grave difficulties.

Chapter XVIII

INTERACTION AND ITS INTERPRETATION

During the course of the preceding chapter we saw that if mind and body were not identical, the relation between them must be one or another of those suggested by Materialism, Parallelism or Interaction. There were, it was pointed out, several different forms possible for each of these doctrines, but one or another of the three general points of view must be true. If this conclusion was correct, and if, furthermore, we were justified in rejecting both Materialism and Parallelism, the process of elimination would seem to indicate Interaction as the true doctrine. We have not as yet discussed Interaction, and it is possible that it, like both Materialism and Parallelism, may have several possible forms, so that much further analysis may be before us. But if the argument of the preceding chapter was sound, it would seem that Interaction in some form or other possesses a good deal of initial probability. Like Materialism and Parallelism, however, it has its difficulties, and these must be considered before we give it our adhesion.

The difficulty which most impresses the popular mind consists, I expect, in the mass of data that show the dependence of mind on brain. These need no rehearsing. It takes no learned physiologist to assure us all of the fact that perception is dependent at least on sensory organs; and during the Nineteenth Century the specific paths of the nervous system and the centers of the cortex connected with

particular sensory experiences were carefully worked out. The dependence of habits upon neural pathways was universally stressed as early as the '80's. It is not so obvious to those quite ignorant of physiological psychology that we have no direct experience of the causal efficacy of consciousness; yet the facts of paralysis, and various experiments on the severance of nerves shows that the mind's seemingly *direct* and *exclusive* control of the muscles is illusory. Pathological conditions, and experiments upon animals, has carried farther our knowledge of the dependence of the psychical on the physical. The use of certain drugs deadens or deranges the mind. The removal or disuse of certain sections of the cortex puts an end to a corresponding part of the mind's activity. Memory and learning are related to processes in certain cortical regions. The greatest triumph of physiological psychology during the Nineteenth Century, in both exactness and complexity of detail, was in the study of aphasia. Definite small centers were discovered which seemed to control speech and the understanding of spoken words. In short, at the close of the preceding century considerable progress had been made in showing the dependence of specific forms of mental content and activity upon specific brain areas, and the promise of rapidly increasing knowledge of this dependence was very bright.

Those of us who made our first acquaintance with physiological psychology in the '90's and who now, forty years later, come back to the field and enquire what has been accomplished since our first studies, have to acknowledge rather mixed feelings. There has been a steady advance in the knowledge of brain physiology; but it has not been of quite the sort anticipated forty years ago. Much of the advance has consisted in throwing doubt on many points that seemed quite settled then. Concerning the exact lo-

calization of function we seemed to have much more detailed and certain information in 1897 than we have in 1937. Recent investigations, for example, of the centers of speech and the understanding of words, have most disappointingly discovered in the brains of persons who never suffered from aphasia the lesions which were almost universally recognized as the inevitable cause of the disease. And in many cases of actual aphasia, when the speech centers have been destroyed, the sufferer has been able to educate other sections of the brain to do the work normally done by the destroyed regions, and thereby to recover his power of speech and of comprehension. Investigations on the brains of monkeys and of some of the lower animals have established this power of re-education of parts of the brain in several fields of psychical activity. The dependence of habits upon specific neural paths is becoming doubtful. And while the general relation of mental and neural functions has been made by no means less probable, the old notion of the cell or small group of cells being the *house* of the idea has been pretty completely given up. The belief is spreading that the sensory and motor centers are not in the cortex at all, but that, if such centers there be, they are sub-cortical. The hope of localizing mental functions by means of physiological experiments or histological investigations is being abandoned by several authorities. One investigator has come to the conclusion that in the rat, at least, all the points of the cortex are "equipotential" so far as learning is concerned, and that there is not a single small section whose removal has serious effects. It is no longer thought that the events in particular parts of the brain can explain particular events in the mind. In short, the conclusion that seems to be emerging is that the brain works largely as a whole; and that the different parts of it are not the places where the different parts of the mind live,

but are, rather, tools which the unitary being, the psyche, uses, and for which, when they get out of order, the psyche may sometimes substitute and re-train other parts.

The partial dependence, moreover, of mental upon physiological activities referred to in the preceding paragraphs cannot be taken as evidence in favor of Materialism, for it is quite as consistent with Interaction. If Interaction is true, it will follow that brain influences mind; and one would naturally expect that certain aspects of brain activity would have more effect upon certain forms of consciousness than others. Upon this influence both Materialism and Interaction are agreed. The disagreement between them is on the very different question whether the mind (in some interpretation of that ambiguous word) influences the brain.

Upon this question, the first-hand evidence seems to be all one way. I will to raise my hand and up the hand goes. Thoughts, clothed in verbal forms and accompanied by the urge to express them, fill my mind, and I speak the words and expound the thoughts. Our working life seems to give an almost unbroken series of exemplifications of the direct influence of mind over body. The investigations of psychopathology repeatedly bring to light new evidence in favor of this conclusion. Surely the burden of proof lies upon him who would deny a view that appears to have such literally unlimited empirical verification.

If we ask for the reasons put forward for doubting the interaction view, we find ourselves confronted not with facts but with theories; for the opposition to Interaction rests exactly upon two philosophical opinions. The first of these is the theory that cause and effect must be alike, that things so different in kind as mind and body cannot influence each other. The second is the theory that the "law" of the conservation of physical energy is universal

and is inconsistent with Interaction. We must consider each of these briefly and in turn.

It is interesting to note, in the first place, that if the nature of causation be such as to make the influence of mind on body unthinkable, it makes quite as unthinkable the influence of body on mind. Materialism, therefore, except in the strange form which identifies brain and consciousness, would be ruled out by this view of causation, quite as absolutely as Interaction. Now if mind and brain be so different that they cannot *influence* each other, it will be hard to see how they can *be* each other; if their mutual influence be impossible because of their great difference, what shall we say of the possibility of their identity? If the causal argument against Interaction has weight, therefore, it would seem to drive us back into one of the nearly incredible forms of Parallelism—or, possibly, lead one to a new formulation of the Interaction Theory. As to this latter possibility, something will be said later on; but I do not see how we could be justified in accepting Parallelism with its very great difficulties, because of the alleged difficulty of applying the concept of causation to the relations between mind and body.

For, after all, what is this difficulty? As usually worded, it runs somewhat as follows: It is impossible to see how two things so unlike as mind and body can influence each other. Or: try to picture the locomotive and the tender being held together by feelings of amity between the engineer and the guard. Or: imagine, if you can, the idea of a beefsteak causing a difference in the activities of the cortex. The criticism upon Interaction, in short, is based upon our inability to say *how* mind affects matter or matter mind. And I think we must admit that we cannot say nor imagine how such mutual influence occurs. But can the critic tell us how matter affects matter? Does he see a force

or something-or-other going over from one billiard ball to another, or from the moon to the tides? Since the days of Hume and Kant very few thinkers have seriously maintained that we possess any such insight or knowledge of the inner nature of causality. The question of a causal relation between two events can hardly be settled *a priori*. Whether one event contributes to the production of another is a matter to be settled by observation. If we find the two events related to each other in the form of a sequence which appears to be invariable, we are put on inquiry as to whether there be here a causal relation. And if the two events do not belong to obviously different series (as day and night) we regularly conclude that the relation between them is causal. The question has been discussed in our chapter on Causation, and for the general position here adopted I would refer the reader back to that discussion. In the last analysis, all we know about causation is the fact that the universe acts organically, with lines of continuity that are followed pretty regularly by actual events. One type of such a continuous process seems to be biological rather than mechanical in type. And, in certain cases, physical processes are continued by physiological, and these by psychical processes within the correlated mind; these in their turn pass over, without break, into physiological processes once more. This is what is observed. It is observed in much the same way as is the continuous process of the flight of the stone into the shattering of the glass, of the continuous process from the motion of the moon to the motion of the tides. It is only a long-outgrown and *a priori* dogmatism that will venture to say: Here can be no causation.

The illustration I happen to have hit upon in this last sentence may be worth following out further. It will be noted that I have nowhere contended that a brain event is

the total and unaided cause of a mind event, nor a mind event of a brain event; just as I should not be so hasty as to assert that the changes of the moon constituted the sole cause of the tide, or that the flight of the stone was the sole cause of the shattering of the glass. Part of the cause of this last event was the existence of the glass, and the nature of the glass. To be more exact in my wording I should perhaps say that the flight of the stone was one of the contributory causes of the glass being broken. Similarly, the brain event is only one of the contributory causes of the rise of a sensation. Another partial cause of it is the existence of the mind and the nature and the temporary condition of the mind. As the glass had to be "there" if a fracture was to take place, so the mind or self had to be "there" for the rise of a sensation. Similarly, of course, it is necessary that I have an arm and a nervous system of a certain structure if my will-act to raise my arm is to result in the desired movement. The type of Interaction I wish to suggest is, thus, not the sort that would explain the rise of either mental or bodily events out of nothing. So far as the principles of causation alone are concerned, it is perfectly conceivable that a series of events in the nervous system might be followed by a series of mental events that leap out of the blue, so to speak; but this is not what I am suggesting. The sudden coming into existence of a series of psychoses "in" a brain which had up to then been wholly unrelated to any form of consciousness is not a self-contradictory concept, but I am not proposing that this is what occurs in sense perception. The shattering of glass from the motion of a flying stone when there had, thitherto, been no glass to shatter, and the production of an idea by a series of physical events along with no mind or self to have the idea, though not strictly inconceivable would come so near to being cases of "creation out of nothing" as to be at least somewhat lack-

ing in initial plausability, and I am not asking the reader to accept a form of Interaction which would make this demand upon him. That a series of brain events impinging upon a series of mind events should change their direction and influence their character is one thing; that it should not act upon a mind but create one, without the co-operation of anything psychical, is something very different. Possibly it was only this type of production that many of the critics of Interaction had in mind when they insisted that cause and effect must have at least a certain degree of resemblance.

The second difficulty urged against Interaction is the seeming incompatibility between it and the law of the conservation of energy. The argument has been so concisely stated by Professor Stout that I quote his formulation of it: "Mind cannot act on body without giving rise, in the body, to a gain or loss of energy, which is not balanced by an equivalent loss or gain. But no gain or loss of bodily energy is discoverable which is not balanced by an equivalent loss or gain. Therefore mind cannot act on body at all." [1] The assertion of the first sentence—the impossibility of the mind influencing the body without increasing or decreasing bodily energy—has been challenged by Stumpf, Wundt, Broad, Wisdom, and a number of other important thinkers in this field. No reason of either an *a priori* or an empirical sort has as yet been suggested to show that in interaction between body and mind a transfer of physical energy would be necessary. The second assertion of the argument as quoted—to the effect that no increase or decrease of the energy possessed by the body is ever discoverable except from bodily sources—is at least equally dubious. There is only one piece of really careful and exact experimental evidence on the question whether, within a given period, the intake and the outgo of energy from the body of a conscious human

[1] *Mind and Matter,* p. 87.

being are always equal (and whether, therefore, the presence of consciousness adds to or detracts from it);[2] and the evidence from this experiment is about what one would naturally expect if mind does influence body. At any rate, the results of the experiment are quite as consistent with this view as with the opposite.

I shall not discuss further the question of the compatibility of Interaction with the theory of the Conservation of Energy, partly because I have done so in another place,[3] partly because I doubt whether such a discussion at this point would be worth my time and my reader's. For the so-called "law" that the amount of energy in the universe is always exactly the same, occupies, as I understand it, a much less important place in the minds of contemporary physicists than it did with the physicists of the Nineteenth Century. It was not difficult to harmonize the "law" with the old macroscopic physics which dealt with approximations and averages; it is not so easy to find a place for it in the much nicer microscopic physics of our day. And, indeed, when one asks the critical question how we know that in a living and conscious being no physical energy ever begins or ceases, the paucity of reason brought forward to sustain a statement which involves such fateful human consequences comes upon one with something of a shock. Granted, if you like (though many physicists would refuse to grant so much), that throughout the inorganic or even throughout the entire non-psychical world, no new energy ever comes into being and none ever ceases to be: what reasons have we for believing that this quantitative identity also obtains in those physical bodies that have the unique character of being somehow connected with consciousness? Is there, in the first place, any *a priori* reason for holding this view?

[2] Carried out by Atwater and Benedict in 1900 and 1902. See Bulletin No. 136 of the Department of Agriculture, Washington, D.C., 1903.

[3] *Matter and Spirit*, pp. 143–156.

None whatever. Is there any empirical or experimental evidence in its favor? Again, none whatever. Why, then, hold it? Can anything more be pleaded in its favor than an argument from analogy—to the effect that since elsewhere energy is always "conserved" it probably is "conserved" in organic and conscious bodies? Considering the immense difference between inorganic matter and organic bodies that are directly related to minds, the analogy seems to me very unimpressive. One might, perhaps, play with the proposition as a tenative hypothesis, quite as likely as the reverse, if it were not for the enormous consequences which (according to the opponents of Interaction) follow from it—the denial, namely, of all efficiency of consciousness, a view which makes nonsense of history, morality, and common human intercourse.

The three objections to Interaction thus far considered—the partial dependence of consciousness upon physical conditions, and the arguments from causation and the conservation of energy—do not seem to possess more than trifling importance. There is a fourth objection to a carelessly stated interactionist theory, however, which is much more serious. It is to this effect. Interaction obviously involves the conception of two things which interact. One of these is the brain, or the entire body, a material, relatively enduring, and space-occupying object. The other is the "mind." But what is the mind? The word "mind" is made to cover many things, and at least two or three of its meanings are backed by really good usage. The meaning most commonly attributed to it in discussions of the mind-body problem interprets mind as the stream of consciousness, the succession of psychic states. But if it be the stream of consciousness, as described by the introspective psychologists, that interacts with the body, we have so ill-balanced a partnership that "interaction" would seem to be a rather poor and

misleading term to describe their relation. The body is always there, but consciousness is notoriously changeable. During two-thirds of the day it is constantly varying in intensity, and for the other third it is nearly or quite non-existent. Certainly the first pulse of consciousness when we wake in the morning can hardly be explained as the action of the body upon consciousness, because prior to that pulse consciousness did not exist—provided, at any rate, that sound sleep be unconscious. In this situation it is difficult to speak of the interaction between consciousness and body. Shall we say that here we have the creation of consciousness by body alone? We saw, a few pages back, the difficulty in stretching the concept of causation sufficiently to include this creation out of nothing. And if the body can create the first pulse of consciousness unaided, why can it not do the same for all the rest? I am not so sure as Professor Stout seems to be that this would necessarily mean the complete dependence of every part of the subsequent psychic process, will acts included, upon bodily conditions; once the conscious stream got started, in whatever manner, it might well contribute its share toward the development of the later thoughts and decisions; but certainly the two "interactors" would be singularly ill-matched.

When we examine consciousness, moreover, it seems to be rather a quality or activity than a substantial entity which can interact with another entity: rather an action than an actor. It lacks not only the steady permanence needed for a member of a pair of co-operating powers; it lacks also the substantial nature, the dynamic force, the comprehensive unity which an actor, a doer of things, must possess. No given state of consciousness, moreover, ever sums up into itself the totality of a whole succession of logical considerations, or the totality of a group of impulses, wishes, and resolutions which lie back of a well-considered and weighty

choice. We can hardly believe that the reasoner or decider is just one state of consciousness following upon a series of predecessors. In careful decisions or well thought-out conclusions, the considerations and the dynamic powers of months or years of life seem often to be summed up and condensed. The conscious state at any given moment is always a thing of shreds and patches; yet the actor implied by and seemingly present in an act may have the solidity and the comprehensiveness of long sections of life. I find it impossible to put in words the full weight of the difficulty I feel. Yet I am sure that if the reader will consider carefully the partial, the tattered, the superficial nature of any given state of his own consciousness at any one instant, he will feel with me that it is almost ludicrously inadequate to the rôle of actor which is required of it in a decision of any moment. But if it be consciousness in the sense of a passing stream of ideas that interacts with body, it must be just this ever-changing, inconsistent, uninclusive, fragmentary, passing combination of images and feelings and impulses and sensations which does all that is done.

Considerations such as these do nothing to make more probable the materialistic or the parallelist hypothesis. What they do is to call for a formulation—or, if you like, a modification—of the solution offered by Interaction which shall be able to include all the manifest advantages it possesses over its rivals, and at the same time avoid the difficulties we have recognized. The question confronting us is this: If Interaction in some form be the solution of the mind-body problem, and if consciousness, as the stream of images and impulses which introspective psychology describes, be inadequate to the task, what is it that interacts with the body?

To this question I can find but one answer that satisfies me: *that which interacts with the body is the self.* The

self as we must conceive it is a substance, in the sense indicated in Chapter VI. It is at least relatively permanent. It is a center of dynamic force, an actor; and it has an inclusiveness and unity which no passing state of consciousness and no running section of the stream can possess. In short, it seems to me that the nature of the mind-body relation points unmistakably to an active self, which is other than body and which is more than a stream of sensations and ideas.[4]

The relation of the self to its body is unique. It is not a mechanical relation. The expression which seems to me to suggest this relation most satisfactorily is Greene's, who says that the self is "organic to a body." Or, to borrow a phrase from Professor Stout, it is the "embodied self" which the mind-body relation indicates. This must not be taken to mean that the body somehow enters into the conscious content of the self in direct fashion. The epistemological position expounded in our chapter on Dualistic Realism is fundamental to the understanding of the mind-body problem. The self *is* not the body, nor is it the psycho-physical organism. It is embodied, but it is not to be identified with anything physical. But neither is it the stream of consciousness. The matters here involved are difficult and I do not pretend to see with certainty into all the details of the situation; but the general nature of the situation does seem to me fairly clear. Both the facts of the mind-body relation and the nature of the processes of cognition and volition point, in my opinion, to the conclusion that the self is the mind, but is not to be identified with the stream of consciousness. The picture of the stream of consciousness given us by introspective psychology is useful enough as a product of scientific analysis, but as an account of the actual reality

[4] In this connection, *cf.* Wenzl *Wissenschaft und Weltanschauung,* pp. 216–17.

of our inner lives is very misleading. The kind of self-examination which does not cut to pieces, the sort of thing Bergson refers to as intuition, does not reveal a stream or succession of psychic states or pulses, following each other like the passive pictures on a cinometographic film. I may analyse my experience into successive parts, and from these parts I may, for the purpose of definition, record, and communication, construct "percepts" and "concepts." But in my living experience there are no such things.[5] Here, as so often, scientific analysis transforms what it would describe. What we actually live through and immediately realize is a self acting in various ways and having various experiences: a self, or subject, or psyche, perceiving, conceiving, thinking, hoping, feeling, deciding, acting.

When the self acts upon the outer world it acts by means of its body. The relation is very close, but, as I have pointed out in another connection, it would be a mistake to make the relation between the self and its body so intimate as to identify them or assert that the body is *part* of the mind or self. Nearly everyone would agree with this when certain parts of the body are considered. Not many would assert that their hair and nails are parts of their selves. And how about the liver and the spleen and the marrow of the bones, and various organs the layman has never heard of? The easy action of normal health, to be sure, presents such perfect co-ordination or unification of the self and its body that on hasty thought we picture them as one. As Professor Hocking says, when a man is pursued through the woods by a wild beast he does not feel that his body is running away and he himself is steering it so as to dodge the trees. "I never consciously make this division of labor between mind and body: I, the mind, do not consider myself as doing a *part* of the operation; if it is a conscious operation

[5] *Cf.* the discussion of this question in Chapters IV, XIV, and XIX.

at all I do all of it." [6] But when I poke the fire it would be quit unnatural for me to say: It is really the poker that is poking the fire: I simply guide the poker. The action of running through the woods and the action of poking the fire or of writing a letter are all so unified that we think of them as wholes and do not separate the parts done by the tool from our guidance of the tool. But in writing and poking, the hand is as patently a tool as is the pen or the poker. And when an abnormal condition arises (as it so very often does), and checks the easy co-operation of mind and body, the situation analyses itself for us and forces upon us the fact that the body and its action are not the identical parts of the self after all. A broken leg, a paralysed arm, that refuse to respond to a man's volition, are distinctly felt as parts of the not-self. And what shall we say of the positively hostile parts of our anatomy in pathological conditions—tumors, cancers, the death-bringing white corpuscles of leukemia? Plainly the body is not a part of the self nor an aspect of it.

The body in normal conditions is very much more like a tool of the mind than like a part of it. The facts of brain physiology, of the unitary action of the many-celled cortex, of the re-education of parts of the cerebrum and the nervous system to perform new tasks when old centers and pathways have been destroyed—all these fit in admirably with this instrumental conception of the body. In all conditions, both healthy and pathological, the body might be described as the self's closest environment.[7] Professor Hocking calls it "a piece of property" [8] of the self. These various expressions are much more appropriate than is the identification of the body as a *part* of the self. Yet, as that way of speaking attributed too close a union between self and body, so the

[6] *Types of Philosophy*, p, 233.
[7] Prof. Lyman's suggestion.
[8] *Types of Philosophy*, p. 293.

words *tool, environment, property* make the relation too external. The self is "organic to" its body, lives in its body; and if you ask me to illustrate the relation between them by citing some relation between other things in common life which it is exactly like, I cannot do it. For the relation between the self and its body is not exactly like any other relation; it is *sui generis,* unique. And if you wish further knowledge of it, you must turn to your own body and your relation to it and see. *That* is what this relation is like! But while the relation is unique, it is not unique in being unique. There are innumerable other things, such as the color yellow and the relation *next to,* which can be known only by being experienced.

But while the relation between body and self is *sui generis* and can be directly known only by being experienced, there is no reason why a great deal may not be known *about* it. Many questions calling for possible hypothetical answers might here arise; but at this point I shall consider only one, as it is a question which the reader would be quite justified in insisting that I deal with. In an earlier part of this chapter, as well as in the chapter on Causation, I suggested a way in which the causal relation between mind and body, on the interaction theory, might be envisaged. Our suggested modification in the wording of the theory—substituting *self* for *consciousness*—perhaps requires a few words of discussion concerning the application of the causal concept to the re-defined situation. And let me say at once that the suggestion I shall here make is purely tentative,—merely one of several ways in which the facts might be construed consistently with my general position. I hazard my proposals for what they may be worth; but the larger hypothesis of Interaction and the self does not stand or fall with them.

This much seems plain: that the physical and physiological processes in a perceptual situation affect the self, so that it

experiences sensa by means of which [9] it becomes aware of external objects. Awareness is not a mere passive beholding of pictures: it is an active process of the self. It follows upon a physiological process and accompanies the continuation of that process (this is my guess). There is no reason to suppose a temporal break in the processes of the cerebrum, filled in by psychical processes. The self and its brain act at the same time and jointly,—just as my hand and the poker do when I poke the fire with it (only, be it remembered, in more intimate connection). The physiological process and the activity of the embodied self are not identical, any more than the act of the poker and the act of my hand are strictly identical; yet as poker and hand go through one motion and perform one act, so the brain process and the activity of the self merge in one complex total deed. They form not a stark unit but a complex unitary whole of such a sort that a change in either part affects the character of the whole act and of its outcome. The act may be changed or even completely stopped at any point either by the inhibiting force of the willing self, or by the rupture of some part of the bodily mechanism—a broken leg, a wearied muscle, a cerebral hemorrhage. In the normal working of the psycho-physical organism, the purely physiological process in the receptors and the afferent nerves flows into a complex process of cerebral functioning and of perceptual, reflective, emotional volitional activity on the part of the self, and this complicated but unified total flows into the purely physiological activity of muscles and glands. In addition to this suggestion as to the combined action of self and nervous system, I am inclined to accept as a promising description Professor McDougall's suggestion that the self has "the capacity of producing, in response to certain physical stimuli (the sensory processes of the brain), the

[9] In the manner discussed in Chapter XIV.

whole range of sensation qualities in their whole range of intensities; the capacity of responding to certain sensation-complexes with the production of meanings, as for example the spatial meanings; the capacity of responding to these sensations and these meanings with feeling and conation or effort, under the spur of which further meanings may be brought to consciousness in accordance with the laws of reproduction of similars and of reasoning; the capacity of reacting upon the brain processes to modify their course in a way which we cannot clearly define, but which we may provisionally conceive as a process of guidance, by which streams of nervous energy may be concentrated in a way that antagonizes the tendency of all physical energy to dissipation and degradation." [10]

I shall venture but one more suggestion as to the relation between the brain and the conscious states and activities of the self. It is fairly evident that the communicability of thought in normal human intercourse is made possible by its getting linked with (or, as Bergson suggests, "inserted into") the processes of certain motor and auditory centers of the brain that have to do with the production and the hearing of the symbolic sounds we know as words. This linking of thoughts to the verbal centers may also aid considerably in the fixation and retention of ideas. Thought is characteristically fluent; as James suggested, "it seems, like a bird's life, to be made up of an alternation of flights and perchings." [11] The "perchings" are mental images of various sorts; and those that are of use in communication and also those that help to nail down, as it were, and make definite record of our meanings for our own use, are largely verbal. This verbal consciousness is the result of the association and of the combined activity of certain brain

[10] *Body and Mind,* p. 365.
[11] *Principles of Psychology,* Vol. I, p. 243.

centers. I am inclined to think that the contribution which the brain makes toward this fixation and retention of meanings in the form of explicit symbolic images is one of its chief functions. If there be, as many psychologists believe, such a thing as imageless thought—"flights" as well as "perchings"—it is quite likely that in it brain activity is at a minimum or is perhaps not present at all. Everyone, I presume, has the occasional or frequent experience of a sudden flash of meaning, which thereupon, with relative slowness, clothes itself, as it were, in a cluster of images or words. It is at least a possible, and I think an interesting, hypothesis, that in this quick rush of imageless insight we are experiencing the activity of the pure self, as yet unaccompanied by the lagging brain.

Before closing this chapter let me repeat that I do not insist upon the suggestions I have made as to *how* the self and its body are related and *how* they co-operate. The important point is that they do co-operate and are related. The evidence appears to me overpoweringly strong that neither the body alone nor a mere string of psychic states alone, nor both together, can begin to account for the actual facts of human effort and knowing and living—facts which are, after all, about the most certain things we have. The considerations brought forward in this chapter and the one preceding it seem to me such as to demand for their most natural explanation the reality of an active subject or self.

They also have a distinct bearing on the nature of the cosmos. If the doctrine of Interaction in any of its forms be true, it would seem that we must acknowledge in the universe a dualism of process. Not necessarily a dualism of substance: the idealistic and the realistic interpretations of the physical world are both compatible with Interaction. But the mechanistic interpretation of mind and its activities is not. If Interaction be true, there are at least two kinds of processes in the world,—the physical and the mental. Pur-

pose is efficient: hedonistic, aesthetic, moral, rationalistic considerations actually influence the outcome of events through the movement of human bodies. We cannot explain our world through a single formula, or by purely physical laws.

This to many will be a hard saying. Dualism has for long been a term of reproach, even of contempt, in philosophy; and he who would "shatter the unity of the world" is considered, in some circles, a kind of cosmic bandit. Two things must be said concerning this. The first is that loyalty to truth is more important than loyalty to even so sacred a name as Monism. If an impartial investigation of the facts points to the conclusion that the world we live in is in some respects dualistic—or pluralistic—we shall do well to make our theories conform even to this unwelcome and most heretical proposition. We should not make an actually pluralistic world monistic by insisting that it is. All of which is obvious enough, but needs to be repeated every now and then.

The other consideration of which I should like to remind the reader is this: that the only kind of Monism which a dualism of process would threaten to wreck is a Monism so stark and absolute that few of us would seriously care to defend it. Certainly the world is one in many important ways, but it is still full of a number of things, and there is no good reason why it should not have room for two—and perhaps many—kinds of process. For be it noted, the doctrine of Interaction does not (as is sometimes quite mistakenly asserted) split the world into two unrelated parts. The very essence of the doctrine of Interaction is the assertion that there *is* interaction. It is a principle, not of division, but of relation. It is a part of the general organic conception of the cosmos. Everything in the universe influences everything else. Everything in the universe, directly or indirectly, is sensitive to everything else. The world is a whole.

Chapter XIX

CONSCIOUSNESS, KNOWLEDGE, AND THE SELF

THE *cogito ergo sum*[1] of Descartes has been often attacked, and never more seriously than in our generation. Criticism has shown that the argument does not prove all that the more enthusiastic Cartesians would like to demonstrate. To found upon it and upon it alone a very lofty and Platonic structure is not wise. And yet I am convinced that the essential part of the argument is sound and that the criticisms of it do not go to the heart of the problem involved: that when Descartes' evidence is supplemented by a careful analysis of the facts of human experience it will be very difficult indeed to doubt the reality of a genuine self, which is at once the subject of knowledge and feeling and the maker of decisions. The consideration given in the preceding two chapters to the mind-body problem has stressed the need of the concept of self if we are to make sense of our active lives. In the present chapter the attempt will be made to show an equal need of it if we are to understand thought, knowledge, feeling, or any form of actual human experience.

And it should be fairly stated at the outset that the facts to which appeal will be made are not the facts of self-consciousness,[2] but of consciousness. The position I shall

[1] As so few Americans of the younger generation any longer study Latin, let me (with humiliating apologies to my own contemporaries) translate: *"I think therefore I am."*

[2] As Mr. Dawes-Hicks seems to think they should be. See his paper in Supplementary Vol. No. VIII of the Papers of the Aristotelian Society, p. 187f.

seek to defend is not that the individual's awareness of himself, or the analysis of the "me," is knowledge of self and proof of its reality. Our self-consciousness is built up slowly and is dependent upon many adventitious circumstances; and it is conceivable that a man of extremely non-reflective type might never form a notion of himself. The thesis of this chapter is the much simpler (though it may at first appear the more difficult) one, that experience, consciousness, of the human sort, no matter what the object of its awareness, is the sort of thing that naturally points to and inevitably presupposes an existent subject.

To return, then, to Descartes' *"cogito."* If you read into the *"sum"* the conception of a self which shall be simple, unified, enduring, immortal, substantial, and I know not what else, plainly you will have a considerable task to prove it by the mere *cogito*. But it will be observed that no such large claim is made in the literal argument. And when the argument is looked at in the literal and simple way, it seems to be hardly an argument at all but a very obvious tautology. Surely *if I think, I do be*. The proposition is what Kant would call analytic. This being the case, there are only two points of attack open to the critics. One of them is what the Common Law calls "confession and avoidance": to reply, Admitted a temporary self exists—What of it? The other course that criticism may take is to challenge the truth of the assertion that *"I think." If* I think I surely exist; but *do* I think? There's the rub! Both these methods of attack have been used by critics of Descartes, and we must consider each. What we really start with, so runs one of the criticisms, is not *cogito* but *cogitatur*. "The first fact for us as psychologists" wrote James, "is that thinking of some sort goes on. . . . If we could say in English 'it thinks,' as we say 'it rains' or 'it blows,' we should be stating the facts most simply and with the minimum of presumption.

As we cannot, we must simply say that *thought goes on.*" [3] In other words, Descartes should have started with *cogitatur,* and had he done so he never would have reached *sum.*

An adequate reply to this is not far to seek. Descartes did not say *cogitatur ergo sum,* but *cogito ergo sum;* and the reason why he said this was exactly because he meant it. The question, therefore, comes down really to this: which is the more exact description of our experience as we actually observe and live it, *cogitatur,* or *cogito?* It is interesting to note what James himself has to say on this question. When, from the passage recently cited, he goes on to a more exact statement of the nature of human thinking, he corrects his former expression, observing: "It seems as if the elementary psychic fact is not *thought* or *this thought* or *that thought,* but *my thought,* every thought being owned. The universal conscious fact is not 'feelings and thoughts exist,' but 'I think' and 'I feel.' " [4]

What we might call the *cogitatur* view of human consciousness has always been advocated by certain schools of thought for which James had little but criticism. The outgrown Associationist Psychology, and its heir, Structural Psychology, in order to be scientific and therefore entirely impersonal, left out, in its description of human consciousness, all reference to a subject. In the hands of Locke, Hume, the Mills, Bain, and even of Titchener and many of his school, it transformed human experience into a succession of sensational and imaginal presentations of a purely objective sort, which follow each other like freight cars, and all of them quite dead. All activity, all that is genuinely dynamic and inventive, all initiative, all effort, was banned

[3] *Principles of Psychology,* Vol. I, pp. 224–25.

[4] *Op. cit.,* p. 226. *Cf.* also the following from Husserl: "Jedes *'cogito,'* jeder Akt in einem ausgezeichneten Sinne ist characterisiert als Akt des Ich, es 'geht aus dem Ich hervor,' es 'lebt' in ihm akutell." *Ideen zu einer reinen Phänomenologie,* p. 160.

from such series of imaginary and conceptual objects, and a series of inactive sensa was substituted. Doubtless the heroically laborious work of these conscientious psychologists made its contribution to our total knowledge; but the picture it presented, entitled *human experience,* is entirely unrecognizable. The life of mind is not the succession of passive entities thus described. It is full of activity, pulsing with life. When we enter into our inmost selves and feel our life as we live it, we are not aware of percepts but of active perceiving, not of concepts but of conceiving, not of passive sensa but of sensing, not of static kinaesthetic sensations but of exploding emotions and efforts. Descriptive psychology has too often deluded us and closed our eyes to the most obvious of facts: we have trusted what we read in strangers' books about the secrets of our own hearts.

The logical outcome of the attempt to describe the life of mind while sternly leaving out all reference to the subjective, to the active cognizing feeling and effort of our selves, is a thorough-going sensationalism. All the active forms of consciousness are by it reduced to sensation complexes, just as all the higher forms of cognitive experience are reduced to a succession of (ultimately sensational) images. The weakness of such a position is two-fold. In the first place, as we have seen, the description of knowledge, thought, emotion, conation, in terms of pure sensa, is simply and plainly a false description. It is the substitution of an artificially constructed abstraction for a careful description of what we actually find. In the second place, it is highly questionable whether such pure sensa (out of which Sensationalism, Presentationism, Associationism and Structuralism would reconstruct our inner lives), are, outside of the cradle, ever actual at all. It may well be that the new-born child experiences these "first things in the way of knowledge"; but for the mature mind all sensations come with at least an in-

cipient reference to past and future, to other experiences, and to actual or possible activity. Most of our sensations are drenched with meaning. Our sensational facts, as John Laird has so well pointed out, are "sign facts." Each comes with a sense of relation to other sensa and of a relation to us. To aver that our awareness of objects is nothing but the existence of a series of sensa is as flagrantly false a statement of the facts as can well be imagined. *Awareness* is a term whose peculiar fitness in description of our experience everyone must recognize; and part of the very meaning of awareness involves someone being aware of something. A color, a smell, an ache cannot be *aware of* or *know* anything. Only a subject can do that. This traditional understanding of the term awareness, common alike to philosophy and to common sense, is not due to the influences of grammar, as has been more than once asserted. We do not believe that *we* act or that *we* are aware merely because we have learned that every verb has a subject. The universal human recognition that a subject is here requisite is due to the very nature of human awareness,—to what we find in all our acting and experiencing. In fact one might well raise the question whether the rule of grammar to which reference has been made, that a verb invariably needs a subject, does not owe its ultimate explanation to the universal recognition that acting so far as known from within involves an actor, awareness a subject, and thinking a thinker. The more this question is analysed and clarified, the more certain does it seem to me that *since I think therefore I am.*

A further and, to my mind, decisive consideration in this connection is the following. The upholder of Sensationalism or of extreme Naturalism does not merely happen to have certain ideas about the nature of thought: he insists that these ideas of his are true. He believes, in other words, that he is thinking about something, and that his thought, as

expressed in his words, corresponds with his actual referend. Now if this belief of his is true, then it is not true that thinking is merely a succession of mental pictures or sensations without reference to anything that transcends them. He cannot have it both ways. It thus transpires that the denial to thought of the power of transcendence—or, to put it in reverse form, the assertion that all mental activity is merely a series of sensa without conscious reference to what is beyond themselves—is ultimately unstable. Any such doctrine, as Professor Jessop has excellently expressed it, "is either meaningless or absurd: meaningless if it does not claim to be true, absurd if it does claim to be true, since its content contradicts the claim made for it." It would thus seem to be impossible even to deny the fact of transcendence, and the necessity of a subject in knowledge, without asserting them.

The question, however, may be raised (as was suggested a few pages back) whether a *continuous* and *enduring* self be required by the facts of human consciousness. Granted that there must be a thinker if there be a thinking process, need it follow that it is the same thinker that continues to act throughout a series of such processes? This question can best be discussed by considering the alternatives to the enduring self that may be suggested. It is ultimately meaningless to propose "consciousness" or "the stream of consciousness" as a substitute for the continuous and conscious subject of experience; and so far as I am aware the only proposal for such a substitute to which careful thought has been given [5] is James' hypothesis that the self is of a purely momentary nature,—is, in fact, merely the present moment of consciousness, the passing, judging thought. Such a temporary self would be in no substantial or transcendental

[5] It would be more accurate to say the only proposal in Western philosophy; for the Sautrantika School of Hinayana Buddhism worked out almost the same hypothesis, in the First or Second Century B.C., in India.

way identical with its predecessor, but would inherit from it all that it had owned, and hand on to its successor all that it had inherited and itself possessed. "Each later Thought, knowing and including thus the Thoughts which went before, is the final receptacle—and appropriating them is the final owner—of all that they contain and own. Each Thought is thus born an owner and dies owned, transmitting whatever it realized as its self to its own later proprietor." [6]

This suggestion of James probably offers the best substitute for a self that has yet been offered; but it is interesting to note the fact that very few critics of the self have taken it up and seriously pressed it. Instead, they have chosen to avoid a careful and detailed study of the problem, contenting themselves with assertions of the linguistic origin of the self-concept, or of the impossibility of reconciling the self with science. But while it is interesting that James' doctrine of the series of momentary selves has been silently dropped by his fellow critics, it is not very surprising. For a moment's thought will show that the proposal has serious difficulties.

In the first place, the hypothesis is meant to be—and so far as it has any strength it must be—essentially empirical. The appeal in its favor is not to logic and analysis but to experience. "It is a patent fact of consciousness" writes James, "that a transmission like this [from momentary self to momentary self] actually occurs." [7] But if it be an empirical fact that these momentary selves succeed each other and transmit their inheritance of experiences, it must be possible at least to find them. And can one seriously maintain that such a momentary passing self is ever to be found? The last appeal must be to the reader himself: hence I can only ask, Do you, sir, find your "stream of

[6] *Principles of Psychology,* Vol. I, p. 339.
[7] *Ibid.,* p. 339.

consciousness" going along bumpity-bump in the fashion indicated by the proposal? Can you distinguish these selves from each other? Do you, can you, ever find one of them? Is not your life, rather, the continuous flow of *your* experience, the parade which you watch, the flowering of your purposes, acts, feelings, and thoughts? To me, at any rate, it seems plain that the momentary self of James' hypothesis, distinct from and succeeding and succeeded by other momentary selves, is an utterly unempirical and purely imaginary entity. You can, if you will, artificially cut up the passage of time into separate sections by the use of the stop-watch. But the life of mind is not thus in itself divided.

Nor is this lack of empirical evidence in favor of what purports to be a wholly empirical conclusion the only difficulty which the proposal in question has to face. The central characteristics of each of the hypothetical momentary selves is that of ownership: each "owns," during its little life, all the riches of the individual's past, which it inherits from its predecessor and passes on to its successor. Each is "born an owner and dies owned." Now what, I ask, is the literal meaning of this figurative term *ownership?* Plainly, the assertion that a passing thought "owns" an object must mean that it is conscious of the object. If it does not mean this, the phrase means nothing at all. But the most cursory observation of our conscious life will surely show that, during at least a very large part of our time, we are conscious of objects which do not come to us from immediate sense perception and yet which formed no part of our experience in the immediately preceding moment. This is true whenever retention of anything not consciously present in the immediate past in any wise colors our experience. Here we have what James must have meant by inheritance if the word really means anything; yet the "present moment" can-

not have inherited this reference to the past from its predecessor since the predecessor did not itself possess it. You cannot inherit from some other self what that self never owned. The undeniable carrying on of the momentarily forgotten but now revived past into the present would be the natural concomitant of a continuing and enduring subject; but is no more consistent with the hypothesis of separate successive "selves," each dying when the next is born, than it is with the cruder theory of Associationism which James and others have so completely refuted. When I recognize that the color I am at present thinking of but do not see is the same shade of red as that which I saw yesterday; when I turn my attention suddenly from a philosophical discussion to answer the telephone; when a pain disturbs my enjoyment of music; when through an hour of concentrated activity I carry on a lively debate; when through the course of thirty years I bring to completion a purpose which I have cherished since youth, it is impossible for me seriously to doubt that it is one and the same self which is the observer and actor of the whole of each series. The attempt to explain, or even to describe, these experiences on any theory that denies an enduring and continuing self or subject, will end in nonsense; and the more careful and explicit the attempt, the more obvious and indubitable the nonsense will be.

I have spoken of James' refutation of the associationist point of view, and it may throw further light upon the subject of this chapter to get before our minds the essential nature of the refuted position. The fundamental teaching of associationist psychology came really to this: that psychic states can be treated pretty much as physical objects—like water drops in a stream or like marbles in a bag. They can be put together and taken apart; compounded and analysed; each is just a plain entity that follows another entity and bumps against a third—each inside its own skin with no

nonsense about it. If this gave a true description of consciousness, plainly no self would be needed other than just the bundle or collection of psychic states. But this whole associationist point of view was refuted before ever it was formulated, by the very founder of Western psychology—Aristotle himself. In the *De Anima,* and again in the *De Somno et Vigilia,* he points out two facts of the mental life which imply an inner unity which no Associationism can find room for. The first of these is that in addition to actually seeing and hearing we perceive that we see and that we hear.[8] The second fact is the power of comparison. "With separate organs we could not judge that sweet is different from white, but both objects must be clearly presented to a single faculty. . . . That which judges judges instantaneously and hence as an inseparable unit in an inseparable time."[9] It is from these facts that he deduces the necessity of conceiving a *sensus communis,* which in principle is not different from a central unified self. Plotinus has a similar argument for the unity of the self.[10] It is interesting to note in passing that, centuries before Aristotle's time, the psychologists of India had been led by similar arguments to a similar conclusion.[11] The impossibility of construing the facts of comparison and others like them without a comparer which stands outside of the collection of the things compared has been more carefully expressed by several modern thinkers, notably Green, Lotze, James, and Ward. "No possible number of entities," writes James, "can sum *themselves* together. Each remains in the sum what it always was: and the sum itself exists only for a by-stander who happens to overlook the units and to apprehend the sum as such. . . . Idea of *a* plus idea of *b* is

[8] *De Somno et Vigilia,* 454 *b.*
[9] *De Anima,* Book III, Chap. 2.
[10] *Enneads,* IV, 7.
[11] In addition to the five senses they teach there must be *manas* or the mind as a central organ.

not identical with the idea of (*a* plus *b*); it is one, they are two; in it what knows *a* also knows *b*. . . . This argument of the spiritualists [in favor of a third entity, the soul] against the associationists has never been answered by the latter." [12]

For my own part, I do not see how this argument is to be answered by them or by anyone else. And as a piece of criticism it would seem to be equally fatal to James' own view which we have been considering. For it is impossible to see how a passing pulse of consciousness could really compare two other psychic pulses. Comparison is out of the question unless "what knows *a* also knows *b*"; and I cannot understand how a passing thought that is not the thought of a continuing self can know either *a* or *b*—*i.e.*, either one of two previous thoughts—since by hypothesis they will both be over and gone when the so-called knowing thought comes into being. Comparison, and for that matter any kind of knowledge, is never a purely passive affair: it means activity, and activity extends over an appreciable time. But the momentary self of James has none of the requisite continuity, but is ever giving place to a new self, as one picture is replaced by another on the cinema screen. James has undoubtedly made some advance over Hume, but he has succeeded in doing so only to the extent that he has moved in the direction of a real self. As a fact, James saw the weakness of his own proposal, and in his *Pluralistic Universe* renounced it. "Shall we say," he wrote in that more recent book, "that every complex mental fact is a separate psychic entity succeeding upon a lot of other psychic entities which are erroneously called its parts, and superseding them in function, but not literally being composed of them? This was the course I took in my psychology. . . . But if we realize the whole philosophic situation thus produced, we

[12] *Principles of Psychology* (Holt), Vol. I, pp. 158, 161.

see that it is almost intolerable. It makes the universe discontinuous. These fields of experience that replace each other so punctually, each knowing the same matter, but in ever widening contexts, *can* they have no *being* in common when their cognitive function is so manifestly common? The regular succession of them is on such terms an unintelligible miracle." [13] Some of my readers will recall the passage in James' essay which follows the words I have quoted, a passage in which he tells us how, after years of thought, his initial prejudice against the concept of a self brought him to an *impasse*. "I saw that I must either forswear that 'psychology without a soul' to which my whole psychological and Kantian education had committed me—I must, in short, bring back distinct spiritual agents to know mental states—or else I must squarely confess the solution of the problem impossible." [14]

It is interesting, but in our investigation hardly significant, that for temperamental reasons James' choice in this dilemma was to throw over logic and the whole outcome of his reasoning, and in place of it to regard the problem as unsolvable. I think James regularly preferred an unsolvable problem to a solved one; it is much more interesting. But for us the thing to note is the course of James' thought *before* he threw logic aside—a course which forced him against his will to admit the necessity of a distinct spiritual agent or self.

The continuity of thought plainly implies the reality of a continuing self or subject. The unity of thought requires the same presupposition. Though I am no Kantian, I recognize that upon this point Kant made a real contribution to our understanding of thought and knowledge. Comparison, the recognition of likeness and difference, the *comprehension*

[13] *Pluralistic Universe* (Longmans), pp. 205–6.
[14] *Idem.*, p. 208.

of a series of events, display a unity which is not to be found in the mere collection of the objects and separate states involved, and explicable only if the subject which compares and comprehends is in some sense separate from the states and objects observed. In the act of thinking, a unity is requisite which could not possibly come from any psychic state nor from anything else except a unitary actor who holds together in a single grasp the various considerations which form parts of his thought. These considerations, of which I speak, form parts of the thought as a series of psychical existences. They do not form parts of the thinker. That they may belong to what we know as an actual thought they must be brought together and held together by the act of a thinker, an *I*, who is, or may be, conscious of them as *his* thoughts. *"Das ich-denke muss alle meine Vorstellungen begleiten konnen."* [15]

Especially obvious in recognition, in the feeling of acquaintance and familiarity, is this logical implication of a subject. When one recognizes an emotion, a sensation, a thought, when one finds a universal or essence characterizing a number of separate existences, the sense of identity is central, and the assertion of recognition is meaningless unless identity of essence be actual. But no mere psychic state, succeeding upon another psychic state, could perceive this identity. Only a perceiver, a subject to which each of the similar experiences has been object, can do this. You cannot think out the experience of recognition in any other way. Two successive experiences may be as similar as you please; their mere factual similarity no more than their mere sequence can account for the fact that their similarity—and their sequence—is recognized. It must be noted that we are here dealing not with a passive sequence of passive events, but with an active process which by its very nature points

[15] "The I-think must be able to accompany all my ideas."

to and presupposes, not a mere passive logical aspect, but an active subject and thinker.

If, as I have tried to show in the preceding pages, Associationism (and Structuralism) are unable to account for knowledge and the activity of the intelligence, it seems hardly worth while to spend any time on an analysis of the attempts of Behaviorism, in its various forms, and *Gestalt* to do the same. For the considerations I have stressed in criticism of the older schools hold even more obviously of the later ones. As behavioristic theory, when pushed home, necessarily either makes of consciousness a mere epiphenomenon or denies it altogether, I have not thought it worth while in this volume to give it any special consideration. The "stimulus-response" view of intelligence, while it does not deny the reality of consciousness, omits from its account that activity of the subject in seeking out and discovering relations which is the essential thing in intelligent, as compared with merely associational, reflex, or bodily processes. The *Gestalt* school, while keenly aware of the insufficiency of either the associationist, behaviorist, or stimulus-response attempts at explanation, and while going on with the analysis of intelligence in a distinctly hopeful direction, stops its course in a position peculiarly lacking in equilibrium and seems permanently suspended in mid-air. The *Gestalt* or configuration is displayed as the solution of each active problem and as the explanation for intelligent activity. But plainly it is only the *perception* and *use* of this "configured" situation on the part of the man or animal that can explain anything; and, as has been so often pointed out in criticism of the associationist school, without a perceiver the unity and activity involved in any percept or concept, or in any realization of or utilization of a *Gestalt,* is quite inexplicable. An unrealized *Gestalt* is not something that can prompt or guide intelligent response. But a realized (or subjective)

Gestalt presupposes and can be created by an intelligent subject and nothing else. As Wyatt has said, "the configuration does not exist in its own rights. The result of apprehending (and accommodating behaviour to) a succession of related movements and of apprehending these as related to a given end is that they will 'fall into shape' or constitute a configuration. The configuration is not the explanation of the intelligent process, but is explained by it. The *Gestalt* psychologist puts the cart before the horse." [16]

The type of argument I have used in criticism of all these schools is in considerable degree epistemological. It seems to show—and in my opinion it does show—that recognition, thought, knowledge presuppose a subject. Many Kantians, however, in their fear of realistic conclusions, as well as some non-Kantian philosophers of the pure conceptualist type, in fear of hypostatising, while recognizing the force of the epistemological argument, insist that it must not be taken as indicating the reality of an *existent* self. The self, they insist, should be regarded only as a logical entity, the necessary presupposition of thought; so much is required by a sound epistemology, but beyond that conclusion we have no right to go. Such a refusal to take the step which their own logic calls for seems to me the acme of skepticism. The realist is often attacked by Kantians for recognizing a non-rational element in the existent, but at any rate he does not doubt that so far as reason can be applied it holds of the entire existent world. For him the presupposition of all discussion, of all attempt at justifiable affirmation or denial concerning the existent, is the recognition that the laws of reason are dominant everywhere, that the self-contradictory cannot be, and that what cannot be denied without defiance of logic must be. To take any other point of view is to throw open the doors to the widest and wildest skepticism.

[16] Wyatt, *The Psychology of Intelligence and Will*, p. 42.

If, therefore, a sound epistemology shows that such things as recognition and thought are meaningless unless there be a unifying subject or self, the only conclusion that can be drawn is that such a self does actually be. This means, not merely that we must conceive it, but that unless we are to stultify our thinking we must believe it to be actual and existent. If such an admission seems to the idealist dangerously realistic, let him do with it what he can. Let us hope, at any rate, that his loyalty to reason will prove stronger than some anti-realistic prejudice. The fear of hypostatising is sound and healthy when one is discussing essences of the Platonic realm; when in a discussion, such as ours, concerning the existent world, rising out of the empirical facts of human experience, such a fear is very close to superstition.

Both epistemological and psychological considerations, therefore, point to the necessity of acknowledging an existent subject or self if we are to have any real explanation for the unity which must be, and which is, in the life of mind. As Lotze has expressed it, "We come to understand the connection of our inner life only by referring all its events to our ego, lying unchanged alike beneath its simultaneous variety and its temporal succession. Every retrospect of the past brings with it this image of the ego as the combining center: our ideas, our feelings, our efforts are comprehensible to us only as its states or energies, not as events floating unattached in a void." [17] The fact that the content of consciousness is often broken into discordant parts is true, but is irrelevant. For the kind of unity here in point is not like the unity of a dozen good peaches, or of a Chinese puzzle, not the unity of similarity nor of the coherence of content. The unity of the mind which points to the existence of a self lies in the fact that whatever the

[17] *Microcosmus,* Eng. Trans., Vol. I, p. 154.

content of my mind, *I know it,* and I know it as the content of *my* mind. To quote once more from Lotze, "Our belief in the soul's unity rests not on our appearing to ourselves as a unity, but on our being able to appear to ourselves at all. . . . What a being appears to itself to be is not the important point: if it can appear anyhow to itself, or if other things can appear to it, it must be capable of unifying manifold phenomena in the absolute indivisibility of its nature." [18]

There is one further essential characteristic of thought and knowledge presupposing an active, continuing, and unified subject, of which (though it has been several times stressed in the course of this book) the reader should be once more reminded. I refer to the fact of transcendence. Without transcendence neither knowledge nor meaning is thinkable, and all discussion, agreement, or disagreement is out of the question. But transcendence means conscious reference to more than the immediate object of awareness. No mere psychic state could conceivably refer, in this fashion, to what is outside of the whole psychic stream. Such reference can be made only because the psychic state is the act of a being that is more than just that. If there be no more to the human mind than a succession of sensa which just are what they are—colors, smells, tastes, images—such outer reference as transcendence involves is quite unthinkable. If mind be nothing but a flat piece of psychical surface, with no active self, no thinker of an Other, transcendence is out of the question. Thinking is not a mere succession of psychic states. It requires a thinker, who in his intention transcends all his psychic states and refers to more than he experiences.

The same conclusion results from a consideration of the nature of judgment. As Oesterreich (following the suggestion of Brentano) has conclusively shown, a judgment is

[18] *Microcosmus,* Eng. Trans., Vol. I, p. 157.

not a mere awareness of the meaning of a proposition. It is essentially active and subjective. In judgment one does not merely think an object or an "objective," (to use Meinong's term): one asserts its reality, one declares a proposition to be true.[19] And by a self one means exactly the active subject that does that sort of thing—a sort of thing, be it noted, which neither an adding machine nor a victrola, nor a collection of unconscious nerve cells, nor a succession of passive psychic states could conceivably do.

Many of the considerations concerning unity and continuity which I have been urging are quite as pertinent to the affective life as to the forms of cognitive activity. As everyone knows, there is about feeling something peculiarly subjective. Feeling tone is notably different from sensation or ideation. It is less objective; it is relatively independent of external objects and peripheral stimulation. It is, in fact, the *way one feels*—the *state* of the self rather than its object. Even the simplest forms of feeling have this subjective quality and bear evidence of the reality of the self to which they point. I hope this assertion does not seem dogmatic to the reader, or in need of proof. The only test to which it can be referred is self-observation, and on this point I do not see that there can be any doubt as to the unspoiled deliverance of normal introspection. As Oesterreich has said, "It is I that am joyful or disturbed, enraptured or irritated, calm or angry. All these feelings of myself are ego-conditions [*Ich-Zustände*], affections of that which I call 'me, myself,' and which in all these conditions remains

[19] "Im urteilen denke ich nicht bloss diese Existenz, sondern ich behaupte sie, ich stelle sie fest, ich anerkenne sie, alles das sind entweder ganz gleichwertige Ausdrüke oder sie enthalten doch alle einen identischen Kern, der eben das Urteilen ist. Diese Funktion nun geht natürlich stets von einem Ich aus: ich behaupte, ich stelle fast, ich erkenne an, dass ein Sachverhalt besteht. Ein Urteilen, das nicht das Urteilen eines Ich wäre, gibt es nicht." Konstantin Oesterreich, *Die Phänomenologie des Ich in ihren Grundproblemen*, Leipzig, 1910. Verlag von Johann Ambrosius Borth, p. 157.

identical, no matter how varied the feelings and passions may be. This fact is directly evident. A sorrow or a joy which were not the sorrowful or the joyful state of a self are things utterly unthinkable. One cannot say what they could be. To assert their reality would be like asserting the reality of a motion which was not the motion of anything. Both assertions would be meaningless and would be immediately recognized as such. There can hardly be any discussion of such a matter." [20]

The James-Lange analysis of emotion into kinaesthetic sensations in no way reduces the force of this immediate testimony of our direct observation. One might draw attention to the fact that recent investigations of Cannon, Sherington, and others have thrown considerable doubt upon the theory, and made it appear that typical emotions can rise when all kinaesthetic sensations have been made impossible. Aside from that, however, and even granting that James may have been right in finding a large amount of sensation in every emotional experience, it is still very questionable whether there be nothing else than this, or whether a mere collection of kinaesthetic and other sensa would by itself be recognizable as an emotion. Personally I very greatly doubt it. The sensations which I discover as present when I experience an emotion seem always to be blended with a fairly prominent reference to myself. The experience of goose-flesh, dryness of the throat, coldness and shivering, and the other things named in Darwin's admirable description of fear,[21] might conceivably be present with no thought of self. But such a purely sensuous experience would be easily distinguishable from what I know as fear. In all cases of fear it is plainly *I*, or some other self, who is afraid.

[20] *Die Phänomenologie des Ich*, p. 7.
[21] Which James quotes with approval.

Equally unquestionable is the sense of self in the experience of activity, especially when effort is required. It is, I suppose, in trying to do something that is difficult, in pushing a heavy object, in resisting a moving one, in lifting a weight, in struggling against an antagonist, that one gets in infancy one's first notion of oneself as different from and contrasted with other things. We know ourselves first of all as centers of force, as powers, as sources of energy, as entities that can do things. The experience of making an effort *is* the experience of *ourselves* making an effort. The moment we have, by some device of introspective method, analysed it into a collection of kinaesthetic sensations, it ceases to be an experience of effort, it vanishes and is replaced by something essentially different. When I try to do something it is consciously I that is trying; and if *I* be subtracted, the experience is utterly transformed and no trying is left. The world *trying* becomes for us meaningless unless there be some self who tries. The whole tingle and character of the experience of determined willing, of attention with effort, of obstinate sticking to one's resolution against difficulties, is bound up with the immediate consciousness that it is *I* who am doing these strenuous things. Leave that out of account, talk only of puckered eye-brows and clenched fists and grinding teeth with the sensations that come from these bodily activities, and your description, if intended as a description of will, becomes unrecognizable, and to all your listeners except those whose minds (as Bishop Berkeley would say) are debauched by psychology, you will seem to be describing the hypothetical experience of some of the lower animals or of some imaginary inhabitants of a possible planet. Astral or animal experience it may be, but human volition it certainly is not.

Effort, or attention with effort, is in the opinion of several leading psychologists the central and characteristic aspect

of conation. The interpretation one gives to these words is crucial to one's entire view of human nature, in fact to one's whole philosophy. As commonly used, the word attention has two distinct meanings, both of which are appropriate, both of which are backed by good usage, and neither of which is reducible to the other. Sometimes attention is defined as the power of the mind to select, and concentrate upon its object, or its power to prolong consciousness; sometimes it is identified with some particular character of the mental content, such as clearness, or with certain kinaesthetic sensations, such as muscular movement and strain. As I have said, each of these uses of the word is justified. The first of the two would be considered by those not trained in psychology as the true and natural description of what one finds when one concentrates his attention, while the second would seem to such a one a bit odd, and perhaps hardly recognizable. But this second way of treating attention is natural and proper for the psychologist, because his business is to observe and analyse the content of experience, and only the content side is really analysable. He, therefore, consciously leaves out of account what we might call the subjective aspect of the common experience, and abstracts from the total living whole only so much as can be identified ultimately with the simple constructs known as sensa and sensuous images. For his purposes—which, like those of most scientists, are partial and abstract—this attitude is justified and appropriate. But actual falsification of the record begins when this abstract method of dealing with reality is asserted to be the only justifiable attitude, and when the assertion is made that the life of the mind is literally capable of being analysed into, and that therefore it consists of nothing but, these relatively artificial products of abstraction. The motive for this attitude is the quite comprehensible, perhaps even laudable, but none the

less misleading ambition of the analytically minded scientist to extend his method to all reality, and to reduce the world and man to a series of easily manipulated logical constructs, each capable of description in a few abstract terms, following each other in regular sequence, and subject to something approximating mathematical treatment. It is, in short, the motive of Naturalism wherever found: the desire for complete explanation of the higher and more complex in terms of the simpler, of the whole in terms of its manufacturable "parts," even at the cost of explaining away and denying the reality of whatever resists such treatment. The logical outcome of such a method, when carried out consistently and thoroughly, is Behaviorism, Materialism, the eventual denial of consciousness and the suicide of all thought, including the very thought upon whose activity the whole naturalistic structure depends.

In the last analysis we are faced with the question: Does the word *activity* mean anything? We cannot explain away the seeming activity of the self in attention and conation by referring to the activity of the nervous system or of the physical world. For in the physical world we may infer, but can never find, activity. All that we really find is motion and the succession of events. We popularly believe that there is in the realm of matter and energy something more than the mere succession and motion that we see on the screen of a cinema; but we read this into the physical world out of our own experience. Human experience, our human lives, our acts and efforts, are the source of all the meaning that the word activity possesses. Here if anywhere it exists. Are we ourselves ever active; do we ever make efforts; is there such a thing as striving? As I recently pointed out, the answer we give to this question will be decisive for our whole philosophy. It is possible to answer either Yes or No. One of these answers is true and the other is false.

If we answer No, if we substitute for the living experience of effort the description of kinaesthetic sensations and other logical constructs which for certain abstract scientific purposes are convenient, and if we take this description not merely as an artifact of psychology but as the literal and ultimate truth of philosophy, we must go on to the denials indicated at the close of the preceding paragraph. And let us be clear about the fact that neither logic nor experience forces us to any such choice. In the concept of activity there is nothing any more illogical than in the concept of yellow. Both are names for forms of immediate experience; and there is no reason why one should be more difficult of acceptance than the other. And surely the immediate testimony of the unspoiled mind and of careful introspection witnesses to the reality of both. If we accept the purely analytic view it will not be for empirical or logical considerations, but because from certain rather sophisticated motives we choose it. The Will to Believe will be the basis of our skepticism of life. But if, on the other hand, we recognize the reality of our own activity and effort, we implicitly recognize the reality of the self. In the last analysis, I believe, there is no middle way. We must accept the reality of the self or go on to Naturalism and the suicide of thought.

Chapter XX

THE NATURE OF THE SELF

The considerations that have occupied us during the two preceding chapters show pretty plainly that both the relation of mind to body and the facts of human consciousness and thought are very nearly inexplicable unless we recognize the reality of a continuing subject or self. To show the great probability of the existence of the self does not seem difficult. But to express in concise language the nature of the self is one of the most baffling of tasks. It is a task, however, which no thinker who believes in the self and writes a book in defense of that belief has a right to dodge; and we have now reached the dreaded point where that task must be undertaken. I shall do what I can with this extremely difficult problem, but I am not sanguine of satisfying the reader, and I am certain that I shall not satisfy myself. I therefore bespeak the reader's sympathetic co-operation. If he does not believe in the reality of the self at all, it will be kind as well as wise for him to skip this chapter and close the book. If, with me, he is convinced that some kind of self is real, or if he is at least hospitable to that possibility, may I ask him to read what I shall have to suggest not as though he were taking from me a dogmatic statement of unquestionable truth, but as if he were co-operating with me in the common task of feeling our way to a dependable and probable conception.

In this common undertaking of ours we must first recognize that the word "self," like so many other terms taken

into philosophy from common speech, is ambiguous.[1] In the discussions of the preceding chapter we have used it as synonymous with continuing subject or ego. The word is also used at times as a synonym for personality and character, with all the richness of empirical content that goes with what is sometimes called the *Me*. The distinction between the I and the Me is important and helpful, and the relation between the two must be briefly considered.

The self defended in the two preceding chapters is not a merely logical construct, but is conceived as an existent being. Since it is an existent it must have character—it cannot be a merely abstract and colorless X. It must be a substance in the sense of that word as discussed in Chapter VI,—"an existent substantive," "an existent group of existent qualities." Since it is presupposed in all body-mind relations and in all consciousness and cognition, it must be recognized as already real in the first conscious stirrings of the new-born, or the unborn, infant. I am not sure that it comes "trailing clouds of glory," but it must be conceived as possessing *some* characters of its very own from the very first.

I think we must say that as a self or subject it has its very own qualities. In addition to these, since it is "organic to a body," it possesses in a secondary sense the various characters of the body in which it finds itself. (The understanding reader, who is not eager to take critical advantage of every pitfall which the limitations of language

[1] Baldwin and Mead, together with many psychologists and many idealist philosophers, use the word "self" to mean the individual's idea of himself, his "self consciousness." From this usage it naturally follows, especially as developed by Mead and Baldwin and by certain objective idealists and pragmatists, that there can be no self except in a social group, that the self and the *"socius"* are mutually dependent, that a man brought up alone (were that possible) could not have or be a self, etc. It goes without saying that this confusion of the self with the conception of the self is antithetic to the whole position maintained in this volume; and, consequently, that the various *social* conclusions which follow for those who have thus confused their terms do not follow for us.

lay before me, will realize that the spatial expression I have been almost forced to use is not intended in too literal a sense.) The self *is* not the body, but Nature provides it with a body, which it uses as its tool, its avenue of expression and action, of communication and life. This body is the outgrowth of two older human bodies and inherits from them many characteristics of its own. Among the things thus inherited are a nervous system and brain, and a considerable group of instincts or tendencies to action. It is through this body with its inherited characters and potentialities that the young self inherits from its parents and its race. It is possible that this bodily inheritance (with the psychological tendencies that grow out of it) constitutes the sum total of the new-born self's native characters, but I do not think it is so. There is, I believe, a minimum of character (of course largely potential at birth) which belongs to the self as such, and which is not inherited through the body.

As the young embodied self develops its physical and mental powers, unfolds its petals, and gains new experiences, especially those of a social sort, it gradually acquires an additional group of characters. These come to it from education in the broad sense of "social heredity." All three of these groups of qualities merge with each other and develop together, forming the personality or character of the maturing man. As he moves on through life every act that he performs, every experience he gets, molds and modifies and establishes this character: all these influences he carries with him, thus bearing upon his back, as it were—or better within his veins—his entire past and his own original and unique contribution. If we are asked whence come the constituents of a man's character—his Me—we must, therefore, reply that presumably they come from three sources, though now so intermingled as to be largely

indistinguishable: from his experience, his racial inheritance (through his body), and the original and unique characteristics and tendencies which belong to him as an ego, or subject.

The self as subject, the self defended in the two preceding chapters, is in a sense the "pure ego" of traditional philosophy. It is at least that. But I hasten to add it must not be taken as too pure an ego. A self completely out of time, a substance without attributes or distinct from them, a permanent and unchanging identity, a monad with no windows, a soul quite pure from the taint of the empirical—such an imaginary, or unimaginable, entity might belong in heaven but surely would have no place on earth. In Bradley's words, it would be a man's self about as much as is his star. Such a being could never change, could have no interests and no character, and could do nothing but abstractly observe. If human selves are of that sort, then all human selves are exactly alike. This, of course, is a conceivable situation. It amounts, in fact, to just about the situation defended by the great Indian thinker S'ankara. Such a denuded conception of the self, it must be added, fits very well into the cosmic scheme of the Advaita Vedanta which asserts that the changing world of the many is essentially illusion; but it would answer but a few of the questions, and help us out of but few of the difficulties, which face us if we accept the reality of the world we live in and try to make sense of it. The actual individual self has many characteristics peculiarly its own. As Professor Perry has expressed it, the person "consists in capacity, skill, taste, judgment, sentiment, which no one can feel or exercise in his place. He is a substantive thing—not a collection of deeds, but a complex tendency to act in ways which are at the same time diverse and characteristic, and which are ready to unfold in the presence of new occasions. The world about has come to acquire for him a peculiar and

consistent set of meanings, and he in turn has acquired a system of meanings for his fellows, as the reliable object of their expectations. He is the common term of many such relationships—reciprocal attitudes and tacit understandings of the utmost delicacy and elaboration. The personal terms of such relationships are not dead fence-posts which can be replaced, they are living trunks and roots, and the relationships are their intertwining branches." [2]

From the beginning I have maintained that the self is a substance; and that means an existent being possessing qualities. But there are many grades and many kinds of substance and a self is a substance of its own kind. It is *sui generis*. I cannot make this too emphatic. One of the chief reasons why the self is so persistently misunderstood, so very hard to understand, is because we naturally seek to form an image of it, even to visualize it, and naturally construct our image on the outline of the spatial things we see and handle. This is a costly mistake, but it is a natural one. Both in the individual and in the race, theory or understanding follows action, and is in all men first produced, and in many men only produced, for the sake of action. Now action, the vital needs of life, the necessities that dominate our activities as living beings in a spatial world of dangerous and useful, tangible and visible things, force us to center most of our attention on the spatial, tangible, and visible. Hence it has come about that the very notion of an entity or real being is associated in our minds with spatial characters, and even when we come to realize that there are, or may be, real beings which are not spatial, our inveterate tendency is still to think of them by means of visual images and to interpret them in spatial terms.[3] Almost the whole weight of language, moreover, goes to

[2] *The Meaning of Death,* Hibbert Journal for January, 1935.

[3] Further considerations looking in the same direction will be found in Bergson's *Time and Free Will* (*e.g.,* p. 171). The self, which is "duration," cannot be dealt with as if it were an essence or an atom.

reinforce this already overweighted tendency. Language was made by men who were busy struggling with a world of material things; and even when the reality of a non-material world was recognized, the thinkers who wished to communicate their ideas about it were forced either to use ready-made words which really meant physical things, or else to coin new terms out of elements drawn from the old materialistic vocabulary. Thus *spirit* meant originally *breath; abstract* meant that which has been (physically) *drawn out; concept* meant that which one *grasps together* with both hands, etc. And so it has come about that every word one can discover when used to express the meaning of the self tends to betray one, and to lead the hearer, and often the speaker, into materialistic pictures the very reverse of what one really wishes to convey.

Hence, let me repeat, the necessity of realizing that by the self one means something essentially unique and *sui generis*. It is a substance, but this does not mean that it is either tangible or visible. And since it is not visible, all efforts to visualize it must be misleading. We must, therefore, not expect that the self will be a substance of the same sort as material things. As Müller-Freienfels puts it, individuality must be thought of as itself a category, not as a subdivision of some other category.[4] We shall thus not be unduly troubled by the fact that the self does not fit into our other categories, and that ways of thinking derived from handling spatial and material things do not apply to it. We must expect that our ingrained habits of conceiving in terms of the visual and tangible, and our spatialized and materialized vocabulary, will make *any* definition or description of the self puzzling and difficult.

We return, then, to our assertion that the self is a substance. And we must remember that by substance one

[4] *Philosophie der Individualität.*

does not mean an abstract core of being taken by itself, but an entity with characters. There is no substance without attributes and no characterless self without qualities or acts. As well ask for an existent form completely divorced from matter. The self is therefore full of variety. In it variety and unity are harmonized. That this can be is no miracle, except as all existence is miraculous. The assumed difficulty of harmonizing the one and the many is largely a difficulty about words. In dealing not with words but with things we find little that is hard about it. Only a simpleton or a philosopher could be astonished that an object which is a book could be your property and the outcome of a printing press and the pride or chagrin of the author. It is really not at all contradictory to conceive of the self as both one and many. And while it is true that all change is in one sense mysterious, there is no special difficulty in conceiving that the self changes—as it certainly does. The chief difficulty in the concept of change is this: that so long as we are dealing conceptually with the world of pure essences, of pure rationality, change is out of the question. No logical universal can change. Change comes into being only when we pass from pure rationality or essence to the realm of existence. As we have seen, there is an element in all existence that is non-rational. Were this not so, change would be out of the question. We need not, therefore, expect completely to rationalize change. Now the self is emphatically an existent being. Hence it will have its non-rational aspect, just as does every existing thing.

Of course questions may be asked about the self which it will be hard to answer. If the self is more than a stream of consciousness, more than a collection, it may well be asked, what is this *more?* A partial answer, and one which at least points in a hopeful direction, will be that the self is the doer of certain acts. It is the sort of being that does

the acts we find it doing. This may not be a complete answer, but it is at least as much of an answer as we can give concerning other things. Things are known by what they do: so is the self. If, then, the question be raised: What is the self aside from all its attributes and all its acts? the answer is that the self is never without attributes and that if it were it would be just nothing at all. It is *that which* has certain characters and acts in certain ways.

So much I think we must say. Much, I confess, is still left unsettled which we may well desire cleared up. More in particular, we may ask whether we should stress most the unity or the multiplicity of the self. Shall we say with Lotze that the acts of comparison, etc., demand a simple and indivisible substance, or with Laird take the more pluralistic view that the soul is "a unity of experience," that the existence of these experiences "in a unity through time *is* the soul?" [5] Perhaps either view is possible. The more empirical and pluralistic one has the advantage of seeming to make the self more verifiable in the sense of more open to immediate observation. It also makes it less open to the attack of those who feel convinced that all things are built upon the same plan. For taken thus, all that is meant by the substantiality of the soul is the fact "that any given experience must form part of a distinctive unity of experiences. It [the self] is therefore a substance in the same sense as other things are substances, though it is a distinctive kind of substance whose parts are experiences." [6]

I have said that either of these views is perhaps possible, and each thinker must make his choice for himself. For my own part I must say that, after long hesitation, I am convinced that the seemingly empirical view of Laird is really less empirical, less in accord with our actual experience,

[5] *Problems of the Self*, p. 360.
[6] *Idem.*, pp. 359–60.

than is the view of Lotze. For though it would in some ways be easier to think of the self as the same sort of substance as material things, except that it is made of psychic stuff, the facts of experience point to a much more unified being than material things possess. On Laird's view, "experiences are the stuff of the soul in the sense in which timber is the stuff of Nelson's Victory." [7] Such a view makes the self, after all, just a collection—a collection of a certain pattern, —and so is obnoxious to the obvious criticisms so often passed upon Hume's view. It would have the same sort of unity possessed by one's country: the unity, that is, of a changing group, or a unity which the beholder reads into it. What we need to express is the unity of the beholder himself, the unity of a being who beholds and acts, and who realizes the multiplicity and separateness of his acts and his objects.

The self is *sui generis* in possessing a unity of an inherent sort which no other substance possesses. Non-living material things have, indeed, relations, but no inherent unity. Many of them possess only so much unity as we read into them. The Great Bear, or Dipper, is a unity because we choose to regard it as such. My watch is a unity because of its relation to my purposes. But without relation to conscious purpose or thought it would have no unity. The unities of the physical and non-living world depend upon living and conscious beings. Living organisms have a certain degree of inherent unity. But in so far as this unity is unconscious, unrealized, it is of a potential sort. It is true that the root and the leaves of the rose plant co-operate, and that we justly find in them together a unity in variety. But it is just as true that they are *two* as that they are one. The only being that is *essentially* one is a self.

The unity-in-variety which uniquely characterizes a self

[7] P. 359.

is seen in each of its three most noticeable characters or functions. The first of these is its role as subject in feeling and cognition. The second is its agency as the actor, the doer of deeds, the one who wills in volition, the efficient cause in its achievements. Finally the self is not only the unity that lies behind each mental state and the grasper that unites and compares: it is also the unity and the unifier in successive states, the identical being that endures in the midst of its changing acts and states. As Professor Wilson has admirably put it, the self is "that which maintains itself through its experiences." [8]

The self is plainly not in space, since neither conscious states nor conscious acts are spatial. While this is true it is necessary to add, with Thomas Aquinas, that the self acts *into* space: for so it must if it is to act upon the physical world at all. A more serious question arises when one faces the relation of the self to time. On this matter the defenders of the reality of true selves are divided. Some, like McTaggart and Professor Wilson, would place it out of time altogether; while others like Laird, Oesterreich, Wenzl, and Brightman think it as temporal as any other existent thing. The considerations which Lotze has so well expressed, and which I have myself urged, in favor of the unity of the self, as based upon its powers of comparison and synthesis, would seem to point toward the non-temporal view of the self.[9] Perhaps even more persuasive are the allied considerations that grow out of the facts of our specious present. In order that such things as rhythm should be sensuously apprehended, that duration and succession should be perceptible, it is necessary (as psychology has long insisted) that we as observers should have a time-span of appreciable length. This fact has been used,

[8] *The Self in Its World,* p. 321.

[9] See also Bowman: *Spirit Time,* in Proceedings of the Aristotelian Society for 1932–33, pp. 317, 318, 320.

and properly, as a further indication of the reality of a self which observes the passing show. The question now arises, does not the ability of the self to grasp together several distinct instants of time, prove that it is itself out of time? If the eye and its total objects move together, the movement of the object cannot be perceived, since all movement is relative. And there is no doubt that the hypothesis of a pure perceiving subject, absolutely out of time, would explain very well this fact of the perception of change and motion. But I am not convinced that it is the only hypothesis which will fit the facts. It is true that if an observer watching a moving train be himself on a train moving parallel to and at an equal rate with the first one, and if he have nothing but the train in his visual field, he will fail to perceive the train's motion. But it is not necessary for his perception of motion that he should be absolutely stationary. If his train be moving at a different rate from the one he is watching, he *will* perceive motion. There is no reason why he cannot perceive while he himself is moving. I do not think, therefore, that the self must be out of time in order to perceive change in its objects. And there are considerations of no mean weight which point to the temporal nature of the self, if this be at all thinkable. If we take the self out of time we rule out all possibility of its development and change. Thereby we divorce it from its character. It becomes a pure perceiving subject which apparently, except for possible differences in accuity of vision, must be exactly like every other pure perceiving subject. Furthermore, if the self be out of both space and time, it is hard to see what could be meant by calling it existent. It would seem that such a non-spatial and non-temporal being would belong solely to the realm of essence, and as such would be a matter for logic rather than for metaphysics. At any rate, it would seem to have so little to do with the

world of action, of experience, of value, that most of us would have but slight interest in what might be said about it.

But while I feel bound to consider the self as a being in time, the considerations cited to prove it timeless are by no means insignificant. To revert to our illustration of the trains, if the self is in motion it is at least moving at a different rate from the things it observes. It is able to take in at one glance an appreciable lapse of time. Nothing else of which we have any experience or can form any conception can do this. A mere collection or sequence of instantaneous psychical events could not do this. As compared with eternal things, such as logical concepts, the self is in time—it is moving. But from the point of view of the events which it observes within its specious present it is not in time, *i.e.*, not in the same rate of change. Events which are at different instants in what is sometimes called physical time may fall within its single moment. And something like this same power of grasping together the temporally disparate is seen in wider compass when through memory, anticipation, and conception it sums up a mass of considerations, transcends the years, and becomes, in Plato's words, "a beholder of all time and all existence."

The peculiar nature of what we know as *recognition* points in the same direction. As Miss Calkins once put it, in her admirably clear analysis of Kant's treatment, "the consciousness of the identity of the present with the past is, in truth, the essence of recognition. Kant lays stress upon this 'synthesis of recognition,' as he calls it. We have, as he points out, the 'consciousness that what we think is the same as that which we thought a minute ago.' Now this identity cannot, Kant insists, belong to the ideas themselves. For, as idea of a particular moment, each idea is distinct from every other, far from being identical with it. If,

therefore, as Hume contends, there were no self,—if the word 'self' were merely a name for a succession of ideas,—then one idea never could be looked upon as identical with another which had gone before; and no one even could say, 'This is the same view, or bird note, or conclusion.' For today's landscape, or sound, or reflection is a different idea, a distinct experience, from yesterday's. Yet we do have the experience of identity—in other words, we do recognize; and the fact that identity may not be attributed to ideas leaves us but the one way to account for the existence of identity. The consciousness of identity is really, thus, the consciousness of the one and identical self." [10]

At this point the question of the knowability of the self must be raised and faced. Is the self in anywise knowable? If it be unknowable, what right have we to believe in its reality? If it be knowable, in what sense may this be asserted? Historically the most famous attack upon the reality of the self was undoubtedly that of David Hume; and this attack consisted entirely in pointing out that the self is not empirically discoverable. "When I enter most intimately into what I call *myself,* I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I can never catch *myself* at any time without a perception, and never can observe anything but the perception." [11]

There can be no doubt of the correctness of Hume's report on his introspection. The self is not to be found among the objects of consciousness. It does not follow, however, that Hume was right in the conclusion he drew from this empirical fact. Several thousand years before his time, a sim-

[10] *The Persistent Problems of Philosophy,* pp. 226–27. The Indian philosophers make a great deal of this point.
[11] *Treatise of Human Nature,* I, IV, 6.

ilarly skeptical conclusion from the same empirical facts was reached by a thinker in ancient India and brought to the attention of the sage Yajnavalkya. The conversation between the two is sufficiently instructive to repay quotation.

"Ushasta said, 'Tell me the self who is within all.'

Yajnayalkya replied: 'He who breathes in the up-breathing, he who breathes in the down-breathing, he is thy self which is within all.'

Ushasta replied, 'As one might say, This is a cow, This is a horse, thus has this been explained by thee. Tell me the self that is within all!' "

Ushasta, that is, challenges Yajnavalkya to point out to him the self as an object of knowledge among other objects of knowledge. To this Yajnavalkya replies:

" 'Thou couldst not see the seer of sight, thou couldst not perceive the perceiver of perception, thou couldst not know the knower of knowledge. This is thyself which is within all. Everything else is of evil.' After that Ushasta held his peace." [12]

The meaning of Yajnavalkya's answer is this: the self is *essentially* a subject, not an object. Hence if you search for it among objects of knowledge of course you will not find it. Had you, in your introspective search, come upon what seemed to be the self, you could be sure from the very fact of its being found that it was not really the self. For the self, since it is always subject, is essentially unknowable in the way that objects are knowable. And the very fact that you sought to find it in this way shows your utter ignorance of what you were looking for. It is not a feeling among other feelings: it is that "whose condition the feelings are." [13]

[12] Max Müller's translation, Sacred Books of the East, Vol. I (Am. Ed.), Christian Literature Co., pp. 128–29.

[13] Oesterreich, *Die Phänomenologie des Ich*, p. 12.

Are we then to conclude that the self is altogether unknowable? The question in this form is hardly to be answered. We must make distinctions and be careful in the use of our terms. Knowledge is a notoriously ambiguous word. To know *about* an object is one thing: to be directly aware of it, to have it as one's immediate experience, is another. Plainly it is only this second and direct kind of knowledge of the self, "knowledge of acquaintance," which is denied by both Yajnavalkya and Hume. It is conceivable that though we lack this, it still may be possible for us to have knowledge about the self. How, one may ask, do we know *physical* things? I do not mean, How do we know our own sensations and percepts, but how do we know the physical things all men except idealistic philosophers in their few official moments believe in? The answer to this question given by the form of Realism I have advocated in this volume is the following: We do not perceive or know physical things "directly," *i.e.*, not in the direct fashion in which we know our own sensations. But we have a strong and native impulsion to believe there are physical things corresponding to and causing our percepts, and our reflective thought discovers that we can make sense of our experience only by supposing that this native impulsion is justified. Our knowledge of the physical world is indirect: it is *knowledge about,* not *acquaintance with.* We have at least this same kind of knowledge of the self. We do not find it as we do its feelings and percepts; but everyone has a natural impulsion to believe in it, and our experience is such that no theory is satisfactory which fails to recognize self as the actor and knower, the inner unity and the inner unifier of our multiform lives. We know *that* the self is, and we know *what* it is by observing what it does. And this we know because every theory of the inner life which fails to recognize a knower and actor does violence to the

facts of experience. If this is the case, and I believe I have shown that it is the case, the fact that the self cannot be directly found is irrelevant: in fact it is exactly what, upon our theory, we should expect to be true. "How couldst thou know the knower?" [14]

But it would be only a partial presentation of the truth should we stop here. I think we do have the same kind of evidence for the existence of the self that we have for the existence of physical things; but I think we have also a kind of knowledge concerning the self that we do not have concerning any physical thing. Our knowledge of the self is in part based on inference, but it is not mere inference. According to several psychologists and philosophers, we have a kind of knowledge of the self which in a sense is direct. Miss Calkins has shown in several careful summaries [15] of recent psychological literature, that a considerable number of leading psychologists, basing their opinion on experiment and introspection, hold that we are conscious of the self. McTaggart, in his great posthumous work, *The Nature of Existence,* asserts that we know the self directly. "The quality of being a self," he writes, "is a simple qual-

[14] *Cf.* the following from Broad: "The fact that the Centre never becomes an object of introspection is no objection to the existence of a Centre unless a Centre be the sort of thing which we might reasonably hope to be able to introspect if it existed. Now, if there were a Centre which is a non-objective constituent of *all* our mental states, it seems unreasonable to expect that it could *also* be an objective constituent of some of our states. To put the matter generally: The relation of acquaintance is essentially asymmetrical, and this implies that the term which has acquaintance cannot be identical with the term with which it is acquainted. Thus, if there were a Centre, it could not be acquainted with itself, as a whole. Now, if the Centre were a Pure Ego, it would have no parts; hence, if it could not be acquainted with itself as a whole, it could not be acquainted with itself at all. On the other hand, it might be acquainted with facts of which it is a constituent; and, by comparing and reflecting on these facts, it might come to a discursive knowledge of its own existence and nature." (*The Mind and Its Place in Nature,* Harcourt, Brace, and Co., p. 586.)

[15] *The Self in Scientific Psychology* (Am. Jour. of Psy., Oct., 1915); and *The Self in Recent Psychology* (Psy. Bulletin, April, 1919 and Apr., 1927). *Cf.* also Wyatt's *The Psychology of Intelligence and Will,* pp. 232–38.

ity which is known to me because I perceive—in the strictest sense of the word—one substance as possessing this quality. This substance is myself. And I believe that every self-conscious being—that is, every self who knows that he is a self—directly perceives himself in this manner." [16] McTaggart believes that such a conclusion is unavoidable. For, he argues (basing his argument on a suggestion of Bertrand Russell's), "I can judge that I am aware of certain things—for example, of the relation of equality. I assert, then, the proposition, 'I am aware of equality.' This proposition, whether true or false, has certainly a meaning. And since I know what the proposition means I must know each constituent of it. I must therefore know 'I.' Whatever is known must be known by acquaintance or description. If, therefore, 'I' cannot be known by description, it must be known by acquaintance, and I must be aware of it." [17] McTaggart then proceeds, in his characteristically exact fashion, to demonstrate that the "I" could not possibly be known by description; and therefore concludes that it must be known by acquaintance.

This conclusion seems, on the surface, to be contradictory to the position asserted by both Hume and Yajnavalkya, with which I expressed at least a tentative and partial agreement. I am not sure, however, that the contrast between the two positions is as great in fact as it is in words. For there is certainly a sense in which McTaggart's assertion is true, and taken in this sense the assertion is one to which both Yajnavalkya and I would eagerly assent. Probably Hume would not. The self is not part of the conscious content found directly as feelings and sensa are. But in every case of knowledge we are directly aware of the "datum" not merely as a thing but *as a datum, i.e.*, as some-

[16] *Op. cit.*, Vol. II, p. 62.
[17] *Op. cit.*, Vol. II, p. 63.

thing given. The givenness is given. The datum is something given to us, it is an object of our awareness or of our thought. *All experience contains the implications of a subject.* The subject-object relation is one of the characters which we find or feel whenever we are aware of anything. It is like the stick illustration—the stick which, no matter how often one cuts it, has two ends. The self, indeed, cannot be found in the way Hume sought to find it, but the reason is that it is too near to be seen. It is, of course, the very finder, and we can never get away from it. "When me they fly, I am the wings."

To perceive or find the self as such, apart from its states and activities, is quite out the question, and had this been all that Hume intended, his denial of self-knowledge would have been entirely justified. But to perceive the activities and the states of the self is in a real sense to perceive it.[18] And if one questions whether the self's feeling states, and its acts of perception and will can be directly perceived—whether the ego can direct its attention upon these experiences and activities, the answer is two-fold. In the first place introspection shows that we selves can do exactly this, and are constantly doing it; and in the second place, if we could not, knowledge of present events, and all introspective psychology would be out of the question.[19]

These considerations about our knowledge of the self may now help to clear up certain difficulties which may have lurked in the back of the reader's mind, as I confess they

[18] *Cf.* Oesterreich: "Abstrahiert man von den Zuständlichkeiten und Akten des Ich, so ist es freilich ebenso schwer zu fassen, wie etwas die Farbe, die keine Intensität mehr hat. Überall, wo immer uns ein Ich entgegentritt, befindet es sich auch in einem bestimmten Zustande oder vollzieht es eine Funktion. Sucht man es noch ausser den Akten und Gefühlen, so kann es niemals gefunden werden." *Die Phänomenologie des Ich,* p. 227.

[19] For further discussion of this see Husserl, *Ideen zu einer reinen Phänomenologie,* pp. 151–61; and Oesterreich, *op. cit.,* Chapter IX.

have lurked in mine. He may well have felt that my thought has been bobbing back and forth between the doctrine that would make the self an abstract and blank bearer of its states, and the empirical view which identifies the self with the stream or collection of its contents—bobbing back and forth between the two, yet unwilling to accept either. The rejection of both these views may have seemed unjustifiable to some readers because of the apparent impossibility of conceiving any *tertium quid*. What I have now been saying about our knowledge of the self will, I hope, make more plain how I can still stick to my position. It is because I believe that we have a certain kind of direct intuition of the self, and this gives us a knowledge of it which, like any other knowledge of acquaintance, is incapable of being completely stated in descriptive terms. I can never tell you fully what I mean by *red* unless you know already. But in the case of the self greater difficulty is met with in the attempt at communication than I find when I try to point out red to you, because, while red falls easily under the well-known category of color, the self is *sui generis*. The attempt thoroughly to rationalize it or describe it by calling it *either* a blank bearer *or else* a collection of states, appeals to the rationalist in each of us, but really fails because there is in the self a non-rational existential aspect which can never be reached by conceptual description and which can be realized only by intuition. It may be said that we do not know the self; but at any rate we do experience it.

To resume: the self is a substance. We have considerable knowledge about it, and a certain immediate realization of it. It is not a blank and abstract substance nor a blank unity, but a substance with qualities, a unity that possesses rich variety. These qualities or characters and this variety are seen in the conscious states of the self and

in its activities. It is characterized by its passing sensa—a relatively unimportant matter—by its memories, its tendencies, its activities, its powers or potentialities for action, its efforts of attention and will, its reasoning power, its sentiments, its purposes. From the point of view of the social and ethical life, the purposes of the self are perhaps its most important characteristic. This is a fact of much significance. It is, however, possible to exaggerate its importance—that is to forget all the other facts about the self. This is exactly what some forms of Idealism tend to do. Purposes do much toward characterizing the self, but not everything; the self has other characters besides its purposes. Some objective or absolute idealists, who would gladly see the individuality of the human self, as a center of existence, surrendered, maintain that the self is not only characterized but *constituted* by its purposes. Such a position seems to me quite untenable, and must, I think, seem untenable to every man who recognizes the fundamental distinction between essence and existence. For if there be an existent world at all, *purpose simply in the abstract* has no place in it. If the word purpose is to mean anything it must mean someone's purpose. In other words, purposes presuppose a self to have them. A purpose in the abstract, a purpose that is no one's personal purpose, a purpose simply swinging in the air, is what the Germans call an *Unding*. The *esse* of a purpose is to be purposed.

The self is to be discerned in every act and moment of our conscious living. But it is probably in the free act of will that it makes itself most vividly plain. In attention with effort, in sticking to the distasteful mental task in spite of monotony, in spite of weariness, in spite of pain, we are often most obvious to ourselves. And in those crises in which the will acts against instinctive tendency, even against the biological interests of the organism, the self

shines with its own light, in its essential superiority to the merely physical and physiological and psychological. Asceticism has often been carried to utterly irrational limits, but the fact that asceticism is possible, that the soul can so triumph over the flesh as the great ascetics East and West have shown us that it can, throws a new light upon human nature. The martyrs of all time, the Irish and Indian patriots of a few years ago refusing to allow their hungry bodies to taste of food until they die of starvation for the sake of an ideal—things like these make almost ludicrous any attempt to explain human nature out of stimuli and reflexes and associations. Nor need we turn to martyrs for striking cases of the self in unmistakable action. The steady drive of the will against the choice of the weary body *most* of us have known. And in many a case where we outsiders see no sign of effort, the self may be struggling with and dominating the great mass of native psycho-physical tendencies, and its victory be all the greater, all the surer token of its own reality, because quite hidden. As with Shakespeare's heroine who "never told her love,

> *But let concealment, like a worm in the bud,*
> *Feed on her damask cheek: she pined in thought,*
> *And with a green and yellow melancholy*
> *She sat, like patience on a monument,*
> Smiling *at grief.*"

Chapter XXI

THE WILL AND ITS FREEDOM

Toward the close of the preceding chapter I suggested that it is in the act of will that the self is most easily and obviously discovered. But the phrase an "act of will" raises as many questions as it can help to answer: of which two are peculiarly persistent, one of them the psychological question as to the nature of will, the other the closely involved but deeper question as to the will's freedom and the meaning of this freedom. I am not so fond as to suppose that anything I can say will settle either of these questions; but my book would be inexcusably incomplete should I fail to suggest the attitude toward them which most naturally and consistently follows from the point of view maintained in this volume. I shall, therefore, plunge at once into the more fundamental question of freedom and determinism; and the discussion of this problem will incidentally but inevitably bring up for consideration the psychological question of the nature of volition.

I shall certainly have lamentably failed to make my position clear if at this point it be needful for me to dwell at length upon that type of "hard determinism" (to use James' epithet) which bases itself on the assertions of a materialistic Naturalism. If the reader has understood my treatment of the mind-body problem, he knows, without further discussion, at least one reason why I for one cannot accept the complete determination of our will acts by

bodily conditions and processes, and it would be a waste of time for me to elaborate further upon the theme.

But while my whole point of view rules out any theory of physical Determinism, it is equally impossible for me to accept a type of "Indeterminism" which would sever our acts from ourselves. Freedom is indeed a central and crucial part of my conception of the self,—freedom, responsibility, the power of initiative and origination, the choice of acts on account of which praise and blame may be meaningfully ascribed. I do not see that any of these things would be possible on the basis of a doctrine that denied all determination to a man's acts. Should we accept such a view we should have to say that a man's character in no way influences his actions and choices, and his choices and actions in no way indicate his character. If a "good man" is found performing good acts it would be, on the proposed theory, solely by accident: evil acts might quite as well be expected from him. Praise and blame would be impossible, for what can either mean unless it be the attribution to a person of a good or bad character as shown by his acts? In fact the word character becomes quite meaningless on such a supposition: for it is by their fruits that we know the nature of men as well as of trees. "A good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit." Good deeds come from good men as naturally and inevitably as roses comes from rose-plants. One cannot gather grapes from thorns nor figs from thistles.

If the moral categories are to hold, or if we are in any way to count on or understand our fellows, the extreme doctrine of Indeterminism is out of the question. But so also is the extreme form of Determinism from without. There remains a way of viewing human acts and choices which is properly known as Self-determinism. Our acts are

determined by our selves. You are the kind of man that makes certain kinds of choices; and we find in your acts a good deal of evidence as to your character. We explain your acts by your character. For every man with a nature that is at all definite there are certain things which we rightly say he may be counted on to perform, and certain other things which he will not do. We are free, free to will what we like. But what we like depends on what we are. You can certainly decide each alternative exactly as you please: the amplest freedom imaginable is yours. But what you please depends on the kind of character you have (how else could "please" have a meaning?); and this is yours antecedently to the particular will act which it determines. You are the kind of man who prefers such-and-such things; and if you wish you preferred other things instead, it is because you already really do prefer them. One always chooses to do that which under the circumstances one would rather do than anything else. But what one would rather do than anything else depends upon what one is. One's genuinely possible acts are limited not only by the potentialities of one's body but by one's nature.

But within these general limitations, these types or classes of possible choices, and also within those fields of action upon which the traits of one's character have no bearing, there may possibly be a certain amount of leeway and indeterminism. I am not sure that such indeterminism exists, but I see no good reason for denying its possibility. An instance of the sort of thing I mean may be found in what moral treatises sometimes call "the freedom of indifference." In starting a trick or puzzle one says, "Choose a number between 1 and 10." Is there any good reason to suppose that seven of the eight seemingly possible choices are really impossible for me? To be sure, in some cases I may have a definite motive for choosing one rather than

any of the others; or the image of one may be prominent in my mind; but in many cases I am aware of no such image and no such motive. I just pick one of them without motive and without explanation. Conceivably, I grant, the choice may have been determined by some previous event in my mind; but what is the reason for supposing that it *must* have been? If we could have the reason stated, our discussion might be more illuminating. The reason can hardly be of an empirical sort; and it will pretty certainly turn out to be the *a priori* prejudice that every event *must be* determined by some preceding event. This conclusion will then function as ground, and we shall go merrily and endlessly round the old, old logical circle. I can find no logical or empirical evidence for the view that a choice of this "indifferent" sort is necessarily and absolutely determined. It is I who make the choice, the choice is my act; but it may have been absolutely unsettled in advance.

A similar case of possible lack of determination is the choice of means, when one has no preference for any of three or four possible means by which the chosen end may be attained. When there is a choice between ends, and these pertain to the traits of a man's settled character, we have (as we have seen) a different matter. Here the choice is indeed determined. But it is determined not by some event nor by some impulse, but by the man's own nature. It is self-determination in the strict sense.

It must be noted, moreover, that few men are entirely good and few entirely evil; and that even with "good men" and "bad men" there are considerable regions of choice concerning which their characters are not at all definite. It is the character of most of us not to have definite characters on a number of points of possible conduct. On these matters it, very likely, is simply not settled what we shall will to do, or how we shall choose. Upon these un-

decided matters, even if they relate to moral questions of importance, one's choice may be made in much the same way as when one chooses between the first nine of the number series—"the freedom of indifference" once more. There is no way of showing that what one shall decide to do, in such a case, is settled in advance. Something may well be decided then which was not decided before. There are certain things we can be counted on to do, certain things we can be counted on not to do, and (with most of us) there are probably also certain situations in which our choices would be not only unpredictable but, until the actual decision is made, entirely undetermined.

But whether determined or undetermined by our characters in advance, our choices are always free: free because they are our choices. It is a mistake to suppose that freedom is to be found only in the cases (if there be such) of indetermination. These are the less significant of our acts, and moral progress consists, in part, in eliminating many of them. In those fields in relation to which our characters are fixed our choices are as free as they can ever be. We are not theaters within which impulses struggle with each other—as in Buridan's ass—until the stronger defeats the weaker. So far as we can separate our impulses from ourselves, we can and often do reinforce the weaker by the strength of our wills and thereby defeat the stronger. This I regard as an empirical fact, to which an unprejudiced introspection will pretty surely assent. For the investigation as to whether or not this is the case plainly cannot start out by defining the stronger impulse as that which eventually wins; to do this (and it has often been done) would be a ludicrously patent and naive case of begging the question. If we are to distinguish a weaker from a stronger impulse at all, plainly the only way of doing so is by appeal to introspection. The stronger impulse

is the one that immediately *feels* stronger; for "as a psychic existent *feels* so it must be." And if we make the appeal to introspection there can be no question that the stronger impulse often fails to determine our choices and direct our actions, while the weaker succeeds, and succeeds because we will that it shall. It is the self that decides.

The doctrine of Self-determinism often seems to be really a disguised doctrine of determination from without, and to differ but little from the naturalistic view which really denies that the self settles anything. This is not surprising, for there is a naturalistic doctrine which goes by the name of Self-determinism, but which, in spite of its verbal disguise, is, under the surface, essentially an application of Naturalism. The difference between it and the view suggested in this chapter centers chiefly upon four points: causation and the "Causal Law," the nature of the self, the possibility of prediction, and the question of ultimate or original determination. We shall consider each of these in turn.

It will be recalled that in Chapter X, one of the conclusions reached was that we must distinguish between causation and what is often called the "Causal Law." Causation is a name for the fact of continuity of process within Nature, that is, within substances and between them; whereas the "Causal Law" is often used to indicate the postulate that all events are arranged in series of invariable sequence, and that no event ever occurs except after some other specific event. Whether this postulate universally holds in actuality is a question for empirical investigation. As is the case with all universal propositions concerning the existential world, it may be made increasingly probable (or improbable), but it can never be completely demonstrated.

Now it seems to me that those who attack the type of view which I have referred to as genuine Self-determination

on the ground that it is inconsistent with causation, have in mind this postulated "Law" of the invariable sequence of specific events, and in applying it to the acts of the will they are seeking to tie each of these to some preceding *event* which it must follow if it is ever to be. That is, of course, one way of avoiding Indeterminism, but it is not the only way. For a will-act may be in a very genuine sense determined within narrow limits, and yet not be wholly dependent on any specific previous event, and therefore not "caused" in the sense of the postulated "Law of Causation." As we saw in Chapter X, causation is not merely a sequence of events; the nature of the substances involved is also an important consideration. Even so simple a happening as the shattering of a window is determined not merely by a preceding event, but in part also by the nature of the glass and of the stone. Similarly, a will-act need not be (and I should say certainly is not) the result simply of some previous event, but may be determined by the character of the man. In other words it may be the act of a free self. Such an act of will would still be a part of the general flow, the stream of continuous tendency within Nature, which in Chapter X we called causation. It would grow out of the self and would be determined by it.

Mr. C. D. Broad, in his monograph on *Determinism, Indeterminism, and Libertarianism,* has subjected this conception to the keen criticism of which he is so powerful a master. In his opinion it either reduces to the kind of radical Indeterminism which we have rejected; or else results in self-contradiction. The contradiction consists, according to his analysis, in the assertion that the act in question is not determined and that it is determined. For, in his opinion, if it be not determined by some previous event, to which it is linked by the "Causal Law," it is not determined at all. "It is surely quite evident that, if the

beginning of a certain process at a certain time is determined at all, its total cause *must* contain as an essential factor another event or process which *enters into* the moment from which the determined event or process *issues*. I see no *prima facie* objection to there being events which are not completely determined. But in so far as an event *is* determined, an essential factor in its total cause must be other events." [1]

It is, as the reader will have anticipated, with Broad's insistence that an event can be determined only by another event that I take issue. Even in the external world the nature of the substances involved is an important consideration in determining causes and effects. It is true that science, in its attempts at prediction, works out lists of regular (or fairly regular) series of sequences between events. But it also takes into consideration the structure and constitution and character of its objects. Moreover, our own experience of activity gives us a more direct insight into at least one type of determination and guidance than the external observation of the recording physicist. Though I have not ventured to go along with the panpsychist in his interpretation of external causation on the model of our will acts, there would at least seem to be more justification for his daring guess than for the rather dogmatic insistence that our own direct experience of activity and choice should be interpreted on the model of an inadequate and partial account of the poor and clumsy best that mere external observation of material things and physical processes can offer. A will act is certainly an event, but if we may trust our own deepest experience it is not determined by some other event, but by the active, willing self, in accordance with its own total nature.

[1] *Op. cit.*, p. 44. It is possible that Mr. Broad may interpret "event" in a sense sufficiently wide to include within it the nature of the substance involved.

This consideration naturally brings up the second of the points referred to in a recent paragraph—the interpretation of "self." For the nature of Self-determinism will turn upon the nature of the self that does the determining. The theory will be naturalistic or fatalistic only if the self be interpreted (as it so often is) as a mere collection of tendencies, or bundle of urges, instincts, preferences, each determined by heredity and environment; if, that is to say, no unitary and active self be recognized at all. Such a view of the "self" would rule out and make impossible what I mean by genuine self-determination. It goes without saying that it would be out of harmony with much that this volume stands for. And it will not do to take the problem of freedom and determinism as an isolated subject, unrelated to the rest of one's philosophy. For the self discussed in this problem is the same self that is the subject of knowledge, the being that compares and judges, that feels and thinks, and that possesses a type of unity which nothing else does. It is this unitary self that also *decides*. It decides according to its character on those matters where its character is definite. But it is not to be analysed into a set of likes and dislikes, of instinctive trends and "prepotent reflexes." We must not allow ourselves to be misled by the easy temptation to hypostatize psychical powers. The analytic dissectors who find no self save a collection of "Drives" and the rest, are really reviving something not very different from the Faculty Psychology of the 18th Century.

The upholder of free will is often stampeded into taking refuge in the doctrine of extreme Indeterminism by the fear lest Self-determinism necessarily means that all his acts and choices could be predicted in advance by one who knew the total condition of things at some—at any—previous moment of time. Such a fear would be well justified if the doctrine meant that all will acts must infallibly follow

certain other events in invariable series, or if it interpreted the self as a collection of externally determined drives. But if will acts be the acts of the kind of self presented in this and the preceding chapter, no such form of prediction would be possible, in spite of the fact that the acts of the self are genuinely determined by it. This has been brilliantly demonstrated by Bergson. For if your act is determined, not by some particular series of events or by some isolable impulse or group of impulses, but by your total self, if, in short, it be *your act,* to predict it with absolute certainty would require a direct acquaintance with all your previous experiences of such an intimate sort as only you yourself could possibly possess. *Knowledge about* your inner experiences would not suffice: the predictor would have to know them from within. In other words, he would have to be you. No massing of external knowledge about your character and history and feelings could include the really decisive factors. And you yourself, with all this inner acquaintance and realization, could not infallibly predict your own act, upon the basis of your prior experiences, until they were all in; that is, until the moment of the act had arrived. And then it would be too late for prediction.[2] For the process of willing is not like the sequence of motions which one finds when one billiard ball hits another; it is an act of the self.

I confess that this way of looking at things involves a conception of the nature of will not commonly found in our psychology books. The downright naturalistic psychologists —the behaviorists, associationists, and even the upholders of the *Gestalt* doctrine—either do not deign to make mention of such a thing as volition, or if they do, they present it to us in forms that are to me, at any rate, completely unrecognizable. For the active choice and effort and determination which I directly know, they substitute series of passive

[2] *Time and Free Will* (English translation), pp. 183–89.

sensa, processes of muscle and joint sensation, or bodily reflexes and reactions of various kinds. Even James and McDougall—enthusiastic defenders as in philosophy they are, the one of free will and the other of the substantial self—when they come to give a psychological description of will, find their scientific desire for analysis so strong that they leave out or glide over the ultimate and central fact—the activity of the self. James, to be sure, comes very close to recognizing and defending it; the essential thing about volition, he tells us, is effort of attention, and this effort of attention he does not seek to explain by any previous determinant. Yet his strange unwillingness to acknowledge the reality of a genuine self makes it impossible for him to recognize self-activity, and throws him (when he speaks as a philosopher) into the arms of complete Indeterminism and mere chance. At the other end, so to speak, of his psychological doctrine of will, this refusal to recognize the self forces him to a form of analysis which sounds suspiciously like the associationist type of thought against which he so often protests. Effort's sole achievement consists in getting a given *idea* to stay before the mind,—this is the sum of his doctrine: if this idea or image completely fills the mind and is not allowed to flicker or go out, the decision is thereby made, and the appropriate action follows. When this does not seem to be the case, it is because other ideas or images are present which inhibit the complete filling of the mind by the central idea.

Whether this is a true and adequate account of what goes on in volition is a question to be settled, I suppose, only by introspection. And when it comes to that, I can only say that in my own case, and in the cases of others with whom I have conversed on this matter, it is a common experience to find one's mind full of ideas of action, with no inhibiting ideas present, and yet to make no move toward the action

thought of. As Wyatt has pointed out, "The act which follows is not necessarily nor ordinarily the correspondent of the images. An act may be quite different from any image just preceding it. The mental event to which willed action is most closely related is not an image but *thinking*." [3] Even thinking, moreover, is not itself identical with decision or will. I may see the better and approve it, yet do the worse; or I may realize the greater fascination of the worse, keep it before my mind in a succession of attractive images, yet decide in favor of the unattractive, austere course which Duty points out. And this decision does not mean that I put the attractive but resigned temptation out of my mind. I may still feel its charm even when I know that I have decided against it. Merely to have ideas before the mind settles nothing. Of course I may decide to make no effort, to exert no force of will, to let things drift; and if I do this the attractive image, finding no resistance from inhibiting contrary images or from my will, may work itself out into my muscles. I am not denying that there is much truth in James' theory of ideo-motor action. But in all cases of volition in the full sense, it is *we* who decide. In extreme cases of the exertion of will after meditation or struggle, we are vividly, even painfully, aware of making the final decision. Few experiences are more intensely conscious than this: "come what may," we say, "I won't do this," or "I will even have it so." "If," said the Buddha to his monks, "the various psychological methods of driving out evil thoughts do not succeed, then with teeth pressed against each other, with one's tongue pressed against one's gums, one should by the exertion of one's will overthrow, press down, destroy these evil thoughts." [4]

The weak point in James' psychology of volition is, thus,

[3] *The Psychology of Intelligence and Will,* p. 223.
[4] *Majjhima Nikaya,* Neumann's translation. Vol. I, p. 292.

his failure to supply an adequate dynamic; merely the presence of ideas in the mind is not enough to explain what we find in an act of will. It is in just this place that McDougall supplements James' account. He accepts the assertion that "the essential achievement of the will is to attend to a difficult object and hold it fast before the mind," but he recognizes that this presence of an idea in consciousness is too passive a process to account for the dynamic force of what we experience in active voluntary effort. He therefore appeals to our instincts and especially to the self-regarding sentiment to do what mere ideas could never do. "The conations, the desires and aversions, arising within this self-regarding sentiment are the motive forces which, adding themselves to the weaker ideal motive in the case of moral effort, enable it to win the mastery over some stronger, coarser desire of our primitive animal nature and to banish from consciousness the idea of the end of this desire." [5]

That frequently one reinforces the power of one's ideals by appealing to one's self-regarding sentiment and one's self-respect is undoubtedly both true and important. But it is *we* who appeal. On McDougall's view, as the reader will have noted, it is the desires and aversions arising within the self-regarding sentiment which *add themselves* and turn the scale. Although McDougall as a philosopher champions militantly the reality of a substantial self, in his analysis of volition he makes no use of it, but pictures the process as a struggle between instinctive tendencies. Various types of decision are depicted and analysed in his chapter on Volition, and in each case it is instinctive desire, usually the gregarious instinct and the desire for social approval, or the sentiment of self-respect, that determines one's act. In the highest ideal form of moral conduct (McDougall's seventh type) it is the thought of self and desire for approbation,

[5] *An Introduction to Social Psychology* (Eleventh Edition), p. 248.

not really different in fundamental nature from that which stimulates the prig, which outweighs the other instinctive tendencies and desires, and thus determines and decides the action. There is much excellent psychological analysis in these descriptions of McDougall's; but he, as well as James, leaves out of his account altogether what seems to me the most fundamental fact of the whole experience: the fact, namely, that the self *makes use* of these instinctive and dynamic forces, in short, that it is the self which decides. This way of putting the matter may seem essentially unscientific because less analytic than McDougall's formula. But the analysis which sees in the self only a bundle of instinctive drives, or of "prepotent reflexes" (to use Allport's substitute term) is a case of the "constructive imagination" which cannot lead to sound and truly scientific results. And this for two reasons. It is substitution rather than analysis of that which is actually found. It is a striking case of the bad kind of hypostatization. For it has made the various instincts and reflexes into active entities. What is actually found is: (1) the body behaving in certain describable ways; (2) the self undergoing certain experiences and acting, originating, choosing, deciding, willing.

Here is the crux of the whole question of will and of freedom. It all comes at last to the question whether activity is thinkable. And by activity I mean something quite different from a procession of passive states. There is no activity in the moving pictures of a cinematograph. The naturalistic thinkers, as I understand them, would interpret freedom and will and conscious life in general as a series of moving pictures: a procession of passive sensa. This is the basal principle of Positivism, of the Associationist psychology, of Logical Positivism, and (strangely enough) even of one aspect of Pragmatism. It goes back largely to Hume. Real activity, the making of effort, origination and initiative,

are branded as impossible. Nearly all the various schools of naturalistic psychology might be described, from one point of view, as variations upon this identical, negative theme—as suggestions, clever and otherwise, of substitutes for activity, of methods of describing conscious active life as if it were passive. The reasons for this banning of the active, this substitution of passive processes for effort and achievement, are not often given; as a rule the desirability of the consummation is taken for granted, and is then used as the decisive ground in its own favor. But if the reader will put together what fragments or suggestions of arguments for the passive view of consciousness he can find, he will, I think, discover the following. Activity is said to be unthinkable because it cannot be described nor thought in terms of the purely passive. In the last analysis only sensa and their compounds are recognized as proper subjects for scientific psychology.

It is perfectly true that activity is not describable or experienceable in any terms but its own. Like a great many other things, it is *sui generis*. It cannot be reduced to sensa. But it is equally true that sensa are *sui generis* and cannot be reduced to terms of volitional activity. And we certainly experience our own activity just as distinctly and vividly, and just as unmistakably, as we experience sensa and passive images. To "analyse" the effort of will into sensa is not to analyse but to substitute. And the motive behind this substitution, behind this determination to turn one's blind spot toward one's own active efforts, is the desire to have all reality subject to naturalistic laws. It is a dogmatic prejudice based upon the Will to Believe.

Our discussion of the nature of will has been a long, though not irrelevant, digression from the topic we had started to discuss—the seeming naturalistic results of the doctrine of Self-determinism, and the reasons why a doc-

trine that really ascribes the power of determination to the self should be distinguished from the more fatalistic theories that go by the same name. I had suggested three difficulties which Self-determination had to face if it were to free itself from the accusation of Naturalism, and had shown why there is nothing in them that really threatens the freedom of the self in the fullest sense. But there is a fourth difficulty, much more serious than the three with which I have dealt, and one about the answer to which I feel far less confident. I refer to the fact that Self-determination, when thought out to the end, seems to put the ultimate fixing of our actions back into the outer world after all. For consider: My present act, we have agreed, is determined directly by my self with its definite present character. But my character of today is a continuation of my character of yesterday. If changed at all, that change is due to my deeds of yesterday, and they grew out of my character of that time. That character was determined in its turn by the character of the day before, and so back to my cradle and to my mother's womb. And what I was, the nature I had, at my first moment, at the time of my first will act—was not that determined by my heredity and environment?

Here, I realize, is a real difficulty, a difficulty which, I suppose, more than any other, has tempted the defenders of freedom into an ultimately self-contradictory or meaningless Indeterminism. But though I do not pretend to see the total situation with all its implications and possibilities as I could wish, there are a few considerations which do throw a certain amount of illumination on the problem, and make the difficulty of a genuine Self-determinism less severe. For one thing, we must remember that if the self is really free here and now, can make its own decisions, without let or hindrance from any external source—then it *is* free here and now, no matter where it came from or how it happened to come at

all.[6] The question of our present freedom is not the question of our origin. And one may well ask, Is not the question of our present freedom the principal consideration? Is it not this that the moralist and most people are chiefly interested in vindicating?

I think this is probably the chief interest involved in the controversy. But it is not the only interest. The earnest advocate of "freedom" will not be wholly satisfied with what I have said: nor am I. For in spite of my present actual freedom, it might still be asserted that ultimately the claims of Naturalism are justified, and that my will acts, although unpredictable, were all settled in advance, settled long before my birth, long before the birth of man or of consciousness.

In answer to this let me remind the reader that the picture of Self-determinism I have tried to present included, as at least an hypothesis, the possibility of a real lack of determination in those of our decisions which lie outside of the field of things concerning which our characters are definite. This hypothesis I do not consider as a necessary part of the doctrine of Self-determinism, but I do think it quite possibly true. If it is true, then plainly there would be no such absolute determination of the future by the past as Naturalism asserts. I am aware, however, that this hypothesis, even if accepted, will not satisfy the lovers of freedom; for it would leave within the realm of things ultimately determined by external and prior Nature those of our acts which are morally the most important. And thus we are brought face to face with one of the fundamental questions concerning the nature of the self. We have not the means, I fear, for its definite solution, but a suggestion which I made in the chapter that preceded this will, I

[6] This consideration has been admirably presented by R. E. Hobart, in *Free Will as Involving Determinism*, Mind, XLII (1934), 1–27.

think, point a possible way out, and vindicate the doctrine of Self-determinism from the charge of leading necessarily back to Naturalism. The suggestion is that the elements or components of the human being, at his birth or at his conception, are not confined to his heredity and his environment: that there is a third element in the strange mixture which is man, namely, the self. The reader may like or may dislike this suggestion: but I see no other way of avoiding an ultimate surrender to a certain type of Naturalism. In no other fashion (unless it be by an appeal to Indeterminism and Chance) can we assert that there is anything in our moral acts or choices that was not determined for us, before our birth, by forces external to us and possibly external to anything that can properly be called mind. We cannot here go into the very speculative problem of the possible origin of the self, but it is plain that it is involved in the problem of freedom. Doubtless the self may have come from purely physical entities and forces; but that is by no means the only possible hypothesis. Perhaps our souls were created by God, as Augustine and a long line of Christian thinkers have taught. Perhaps, as the Hindu philosophers and the Buddha believed, each of us has come through a long series of human lives—a series so long, that, as Professor Wisdom suggests, it reaches back to the very beginning of time, or back through an eternal Past that has no beginning. "Never have I not been," says Sri Krishna in the Bhagavad Gita, "never hast thou not been." Perhaps we have grown out from the Cosmic Soul, as leaves bud out upon a tree.

Chapter XXII

THE SCIENCE OF MAN

The conclusions reached in the preceding chapters concerning the interaction of mind and body, the nature of the self, the human will and its freedom, not only are of fundamental metaphysical interest in themselves, but also have significant bearings upon psychology and the social sciences, and upon man's prospects and his duties. "Know thyself" was the great command of one commonly called the Founder of Western Philosophy; and it is often pointed out that a rapid and continuous advance of the "Science of Man" is the greatest intellectual desideratum of the times. But great as is the demand for such an advance, and numerous as are the workers who have been attracted to the field, no one acquainted with the situation can hide from itself the fact that progress in the scientific knowledge of both man and society is still notably slower than in the physical sciences.

The reason for this striking and unfortunate fact has been a subject of speculation for years. About a century ago Buckle pointed it out, and suggested that it was due in large part to the "inferior ability" of students of man and society as compared with physicists and chemists, and to the fact that they so easily satisfied themselves with a knowledge of only a small part of the relevant and important facts. Even "the most celebrated historians," he found, "are manifestly inferior to the most successful cultivators of physical science."[1] Contemporary writers, as a rule, are content to

[1] *History of Civilization in England* (Appleton's Ed., 1848), Vol. I, p. 5.

attribute the backwardness of psychology and the social sciences to the enormous complexity of the data and the problems involved, but all who deal with the question admit the fact; and most of them, while they deplore it, are hopeful that the coming years may see the Science of Man make up a large part of the lead which the physical sciences at present possess.

It is possible that the psychologists and "historians" have been of "inferior ability" to the chemists and physicists; and it is probably true that their data are at least as complex as those of physical science; but if the conclusions of our recent chapters are sound, there is a still more deep-lying reason for the backwardness of the science of man. That reason is to be found in the nature of man himself. For if man is the sort of being which the latter part of this book has increasingly indicated, he is so different from physical nature that a science of man, if attainable, would necessarily be notably different, in other matters than content, from a science of physical nature.

The most fundamental of the sciences here involved is, of course, psychology. The question whether psychology is a science will depend for its answer, first of all, on the meaning we are to give to the word science. It may be taken in a sense large and inclusive enough to embrace mathematics, matter and energy, man with his intelligent activity and his free will, and human society. Thus considered it would be simply the pursuit of the truth about these various things, and it would be at liberty to use any methods discoverable and to furnish conclusions of any degree of probability and exactness, no matter how modest. If the word be thus loosely used, there can of course be a science of man, and it might be a very useful achievement, and a very hopeful field of investigation. There is, however, a common use of the word science which would make it something more limited and

more exact. As we saw in an earlier chapter, the more exigent and exact ideals demanded of science, on this view, grow out of its function. Like invention, it is the daughter of necessity. Primitive man, faced with a world of forces immeasurably greater than his puny strength, had to know how to react to Nature; and for this purpose it was necessary for him to tell what to expect from Nature and to get the co-operation of his fellows in responding to and making use of Nature's activities. The knowledge which was to be of use in these ways obviously had to be common or public knowledge and the kind of exact knowledge which would enable men to anticipate natural events. This kind of exact and public knowledge, with its practical applicability to all situations of certain definable types, came to be known as "science" in the more exact and limited meaning of that word, as distinguished from philosophical and historical knowledge. Thus a scientific fact, as distinct from facts of other sorts, is a piece of knowledge which is experienceable and verifiable by any normal and properly trained individual; and "scientific" laws are those which apply to repeatable situations and thereby enable one to predict the future, and explain the past. In short, before a form of investigation, or a body of knowledge, can be called a science in the stricter sense of the word, it must be able to pass the following tests. (1) Its facts must be susceptible of being experienced by any normal and suitably equipped individual; and the proof that it is thus capable of being made common property is to be found in the fact that it has been thus verified and can again be verified. (2) It must describe and generalize its facts, and thus be able to explain and predict. History may deal with particular and unique events, but science is of the universal. The generalizations of science will result in the establishment of laws of regular sequence, by means of which, on the one hand, the actual facts and events within its field may be ex-

plained (through linking them with preceding events in observed and repeatable series); and by which also future events, on the basis of past series, may with a considerable degree of probability, be predicted. The degree of probability of prediction will, as an actual practical matter, vary with the complexity of the facts involved, but in theory failure of exact prediction will be due solely to lack of knowledge; wherever all the relevant facts are in hand, absolutely certain prediction would always be possible.

To what extent can psychology pass these tests? A little reflection, I believe, will show that psychology can pass the first test quite as well as other sciences. This, of course, is sometimes denied; and, indeed, at first glance seems improbable. For the subject matter of psychology being peculiarly subjective, it would seem that its facts could never be experienceable or verifiable by more than one individual. This, indeed, is the chief theoretical reason for the attempt to substitute a behavioristic for an introspective psychology. But the ruling out of introspective psychology on this ground —because its facts are necessarily subjective and therefore never verifiable and communicable—rests upon a mistaken notion as to what the facts of psychology are. The facts of psychology, like those of other sciences, are of the "if . . . then" type: universal hypothetical judgments. If the subject in an experiment, or in any describable situation, receives such and such stimuli, he will have such and such experiences. Or if he has experiences of a certain describable sort, other experiences, or certain definable reactions, will follow. That the subject did have a certain type of experience can, of course, as a rule be known only through his assertion. But that certain events follow other events in the behaviorist "psychology," or in chemistry or physics, can be known only through the assertion of the observing scientist. In psy-

chology, the observing scientist is the subject. The psychological fact is in theory just as verifiable as that of any other science. All the sciences have to make use of verbal or other symbols, in the exchange or socialization of experiences. This always presupposes a certain amount of faith and disregards a theoretical possibility of illusion. To refuse to take this chance, to make this faith-venture, is Solipsism.

Can psychology generalize its facts and thereby formulate laws of regular sequence, such as those of physics and chemistry, so nearly invariable as to enable it to explain and predict? Laws that are demonstrably invariable and universal because logically necessary are not to be found in physics and chemistry; but these sciences have been able to formulate laws of sequence that possess a large degree of observed regularity, and to which few, if any, exceptions have been found, and by means of which, therefore, particular facts can be explained and future events safely predicted. Can psychology formulate any laws of similar trustworthiness? In the simpler fields of psychic life which are more directly dependent on physical conditions it can. I refer to such matters as the rise of a sensation on the presentation of a stimulus, and certain simple reactions with their accompanying conscious states. In the more complex portions of mental life no school of psychology has been able to formulate laws of sufficient nicety and sufficient trustworthiness to enable us to explain why a given individual thinks and acts exactly as he does, or to predict what he will do or think next. Psychology is able to formulate types and to amass statistical results, but explanation and prediction, of anything like "scientific" exactness and certainty, are quite beyond it. The psychologist can tell me what kinds of minds and temperaments there are, and what is the statistical probability that certain types will act in certain ways. But if I want to know how a given individual will act in any of the

more complicated situations of life, I shall go to his wife, or to the ward politician.

It is often asserted that the reason for this inability on the part of psychology to explain and predict with exactness and certainty is due to our lack of complete and exact knowledge, and the hope is held out that with further investigation and through the refinement of our methods and our instruments we shall be able one day to predict and explain. I see no reason for supposing that this assertion is justified or this hope well founded. The reason for the steady failure of psychology successfully to emulate the physical sciences, as I suggested above, is due to a much more deep-lying cause than our lack of empirical knowledge or the clumsiness of our instruments. If the self is the active subject which it appears to be, and if it be free in the sense discussed in the preceding chapter, and if the determination of its acts is not to be found in a sequence of events but in the active decisions of the personality as a whole, exact and certain prediction of human action is out of the question. Schools such as Associationism and its daughter, Structuralism, can, indeed, explain and predict with as perfect a nicety as mathematics; and other schools, such as Behaviorism, can at least emulate, in dealing with simple reactions, the achievements of physical science. But the reason for this is to be found in the fact that Behaviorism deals, not with psychical, but with physiological and physical events; and that Associationism has constructed its "ideas" and its other objects *ad hoc,* not really through empirical observation but very largely after the manner of mathematics. Neither Behaviorism nor Associationism deals with human experience and activity as it really is. And those schools, on the other hand, such as dynamic psychology and self-psychology, which deal in more empirical fashion with real rather than artificial experiences, with psychical rather than physical processes, are, by the very nature of their

objects, precluded from discovering that invariability of sequence which alone would make explanation and prediction possible. If space permitted a detailed examination of the methods and achievements of the various schools of psychology, it would not be difficult to vindicate empirically this conclusion. It would seem that, by the very nature of its object, psychology is faced with a dilemma. It must choose between being empirically faithful and being exactly prophetic; between an empirical description which is not "scientific," and a scientific description which is not empirical. Fidelity to the facts of what is actually found in consciousness makes the discovery of invariable sequence and exact prediction, to say the least, extremely improbable; and the determination to have laws of invariable sequence at any price makes faithful description of living minds impossible.

There would seem to be five different kinds of intellectual pursuit of the general nature of science—taking the word now in its less limited sense: all of them worth while, all of them enlightening, but by no means all of them alike. (1) Mathematics. This is wholly an *a priori* affair. It lays down certain postulates and by the processes of pure reason is able to derive various consequences which are demonstrably universal and necessary, because to deny them, while maintaining the postulates, would be to violate one or more of the fundamental laws of thought.

(2) The physical sciences. These deal with the facts derived from experience, but facts of such a sort that sequences once discovered by them in the material world are repeated endlessly. Hence, although the sequences which they discover are not in theory absolutely and *a priori* necessary, as they are in mathematics, they are still, for practical purposes, universal and invariable. Observation has verified their dependability in the sense that no exceptions to them have been noted which are not explicable in some way consistent with

their real universality, and the postulate that they are actually invariable is thus pragmatically justified.[2] This being the case, we can and do explain individual physical events by means of the universal laws thus established, and with confidence and success and exactitude predict future events by their aid.

(3) Biological science. Here, though it is possible that a new element leading to unexpected variations of regularity may be at work, many of the phenomena seem to be subject to physical laws; and at least a considerable proportion of those not subject to physical laws (such as tropism, for example) are capable of such complete generalization as to make fairly accurate prediction possible.

(4) What, for want of a better name, might be called psycho-physical science. This deals with those parts of experience and of conscious activity that are directly determined by the body and its laws. So far as the evidence goes, this is confined to the field of sensation, reflex action, and possibly a few other simple phenomena. Here, as in biology, fairly exact and certain prediction is possible.

(5) Psychology proper. This is a description of human consciousness of both the structural and the dynamic sort: it should, of course, include some account of the bodily states that precede, accompany, and follow the various psychical processes. It is, in short, a description of various typical ways in which human beings feel and think and act in various describable situations. Just to the extent that human beings have anything spontaneous about them, just to the extent that their choices are "free" in the sense of freedom advocated in the previous chapter, their experiences and activities will not be describable in terms of invariable event-sequences, nor capable of generalization in invariable laws;

[2] The Heisenberg phenomena cast doubt on the invariability of processes in microscopic physics; but this does not affect the laws and predictions of macroscopic physics.

and hence no perfect explanation of them, and no really trustworthy prediction concerning them, will be possible. "Psychology proper," as I have called this fifth sort of pursuit, while it may rightly be spoken of as a science in the larger sense, will not be a science in the narrower signification of that term. It can throw light on human actions and thoughts, but it cannot fully explain them in the sense of showing them to have been necessary. It can give us the statistical probability that certain human types will react in certain specific ways to certain specific situations; it can even help us to guess intelligently concerning the conduct of individuals; but it can never enable us in any scientific sense to predict what the individual will think, or feel, or do.

We may then justly claim that we have already a "science of man" if by science we mean the pursuit of truth or the accumulation of knowledge; but there is not yet, and I doubt if there ever will be, a science of man which will enable us to explain him as we explain physical objects, or predict his conduct as we predict the reactions of chemical compounds, the tropisms of the lower organisms, or human reflexes. And the "science of man," we must remember, includes the science of society; for society takes its nature from the individuals who make it up, and the social sciences will share with psychology its exactitude or lack of it. If the metaphysical position defended in this volume is correct, we shall never have the kind of social science that Buckle and his followers have desired and anticipated.

In some respects this is regrettable. Exact explanation and certain prediction are valuable, and cosmic limitation upon the possible advance of any given science is necessarily discouraging. It is probably as fortunate as it is natural that those most enthusiastically occupied in the advancement of psychology and the social sciences do not share my view of the self and of freedom. Although I believe that psychology

is not a science in the strictest sense of the word, I think it right and desirable that the psychologists should act as if it were. For the best empirical way of testing the question whether it is or is not a strict science is to give it every opportunity to predict and explain.

I have no expectation—nor any great desire—that many of the readers of this book, especially the older readers —will be induced by anything I have said or shall say to change their opinions about the prospects of psychology and the social sciences. But I do hope that it will be plain to all how large are the scientific and practical consequences that flow from the metaphysical issue of the self and its freedom. If the kind of self I have depicted be real, there can be, as we have seen, no strict science of man. But though this may be regarded as a real misfortune, it is not without partial compensations. For if man be *essentially* different from the kinds of objects which the exact sciences study, he can command a kind of *respect* which is due to nothing lower in the scale.

Upon the question of the metaphysical nature of man will depend the proper answer to the problem of education *versus* propaganda. If man is merely a psycho-physical being whose decisions were all long ago determined by a series of causal events, so that

> *"With earth's first clay they did the last man knead,*
> *And there of the last harvest sowed the seed,"*

if he have not the power to choose whether to obey impulse or reason, if his efforts at clear thought are all illusory and their outcome settled in advance, then let us not try to educate him, for the very possibility of that is precluded from the start. Let us mould him like clay, breed him like guinea pigs, condition his reflexes and determine for him all his opinions and actions by means of skilful propaganda. He may be in-

doctrinated, but he cannot be cultivated nor disciplined. If man is that kind of being, democracy and liberalism have all along been mistaken, the Fascist method alone is justified, and Huxley's "Brave New World" is our destination. If, on the other hand, the self is real and the will is free, very different conclusions indeed will be justified. At any rate, no one can intelligently make up his mind on the problems of State interference with education, of academic freedom, of the inculcation through psychological conditioning of political, economic, historical, religious dogmas, on the questions of public opinion and a free press, on the questions whether an effort should be made to train citizens to think, or whether, instead, thought should be discouraged or forbidden, whether criticism of Government is to be fostered or made a crime, whether the criminal is responsible for his acts or is merely an invalid, whether anyone is responsible for his acts, whether effort in any direction is ever worth while, whether it is ever possible,—I do not see, let me repeat, how one can intelligently make up his mind on these and many like problems without first settling for himself the question of the reality and the freedom of the self.

The doctrine of man involved in the philosophy which this book defends attributes to him something of the "dualism of process" which it discovered in the cosmos from which he grows. As Kant pointed out, obligation is possible only for a being who recognizes reason as an essential part of his nature, but who also feels himself pulled in an opposite direction by his animal inheritance. This dual nature of man forms both his tragedy and his glory. He sees the better—and often does the worse; he aspires and worships,—and is hampered and held back from the goal of his effort by "this body of our humiliation." Not that the line between the spiritual and the carnal can be drawn in the old exact fashion, nor that the body is in itself evil. Since Plato's time we have learned to

prize the body as a tool of inestimable importance for the achievement of all the things we value, and we know that the self and its physical instrument are mutually enmeshed in a fashion which Aristotle anticipated, but of which Plato seems not to have dreamed. But, in spite of this, it is still true that body is not mind nor self, and that self is not body; that man draws his being from two aspects of the Universe; that he is "child of earth and of starry heaven"; that though "a beholder of all time and all existence," he is bound down to a little point of space and time, forced to take constant cognizance of a piece of protoplasm which calls back his attention from his higher problems and holds it tight with its imperious demands, as he goes crawling in the mud and dreaming of the stars. With conceptions wide as the stellar spaces, and with intimations of things too deep for words, he feels driven by the beast within him to sell his birthright for a mess of potage; and his conscious life which had contemplated the eternities is cut short by a clot of blood or a microscopic bacillus. Small wonder that he feels at times bewildered—this strange creature whose exterior semblance doth so belie his soul's immensity.

Every lover of spaniels will have noticed often in their eyes a melancholy longing, a sad earnestness, combined of love, defeat, uncertainty, wistfulness. It is as if the little soul within felt so much more than its limited language of tail and bark and eyes could ever tell; as if it half sensed a whole world which it could not make out, and for which its inherited instincts and intelligence were all inadequate. Part of the spaniel's mind seems to have outgrown, outrun, the rest of his equipment. The look in his eyes suggests (at any rate to the lover of spaniels) that he has a faint inkling of a whole new universe of meanings and values to which he cannot react. To the lover of spaniels, once more, this incipient apprehension of the more than canine constitutes his unique

charm, his highest achievement. Yet it is in just this that he seems wholly defeated. All his purely animal equipment is thoroughly successful; only in his glimpse of the something beyond, only in his longing for the something more, is he entirely baffled.

In his higher aspirations and at the moments when he feels upon the verge of vaster insights, man at his best is often like the spaniel. In his case, too, part of him has outrun the rest. He is largely animal; but a part of him is only a little lower than the angels. He, too, seems moving about in worlds but dimly realized. At times there is in his eyes something of the same dumb wonder we see, or imagine, in those of the spaniel. The more-than-animal, growing, burgeoning within him, carries him to heights for which wings are needed—wings which Nature has neglected to provide. He "partly is and wholly hopes to be." At times he seems almost on the point of emerging on some loftier level of evolution or of insight; but his limitations ever pull him back. The highest point of his achievement he can sustain but a flying moment. No brief description of his state can better those words of William James with which he closed his last published paper: "Ever not quite." Francis Thompson felt the same baffling defeat when he wrote of

> *"The gain that lurkest ungained in all gain,*
> *The love we just fall short of in all love,*
> *The beauty that dost leave all beauty pain,*
> *The unpossessed that mak'st possession vain."*

Will anything greater come out of man? Is this the end of him? Where did he come from and whither is he going? Is the spirit of each individual ultimately dominated by the weight of the physical, and does it die when the bodily functions cease? I do not know; nor does my philosophy give any certain answer. But unquestionably it does point

in a definite direction. For plainly the question whether the self may outlive its body will depend on the prior question whether the self is wholly dependent on its body or has some degree of independence. And on this question the philosophical point of view presented in this book has a decided bearing. I cannot here discuss the question in detail; to do so would be to repeat a large part of this volume. I shall only point out that if the conclusions of the preceding chapters are sound, the self possesses a considerable degree of independence, and there is no *a priori* justification for the denial of its survival of bodily death. The self *is* not the body; nor is it a mere collection of ideas nor a stream of psychical processes. It is essentially an *active* being, a center of thought, feeling, and choice. It influences and acts with and upon the body within which it is immanent, the body to which it has become "organic," and which is to it both an environment and a tool. Part of the conscious life is dependent on both self and body,—such things as sensation, perception, reaction, the sensuous feelings and the "bodily resonance" of the emotions. Other parts of the psychic life are not obviously dependent on body. It is only a postulate of physiological psychology (though *for its purposes* a proper postulate) that all forms of thought, feeling, and will are the products, or the partial products, of cerebration.

As life goes on, the self seems to become less and less dependent on its body. Interesting sensations, physical pleasures and pains, physical activities and desires fill nearly all the mind in early childhood, and loom still very large throughout youth. In maturity and age the bodily content of consciousness steadily wanes in importance; and the body begins to be an impediment and burden. There are some indications, moreover, in the race as well as in the individual, of increasing independence of the self from the obviously physical. In the more developed races the life of representa-

tion gains steadily upon the life of sensation and perception. The power of inhibition over the animal impulses steadily grows. Thought becomes more clear and reason extends its sway over larger regions of life. There is some evidence that man is today entering upon a level in which the mind is less dependent than formerly upon the use of images in its thinking, and is becoming capable of a certain amount of imageless thought. The suggestion that here we have an indication of diminishing dependence upon cerebral activity at least challenges consideration. More significant is the steadily increasing probability of the reality of telepathy and supernormal knowledge. Investigations by many scientific workers [3] that have been carried on now for many years have piled up a mass of factual evidence for clairvoyance, telepathy, and kindred phenomena which I, for one, cannot pass over as negligible. The reality of supernormal knowledge seems to me, if not demonstrated, extremely probable. The most natural conclusion to draw from the acceptance of this view is that in certain situations selves are able to influence each other without the intervention of cerebral or other bodily means. Of course this is not the only possible interpretation of telepathy, but it is the most obvious one.

If I may write in the language, not of philosophical probability, but of speculative hypothesis, I would remind the reader of the indications referred to in earlier chapters that each individual self has a character not entirely derived from heredity and environment, and suggest that the self enters into the body at birth (or conception), becomes organic to it, enmeshes itself within it, uses it and helps develop it; and finally, when the body is worn out and no longer useful, casts it aside. I should not want to commit myself to even a guess

[3] One of the most recent and most careful investigations is that of Dr. Rhine and his colleagues at Duke University, reported in his book, *Extra Sensory Perception* (1934).

as to what happens then. It may be, as the Gita asserts, that "the Body-Dweller" having put aside its outworn body "goes to others that are new." [4] It may be that it needs no other body—though as long as it retains any individuality it would seem to need some relatively continuous mechanism for communication and co-operation with other selves. It may be, as St. Paul darkly hints, that when its natural body is cast off the self finds ready for its use "a spiritual body," which (apparently) is built up through life by life's activities and choices and discipline. Other guesses may be made. I do not commit myself to any of them. They are all "animistic," if you like, but I confess that word terrifies me no more than it does Professor McDougall. And as for the main issue of survival, in the light of the various kinds of evidence to which I have referred, and of philosophical considerations such as those which this volume has sought to present, I think he would be a very daring or dogmatic person who should affirm that the self is wholly dependent upon the body, and that its continued existence is entirely at the mercy of microscopic motions that take place within its physical tool.

Before closing this brief consideration of man, we should at least touch upon one more problem concerning him, even if we must despair of solving it. Has the philosophical point of view presented in this volume any light to throw—in spite of man's uncertain source, his confused and dual nature, his dubious destiny—upon the purpose of his life? Has human life any purpose, and if so, what is it?

I do not pretend that philosophy—my philosophy at any rate—can answer this question. But I think it may at least say this: *If* there be anything of cosmic purpose in human life, part of that purpose is the education and development of the self. It may be "we are born at all adventure"; but if there be any larger significance in our lives, it must be that

[4] *Bhagavad Gita*, II, 22.

we human souls have value and are worth perfecting, and that it is for this we are here. Doubtless it would take unimaginable ages to perfect us, and the process would be a long, perhaps an endless one. But the Universe has eternity at its disposal.

Chapter XXIII

ULTIMATE GUESSES

The title of this chapter must not be taken to indicate that all of my guesses—or all of my *ultimate* guesses—could be set down within its limits. *"Some of my ultimate guesses"* would have been a more exact statement of the things here to be discussed; and some of the larger cosmic themes shall be the limit of my guessing. Within such limits there is room enough, in all conscience, for many chapters, and I shall not attempt to do more than indicate and suggest. In several of the preceding chapters I have made confession of uncertainty; this one will be in part a confession (to use James' word) of "over-beliefs." I should do my over-beliefs injustice, however, should I imply, or admit, that they are merely fond guesses, or chance strokes, or that they were based on nothing but playful fantasy or the will to believe. The guesses I shall express are intended very seriously, and I hope to be able to show that they are not unrelated to reason and the evidence.

There seem to be five principal hypotheses as to the ultimate nature of the existent cosmos. Each of them has its convinced and enthusiastic advocates and its equally convinced and ardent condemners. In some ways I envy those who can make up their minds quite definitely on this large theme and put it by as one of the settled certainties. An untroubled faith in some one solution, and an equally untroubled conviction that all rival theories are absurd, must

not only give one a comfortable and cozy feeling but also be a means for settling many a lesser problem. Given a definite and indubitable vision of the ultimate scheme of things, one could deduce from it all sorts of necessary or probable conclusions as to more detailed matters. This is the form of thought and the method of reasoning which both our theological predecessors and our naturalistic contemporaries have regularly made use of. One who knows the end from the beginning need not fear to be seriously lost. *"Der gute Mensch in seinem dunkeln Drange ist sich des rechten Weges wohl bewusst."* He who is well acquainted with the Will of the Creator and with the Plan of Salvation can tell us many things about the development of life and the meaning and goal of human history which are hidden to merely human science; just as he who knows at the very start that all things are determined by purely physical causation can solve—or dismiss—the mind-body problem, and banish the self and its puzzles, and settle most of the problems of theology, without difficulty or the labor of thought. I envy those who find the universe and its problems so simple, and who can be so sure about it; but for my part, such knowledge is too wonderful for me, I cannot attain unto it. And the best approach I can as yet make toward a solution of the questions they find so easy, the reader I fear may feel is little better than intelligent guessing.

The five principal hypotheses concerning the nature of the world to which reference was made at the beginning of the preceding paragraph might be called: (1) Materialistic Naturalism, (2) Dualistic and Atheistic Pluralism, (3) Deism or Transcendental Theism and the conception of the Finite God, (4) Spiritual Pantheism, (5) Absolute Idealism.

The first of these we have considered at length throughout this volume, more especially in the chapter on the mind-body

problem. Naturalism may be true, but at any rate the present chapter is not the place to discuss it. The considerations which lead me most decidedly to reject it I have already expressed; and it will be evident to all that whoever agrees with the general position thus far expounded will agree with me in dismissing the first of the five cosmic hypotheses named in our list.

The second hypothesis maintains that there are two kinds of beings in the world—possibly three—namely, material objects and finite conscious creatures, such as the animals and ourselves. Possibly organic but unconscious beings—the vegetable world—should be added; but whether they are to be called a third kind of reality, or are to be subsumed under the non-conscious and physical is, for our present purpose, a mere matter of book-keeping. This second hypothesis conceives the world as an aggregation of matter and energy, a very small part of which is inhabited by conscious beings, of which men are probably the most developed. The more glaring of the difficulties which made thorough-going Naturalism so hard for many thinkers to accept are thus avoided. Interaction is accepted, the "dualism of process," and possibly also the reality of free and morally responsible selves are recognized. On the other hand, the existence of God or of an idealistic Absolute is denied, as is also any spiritual interpretation of Nature. The separate purposes of human beings are acknowledged; and (since Interaction is accepted) the efficiency of these purposes; but in the world as a whole, or in any non-human part of it, purpose has no place. As to the origin of conscious beings, either nothing is said, or they are conceived as having developed out of the purely physical world. The hypothesis stops here.

It is a serious question whether a really philosophical hypothesis can stop here. A critic might, with some degree of justification, insist that the upholder of this second

hypothesis ought either to go back to pure Naturalism or go on to something else. A philosophic hypothesis—as contrasted with a scientific or an historical description—means to throw light on the given, to enable us to understand the facts of our world a little better than we should without it, to bring some degree of unity into the chaos of the merely presented. This second hypothesis (Atheistic Pluralism) is hardly an hypothesis at all; it seems to be little more than a description of obvious phenomena.

This criticism is especially pertinent if no suggestion be ventured as to the origin of consciousness. If, on the other hand, the naturalistic hypothesis be adopted, that consciousness developed out of unconscious matter, most of us who have not chloroformed our native human curiosity by an acquired and sophisticated Positivism, will want some kind of suggestion as to how this development came about. We have no right to demand much light on such a theme, but we should appreciate a little. If those who assert the production of the conscious by the unconscious cannot help us at all in this matter, we shall not blame them, nor insist that their failure is by any means a refutation of their theory; but we shall at least point out that if man developed out of the universe, this fact is significant. To assert it is to say something about the universe which the description of it in physical terms does not even dimly suggest. If man grew out of the universe, then this is the kind of universe that produced man. Naturalism has often sought to characterize man by the assertion that he grew out of Nature. The assertion is probably true; but it is equally true that Nature is characterized by the fact that man grew out of it. If we are a part of Nature, then Nature is to some extent characterized by us. It is *that* kind of universe we live in. The universe is *not* like the purely material and mechanical systems which we find within it, and after which Naturalism

patterns its model of the universe as a whole. It is not at all evident that purely physical causation—the processes of matter and energy in space and time—furnishes by itself the most satisfactory explanation for the arrival of such a being as man.

At this point it may be helpful to consider once more the question of causation, and the cognate question of teleology and the mutual relations between the two. Naturalism insists that physical causation determines all events, and consistently denies teleology any place or influence within the cosmos. Objective Idealism champions teleology, but insists that there is nothing incompatible between the dominance of physical causality and the dominance of purpose. Any given series of events, it asserts, can be interpreted both causally and teleologically. It is merely a question whether you read the series forward or backward. Both teleology and causality are mere forms of order within the total process. Causality determines events from behind, and teleology from before. You see a man running towards a slowly moving bus. All of his actions are determined by physical causation—the distribution of energy within the organism. But it is equally true to say that all the man's actions are determined by his conscious purpose to catch the bus. Purpose and cause are equally real and equally dominant.

Generous as is this offer of peace and alliance held out by Idealism, most naturalists are unwilling to accept it. They insist that since causation really determines everything, there is nothing left for purpose to determine; and they point out that if any event were really determined from before, if the present were really determined by the future, there would be no certainty of the universal causal dominance from the past.

It seems very plain to me that on this issue the naturalist

has by far the best of the argument. It is true that a world every event of which was absolutely determined by physical causality, might *look as if* it were following out some purpose. The onlooker might read purpose into it. This is what we have in the case of a machine. Every act of the machine is strictly determined by mechanical laws, yet it looks purposeful. But could we seriously say in either case that the purpose which we read in, or think we see, directly dominates the actions and events observed? Certainly not. The machine and the world of our illustration would merely act *as if* purposeful; but we know perfectly well, by the conditions laid down in the hypothesis, that the present actual situation determines the subsequent processes; that the future exerts no direct effect upon the present, that teleology and purpose are really inefficient. Purpose does not do anything: it merely *appears* to. It is only by inventing an entirely new meaning for the word "purpose" that the objective idealists can make their position even plausible. As they use the word, purpose does not mean what it is commonly understood to mean. They succeed in making teleology and causality mutually compatible only by leaving out of consideration the actual flow and movement of time and of the cosmic process from past to future, substituting a kind of abstract order for the temporal one, and then pointing out that one can read such a timeless and unmoving pattern in one direction quite as well as in the other, and that the two readings are mutually consistent. In the realm of essence (which is probably the only realm Objective Idealism genuinely recognizes) one way of reading is as good as another. The upholders of this view fail to recognize that in the realm of existence—in which alone either causality or teleology has any important meaning—the inmost significance of both cause and purpose is inextricably bound up with the one-way flow of the time series. It is as impossible to have the sequence of events de-

termined by both the past and the future, as it is to ride on two horses which are going in different directions. If physical causation completely determines all events and does so invariably, no other determiner can be admitted. To admit teleological determination into such a tight causal series is to take refuge in a kind of *Als ob* philosophy, which you need hardly expect anyone to take seriously.

This does not mean that purpose—in the common English sense of the word—can never influence the sequence of events. There is one way in which it can have such influence, but only one. And that is by becoming itself a cause. A purpose must be a cause if it is to have an effect. The question of teleology therefore boils down to this: Does purpose ever act causally? Does it ever insinuate itself into the causal chain, so as to modify and change the effects which the purely physical cause (in a given situation) would have had if no purpose had acted? Be it noted that an affirmative answer to this question would not be a denial of the universality of causation, but it would deny the universal and exclusive dominance of *physical* causation. It might well maintain that every event has a cause, but it would assert that other forces than the physical can act causally. This indicates what is at issue in the question, Can a purpose be a cause?

If the position adopted in the earlier chapters of this volume be accepted, causation does not involve a "force" going over, nor some sort of "physical necessity," nor some *a priori* method of infallible prediction. Our knowledge of the details of causal series is empirical. Observation of Nature shows us a series of continuous processes which intersect, sometimes reinforcing, sometimes interfering with each other. This causal nexus seems to hold within it everything in the universe. All events, acts, processes, substances, are carried

along by and are a part of this mighty, one-way, cosmic stream.

Do we ever find purposes within this causal stream,—find them not only as end-terms and mere effects, but acting like other events act, both as effects and as causes? The answer one makes to this question will depend on the attitude one adopts toward the mind-body problem. One who is substantially in agreement with the doctrine presented in this volume, and who therefore accepts Interaction, can have only one answer to the question about purpose. To such an one it will seem patent that there are few things for which we have such massive evidence as we have for the causal efficacy of our purposes. To deny that purposes are often causes is to involve oneself in all the difficulties, not to say absurdities, which make both Materialism and Parallelism essentially fantastic.

Since we have such persuasive evidence of the causal power of purpose in the only part of reality that we know from within as well as from without, the hypothesis that purpose is causal in the rest of reality is at least conceivable. Is there any evidence in its favor?

The whole question has taken on a new appearance since the days of Newton and Paley and the old "Design Argument." Neither causation nor teleology are conceived as they were fifty, nor yet thirty, years ago. Physics has largely given up the purely mechanistic view of causality inherent in the Newtonian conception, and has supplemented it with the notion of the field, in which each part of a given realm influences every other part, and the form of the whole determines the conduct of the sections into which we observers may divide it. If we apply this conception to the Cosmos as a whole we get a new picture of Reality. The causation that runs through it is not the Newtonian push-and-pull, but something much more like the organic causation that one finds

in living organisms. Causation of this sort need not be, and presumably is not, confined to one region of the existent world. The postulate of order in our experience which the mind necessarily makes is by no means limited to the physical and mechanical. If we are to think our world at all, if we are to understand and actively respond to the processes that go on within it, we must be able to put it together into some sort of unity. The causal postulate which is derived from the category of order, cannot be limited to one set of phenomena but must include all. If the demands of the intelligence are to be satisfied, everything must be linked up with everything else through a continuous chain of influences. The more clearly we follow out in thought this fundamental conception, the more convincingly there arises before us the picture of the Cosmos as an organic whole, each part sensitive to every other part. In such an organic world, including the mental as well as the physical, purposes could well act as causes, as links in the sequences of continuous activity.

Are there, then, any indications of the presence and efficiency of purpose in other parts of the universe than human and animal life? I think there are. And I do not here refer to the particular instances of design which so interested the deists and theists of the seventeenth and eighteenth centuries. The Darwinian theory has produced partial answers to many of the particular arguments which the earlier teleologists brought forward; but Darwinism itself has but multiplied the evidence for some sort of immanent teleology throughout the long development of vegetable and animal life. While few thinkers are satisfied with the particular positive suggestions and hypotheses of the vitalists, their negative assertion, on which they all unite, that Mechanism has given and can give no adequate explanation of the facts of ontogeny and philogeny, is entirely sound. Nor do the evidences of purpose cease with the limits of the organic world. Scientists and

philosophers as well as theologians have pointed out the striking "fitness of the environment." [1] And indeed, if efficient immanent purpose be recognized throughout the organic world, it will be very hard indeed to deny it in the inorganic world from which the organic grows. Here, once more, the newer conception of causation has significant bearings: the world is a whole, each part sensitive to all the rest, and each, directly or indirectly, affecting all the rest. To me, at any rate, the picture given us by "Emergent Evolution" seems incomparably more like the world we live in than does either Materialism's picture of a cosmos in which consciousness and purpose have no place, or the unfinished and unfinishable sketch of a dualistic atomism, with no suggested merging of the organic and the inorganic.

"Emergent Evolution" presents us with a developing world in which, at various stages, there are increments of being, new *kinds* of being, which, though mechanically unpredictable, and not explicable by preceding conditions through physical causation, grow out of the lower forms of existence. Life issues out of matter, sentiency and undirected impulse out of life, and from these develop, at last, all the higher forms of feeling, will, and intellect that we find in man.

The cosmic picture of Emergent Evolution is probably a true one. Is it to be taken as a description or an explanation? And if the latter, what sort of explanation does it give? The word explanation is ambiguous and several forms of thought go under that name. They all share in common the character

[1] "Peculiar and unsuspected relationships exist between the properties of matter and the phenomena of life: the process of cosmic evolution is indissolubly linked with the fundamental characteristics of the organism: logically, in some obscure manner, cosmic and biological evolution are one. In short, we appear to be led to the assumption that the genetic or evolutionary processes, both cosmic and biological, when considered in certain aspects, constitute a single orderly development that yields results not merely contingent, but resembling those which in human action we recognize as purposeful." (L. J. Henderson, *The Fitness of the Environment*, pp. 278–79).

of throwing light upon the phenomenon to be explained by exhibiting it as a part of a larger whole, and thus enabling the mind to grasp it and its relevant environment together. Perhaps the simplest form of explanation, and the first one to appeal to the naive mind, is that given by purpose or desire. If you ask me why I wrote this book and I answer, Because I wanted to, my work in writing the book is explained to your satisfaction, though, of course you may well wonder why I wanted to do such a strange thing. A more sophisticated type of explanation is based on the logical principles of thought. How explain the rather striking fact that in every right-angled triangle the square of the hypotenuse equals the sum of the squares of the two other sides? The explanation consists in showing that you could not deny this fact without contradicting some of the postulates laid down in defining a triangle. A less exact form of explanation—and therefore one of much wider application in the existent world—consists in pointing out that the phenomenon to be explained is merely a case of a wider and well-known "law" or type of phenomena.

Which of these forms of explanation does Emergent Evolution give? Whatever we may think of the implications of the theory, the emergent evolutionists give us none of the three. What they present us with is merely a theoretical history, a chronological list of the order in which things have appeared. Their history and their list are probably correct, but if they stop with them they have thrown no light on the extraordinary things that they have described.

History may be satisfied with chronology but philosophy cannot be. To be sure, it is quite possible that philosophy may not be able to get anything more; but if so, then it will remain keenly conscious of its unsatisfied demands. We, as human thinkers, greatly desire further light on the striking linear development which Nature, as we know it on our planet, has taken. We want to understand it better if we

can; we want some kind of suggestion that will at least point towards a possible explanation. The second and third kinds of explanation referred to above—the logical and the generalization of a larger law—are here pretty obviously inapplicable. But explanation through purpose is at once suggested by the fact that we seem to find immanent purpose running all through the organic world and expressing itself at all the levels of the cosmic development which we are trying to understand. It is not a demonstrable explanation, but I know of no other that seems to me so probable.

But let us not blind ourselves to what is involved in the recognition of immanent purpose guiding, or influencing, the development of the world. The view expressed by some Hegelians that Nature is indeed guided even in its earlier stages by immanent purposes, but these are as yet quite unconscious and come to consciousness only in man, is ultimately meaningless. One may intelligibly hold the view of extreme Naturalism, denying purpose completely; one may intelligibly seek to satisfy oneself with the purely positivistic listing of sequences; but to reject both of these, to insist that ultimate explanation is discoverable, and discoverable not in causation but in teleology, and at the same time to deny that conscious purposing has anything to do with the cosmic process, is to use words without meaning. One must either get on with mere chronological description or else turn to Naturalism or to some form of teleology that puts real meaning into the terms teleology and purpose. If "teleology" means merely that the observer may read purpose into Nature and that there is no other purpose there than that which his thought or fancy creates, then in Nature there *is* no purpose and the observer is fooled. And it is not only the Hegelians who have sought to satisfy themselves with an ultimately meaningless word by referring to immanent purposes in the cosmos. The Platonists as well as the Hegelians, the Aris-

totelians as well as the Platonists, and many a member of some less distinguished school, have done the same. The joining of these two words, *purpose* and *immanent,* has often been found a delightfully simple way of serving God and Mammon at the same time. By saying *purpose* one wins the favor of the idealists and theists, by saying *immanent* one retains one's good and regular standing among up-to-date naturalists. And one achieves this most desirable consummation at the not uncommon price of using words which, on analysis, have no meaning at all. Once for all, let us understand that teleology and purpose mean conscious purposiveness. If they do not mean this, pray what do they mean? And if by "purpose" we do not mean anything conscious, why not drop the word? Are we really trying to fool ourselves? So long as we are using the English language let us realize that an "unconscious purpose" is a contradiction in terms, and belongs in the realm of round squares.

The facts of Emergent Evolution, therefore, seem to point toward the conclusion that the development of at least one part of the universe has been largely directed by conscious purpose. This is obviously a momentous conclusion. By no means do I consider it demonstrated. I go no further than to say that at present it seems to me more probable than any rival hypothesis. It is, if you will, one of my over-beliefs. Accepting it tentatively, I am forced to go beyond the second as well as the first of the five cosmic possibilities suggested in the early part of this chapter, and to commit myself to one of the three remaining, and essentially religious, views. But it is not merely the facts of teleology and the probability of Emergent Evolution that lead me to this conclusion. Other considerations also are involved. For one thing, I have long been greatly impressed by the facts of mysticism and the religious consciousness. The forty years of study that I have given to these matters has deepened in me the conviction that we

have here something more than a superficial phenomenon of the human mind. An experience which to those who have known it is so central and irresistible in its power over belief, an experience that is at the same time so wide-spread among the adherents of all the great religions, so persistent through the centuries, and so unperturbed among endless changes of creed, suggests at once—and to me with much persuasiveness —that it possesses genuinely cosmic significance. And I here refer not so much to ecstasies and visions, as to the wide-spread milder type of religious consciousness, to the sense of a More, of a reservoir of spiritual life akin to our own, upon which we may draw; to what James sometimes called the "leaky consciousness" of so many lowly and so many elevated human beings. Human nature fits its world and the world fits human nature, and the demands made upon Reality by this wide-spread cosmic sense I believe to be prophetic or indicative and significant. That is another of my over-beliefs. If any one of the three "religious views" of the universe in our list were true,—if there were a personal and transcendant God, or a pantheistic World Soul, or an Absolute Mind—it would be natural to expect some kind of revelation of this fact, some kind of relatively direct communication from the Divine to the human, at least some leaking in of the ultimate Light, some vague and perhaps ineffable apprehension of the cosmic "Love that moves the sun and all the other stars." If such an experience were wholly lacking to human nature, this lack would loom rather large as an objection to every form of religious world view. Well, this experience is not lacking. Human nature for millenniums, in all the continents and in all the religions, has known the sort of cosmic experience which would naturally be expected if we men were really in the presence of a Divine.

But it would be misleading to assert that my own personal opinion of the ultimate nature of the cosmos was wholly the

result of logical and evidential considerations such as those thus far presented in this chapter. Reason and evidence and discussion and careful thought have much to do with a man's final *Weltanschauung,* certainly. I am not one of those who would attribute a man's philosophical opinions wholly or chiefly to his temperament or his wishes. Reasoning is, perhaps, the most important and influential element in the production of the total conclusion. But it is not the only element. Nor is the process of making up one's mind a process of conscious reasoning or of clearly expressed discussion. These ultimate problems cannot be settled for anyone at any given moment. No man, I suspect, comes to his final conclusion on them by syllogistic argument nor through any one discussion, either with others or with himself. Forming one's opinion about the universe is a little like forming one's opinion of an acquaintance or of a friend: it is achieved at last through all the processes of living. It grows with the years. One lives with the problems involved and never by any single or statable act of will or intellect *decides* them: rather one finds them in part decided,—just as one discovers one's opinion of one's friend. There are certain things a man simply cannot believe, even though he sees no way of answering the arguments of some clever advocate for the belief in question. And there are some things which one must believe—which one knows in all honesty one does believe—even though no demonstration of them be forthcoming. Reasoning and the evidence make their contribution to one's total view of things; but so do also all of one's nature, all of one's experience.

Concerning our attitude toward these cosmic matters von Hügel writes: "We get to know such realities slowly, laboriously, intermittently, partially: we get to know them, not inevitably nor altogether apart from our dispositions, but only if we are sufficiently awake to care to know them, sufficiently humble to welcome them, and sufficiently generous

to pay the price continuously which is strictly necessary if this knowledge and love are not to shrink but to grow." [2] I am not sure that I fully assent to all that von Hügel here says; some of it I should at least have worded differently. But he has expressed an insight into the nature of our cosmic awareness which I feel to be profoundly true. Few men's final world view is the product of merely logical considerations.

It results that the grounds of one's belief cannot be fully set down in words. In part the belief will rest upon a kind of sense of the universe which those who do not share it will naturally consider imaginary and unimportant; while those who find it in their own experience will feel it to be more weighty than many arguments. This is not mysticism, though it is not unrelated to mysticism. It is more comparable to one's opinion of a close friend,—an opinion built up through a life-time and based upon endless experiences, little and large, and most of them forgotten. Forgotten they are so far as explicit memory goes, but they have merged into a conviction which it would take many arguments and much new evidence to shake. When one has lived with the Cosmos for sixty years or more, one feels that it is an old acquaintance, and one's opinion of it is in part the result of reason but also of much besides.

I shall now try to go a little farther in my attempt to show how this "old acquaintance" seems to me. If I have been at all justified in accepting the theory of Emergent Evolution, and in interpreting immanent teleology as the working of conscious purpose, it will be worth our while to raise the question how conscious cosmic purpose, or purposes, could be conceived to work or to be efficient. In this investigation it will hardly be worth while for those readers who cannot accept cosmic purposes to go along with me, and there is no

[2] *Essays and Addresses* (Dent), First Series, pp. 104 and 105.

good reason why they should read farther. But there will be some who, like myself, consider the hypothesis of effective immanent purpose at least conceivable,—all those (and there are many) who view with any degree of sympathy the theistic argument from order, or the "new teleology" will be among them; and for them, as for me, it may be illuminating to ask ourselves in what manner such cosmic purposes can be conceived as effectively guiding the cosmic process. For, I suppose, it goes without saying that all those who believe in cosmic purpose mean by it efficient purpose: there would be no reason for accepting purpose in the Cosmos as genuinely real unless it were conceived as doing something: otherwise there would be no point in appealing to it, or accepting it as involved in the facts that need explanation. How, then, are these purposes to be conceived as efficient?

The question will be clearer, and we more hopeful of attaining an answer, if we consider those concrete and simple cases where we seem to find purpose having an obvious effect upon matter and motion. At what points, then, in what *loci,* do the purposes that we know about get themselves embodied in the texture and sequences of the physical world? The first and most obvious answer to this may be that we see purpose influencing the visible and tangible world in the actions of a machine. Go into any factory and observe the wonderful and purposive things which the machines accomplish, and you will see—will you not?—purpose directly influencing the material world. But a little reflection will show that this is not the case. Nothing here is really to be seen except mechanical action—portions of matter affecting other portions of matter and redistributing measurable amounts of energy. And not only is no purpose here visible: one might almost say that none is here conceivable. At any rate there is no reason whatever to suppose that purpose has anything to do with the process. The purpose, we say, comes in in the *making* of

the machine and in the direction of it. Once the machine is made, all its activities go on mechanically, except as it is directed by human agency. Let us, then, examine these human processes more narrowly. How was the machine made? Probably by other machines, the whole process being purely mechanical except as directed by human hands. The same thing is true of the management and direction of the machine, once it is made. But in the application of human hands to the various forms of matter involved in the making and the direction of the machine, do we come upon efficiently active purpose? Plainly we do not. Human hands, after all, in so far as they direct or mould material objects, are themselves material objects, and the relation between them and the matter which they direct and guide is purely mechanical. Where, then, does purpose come in? Where can it, where must it come in if it is to have any effect upon the world of matter? We have already learned the answer: purposive action is found only in the interaction of mind and body, or, better, in the action of the self within the body.

This is a conclusion both unescapable and significant. If you deny such action of the self upon its body you deny the efficiency of purpose; and if you admit it, you must conclude that purposive action, so far as we ever know it or have any direct evidence of its existence, or are able in any way imaginatively to realize it, is always immanent. For what we refer to as the interaction of mind and body is not the external kind of action which one finds when one billiard ball hits another. The category under which the mutual influence of the self and its body should be conceived is not mechanical but much more like the biological. The union of the two is peculiarly intimate: they have somehow become organic to each other. There is no use trying to tell what this organic relation is in terms of mechanistic or some other kind of relation; for it is just itself, unique, *sui generis*. But to say that

for this reason we do not know what it is would be, in one sense, absurd. We know directly what it is, as we never know what mechanical action is.

Considerations such as these plainly have a significant bearing on the choice among the three possible "religious views" of the universe which the elimination of Naturalism and Atheistic Pluralism left us to choose from. The chief argument used in favor of a transcendent and non-immanent God, an external Creator, is, I suppose, the teleological. The world, both organic and inorganic, shows marks of His "design." But on this view, what should we conceive to be the process by which He achieves His purpose, by which He moulds and guides the universe? Did He—and does He—do it with his hands? Shall we say that He formed things originally with his hands and that, thereafter, mechanical laws directed all the succeeding processes? And these "laws," did He *make them;* and if *Yes* be the right answer, what does it mean? And is divine purpose to be seen only in the act by which his hands follow the command of his will? . . . The thing becomes preposterous. As the modern concept of causation leads us to conceive of the universe as an organic whole, a net-work of relations and of parts sensitive to and mutually influencing each other, so an examination of purpose and the meaning of its efficiency points to the conclusion that, if the world be really teleological, the relation between the cosmic purpose and the cosmic process must be analogous to that between a self and its body.

The difficulty in seeing how purpose can be efficient except in immanent fashion is only one of the obstacles which make it hard to accept either Deism or a Theism which depicts God wholly or chiefly in transcendent terms. As for Deism, in the sense of the Seventeenth and Eighteenth Centuries, since it has no defenders we need waste no words upon it. But the Theism of the Finite God, as presented by certain

schools of Christian theology, and as defended by William James, certainly makes a strong appeal to the moral sense and throws down a thrilling challenge to the man in each of us. So strong is this appeal that for many years to come—possibly to the end of human history—it will have a considerable following. Much, moreover, of a theoretical sort can be said in its favor. I have too much respect for it and for many who cherish it, to subject it here to serious criticism. But I am bound to say that, for me, and, I think, for very many people, belief in it is becoming steadily more difficult. "A god down in the dirt" as James used to call him, a power among other powers, conscious of an indifferent or hostile environment, a struggling, often thwarted God, who has noble aims, uses various means to achieve them, yearns for a better world, and who may eventually with our aid realize his glorious hopes,—this is not the kind of explanation of our universe that the intellect seeks, nor is it the Determiner of Destiny which our religious nature demands.

For my own part, therefore, I find myself faced with a choice between what I have called Spiritual Pantheism—which, indeed, might quite as well be denominated Immanent Theism—and some form of Absolute Idealism. I am using this latter term in a sense wide enough to include the Absolutisms of both East and West. Both eastern and western forms have several representatives, but for the purposes of this chapter it will suffice if we refer to a typical form of each,—namely S'ankara's Vedanta and Royce's Idealism. There is much in Indian philosophy that makes a strong appeal to me; but the extremely monistic form in which S'ankara presents it is, in my opinion, quite untenable. The non-reality of all but the perfectly unitary Brahma is plainly incompatible with the actuality of our finite minds; and to explain our finitude by calling it illusion merely pushes the problem one step further back. For whence this illusion? The illusion at

least is real. In some sense or other, the existence of finite minds must be recognized.

Somewhat similar considerations prevent me from accepting the Roycean Absolutism. For one thing, its Idealism could hardly be made compatible with the Realism which this volume has sought to expound and defend. In an earlier chapter I did indeed acknowledge that Absolutism with certain modifications was a perfectly conceivable hypothesis: but the modifications which, it seems to me, would be required would make it over into something like the Spiritual Pantheism which is its chief rival. That is to say, I consider Absolute Idealism of the sort which completely identifies finite consciousness with the Absolute's consciousness, quite untenable. The reasons for this rejection of Absolutism were so clearly presented by James in a famous criticism which will probably be familiar to all readers of my poor book, that there is no need for me to do more than indicate them. The human experiences of ignorance, of wonder, of finitude, of defeat, are such that in the very nature of the case they could not be shared by an All-Knower who had presented to him the answer to every question, an Infinite Mind whose Will (so far as one may attribute Will to him) was eternally satisfied. It is true that in the very same lecture in which he elaborated this criticism of Absolutism, James also acknowledged that since his attack rested on logic it was not necessarily fatal: for logic (at least of the "intellectualistic" sort) he had been forced to give up. Those who still cling to logic (and can we seriously discuss philosophical questions without it?) will not be impressed by this method of saving the possibility of an All-inclusive Consciousness identical with finite minds. Nor can I see that either Bergson's anti-intellectualism (to which James appealed), or James' own Radical Empiricism, or the Neo-Realism that issued from it, or all three together, do anything to make less contradictory

the identification of finite experiences with actual parts of an Absolute Mind. It is true, of course, that any given term can be a member of two or more groups (the famous illustration of Mr. Taft presumably need not again be brought out of the closet). But when one deals with a psychical entity, such as the experience of curiosity and of ignorance, the relations in which it stands so qualify it that what we may call "the same term" in two different groups is significantly not the same. The experience of wondering what is the answer to a riddle is not the *same* experience—it does not remain unchanged—when introduced into a group one of whose members is awareness of the answer.

For this and other reasons the hypothesis of an all-inclusive Mind which not only *knows about* but literally *shares* the experience of its finite parts seems to me manifestly untenable. One might, indeed, modify Absolute Idealism so as to make it into a theory which, while still idealistic, and while attributing unlimited and infinite *knowledge about* to the Divine Mind, should recognize an actual distinction between its experiences and the limited experiences of its finite "parts." Such a theory would be a form of what I have in mind when I use the term Spiritual Pantheism. But Spiritual Pantheism, as I conceive it, need not necessarily hold an idealistic or subjective view of physical nature. For reasons expressed in the earlier chapters of this volume, I should personally prefer the realistic type of Pantheism; but it could be taken in the idealistic sense just indicated, or in the form suggested by Panpsychism. I shall not further discuss the relative values of these three forms, but shall try to sketch the main outlines of the general pantheistic *Weltanschauung*.

The universe is an organic whole, every part of which is directly or indirectly sensitive to, dependent upon, and capable of influencing, every other part. The plover, south of Capricorn, hears the call of the Labrador Spring while yet

white Winter reigns, and starts on her twelve thousand mile flight; the salmon in the sea is drawn to the breeding grounds of Maine and Scotland and Alaska; the compass-needle trembles at the influence of the distant pole; the moon draws the tides through two hundred and forty thousand miles of intervening space; light travels across the stellar universe; and through the power of gravity distant star greets distant star. Reality is no "block-universe," but full of infinite variety and constant change. It is temporal, not static, a beginningless and endless process in time. But it is not a fall or drive or blind rush of separate atoms: rather it is the development and play of a common and infinitely varied life. The purposiveness of this common life, manifested in all things, leads me to believe that it is a conscious life; and that the relation between it and the physical world is that intimate and unique relation which we find between our own conscious lives and our bodies. The physical world is not dead but living, and it is the body of God. All its activities are both causal and purposeful—because in it, as in us, purposes are efficient, which means that they are causes. It is my hypothesis that the purposes of the Cosmic Mind are completely efficient, as ours are not, and that all the activities of its body (which is the physical world) are purposive as well as causal (which is obviously not the case with the processes of our bodies).

The purposes of such a cosmic Mind must not be pictured after the manner of our thwarted and striving purpose. Nor are they of the sort attributed by the "design argument" to the finite God of non-immanent Theism. The Cosmic Self of my hypothesis does not plan and scheme, nor does He make use of means to bring about the ends He longs to achieve. There is no "far-off divine event toward which the whole creation moves." On the other hand, the purpose which seems to be present in Nature is not to produce "just this,"

nor can it be presented in any one stage of the world. The development, the production of new forms, which one finds in organic evolution, and presumably in cosmic evolution, is indeed evidence of inner purpose, and the purpose is not simply process as such. It is process in a fairly definite direction, the continuous invention and origination of forms of steadily higher value. The cosmic Purposer, in one sense, is ever at his goal and always has been. But the goal is not a static and completed situation: it is a constant forward movement, flowing triumphantly on like the sweep of a symphony. The cosmic process, as I conceive it, is best pictured as the continuing achievement of a work of art by an unhampered artist. And among the arts it is not painting, sculpture, or architecture that best illustrate it, but music. The cosmic artist does not plan to create a universe and gradually build his world, achieving slowly but steadily his great designs by the skilful use of various methods. The universe which He purposes and achieves is the very process —like music, which is never complete in the way in which a temple may at length be finished, but in another sense is always complete, always achieving the beauty which the artist desires. Some of the ways in which music may be produced illustrate not badly several of the world views we have here considered. Thus Materialism or Mechanism might be compared to a piece of music played by a pianola, the record being the chance production (if we can take the suggestion seriously) of matter and energy, with no idea of beauty or of satisfaction involved. Deism would be like the pianola performance of a record made by a distant (or possibly dead) composer. The Theism of the traditional "design argument" would, to some extent, be illustrated by an artist playing from a written score one of his own compositions. The Spiritual Pantheism of my hypothesis is more like the composer improvising. There is here no careful working out

of an arrangement long before planned, any more than there is a merely purposeless and predetermined mechanical operation. All is purpose but all is spontaneity. The new is ever entering in, the value desired is being ever achieved. Throughout the entire process is indeterminism and origination, yet the whole is a unitary and self-consistent whole, because it is the outpouring and self-expression of a single masterly Self.

A comparison equally illustrative might be taken from another of the arts, following a famous Hindu suggestion. The cosmic process the Indians have often called the Dance of Shiva. The conception is that the Divine never works but ever plays. Its activity is only sport. The puritanical conscience of many a Western critic has often held up this comparison to scorn, as new evidence of the essentially immoral nature of the heathen mind and of the gods which it creates. The figure seems to me even more appropriate than my illustration of the musician improvising on his instrument. For the dance is, in a sense, the highest of the arts. No instrument is here used or needed; the dancer is his own instrument. At every moment he is giving complete and untrammeled expression to the purpose which animates him. The purpose is a continuing purpose, ever changing in detail but retaining throughout the entire process its essential self-identity. The Cosmic Artist is ever fulfilling the inner urge of his own love of life and love of beauty. The Vedanta assures us that the Divine is *Sat, Chit, Ananda.* Of the cosmic Artist we may say the same: He eternally is Being or Life, Consciousness, and Joy.

The conception I am suggesting is obviously in some ways like Bergson's *Elan Vital*—which, in his recent book,[3] has revealed itself as a synonym for God. The world process of my Cosmic Artist is the outpouring of an inner life, essentially

[3] *Les deux sources de la morale et de la religion.*

spontaneous, always purposeful, but never directed by an ancient and fixed design. The difficulties which all readers of Bergson find when the relation of the *Elan Vital* to matter is questioned I have sought to avoid by adopting the oft-suggested view that the physical world is the very body of the Divine. In this respect my hypothesis is more like that of the Bhagavad Gita—to which, indeed, I owe much. The Cosmic Self might well say, with Sri Krishna in the Gita: "All this universe is strung upon Me, as rows of gems upon a thread."

God would thus be no invisible ruler to whom the cold processes of reason might point, but the warm and living whole, which we see with our eyes whenever we open them, and in which we live and move and have our being. The heavens declare the glory of God, for they *are* His glory. The firmament does not show His handiwork, but is itself, seen in the true light, very God of very God. When we deeply feel the beauty of the starry heavens and of trees and flowers, the wonders of the sea and of the interstellar spaces, it is literally the beauty of God that we behold. To no distant time, to no other-worldly realm, must we postpone the divine vision. "I had fainted unless I had believed to see the goodness of the Lord in the land of the living."

But here as elsewhere, the true appreciation of beauty must be disinterested. Too often in the past the beauty, as well as the goodness, of the Lord has been veiled and distorted by an attempt to identify it with an imagined exclusive care for us human darlings. The self-consistent, dignified indifference of Nature to particular personal exigencies, the steady persistence of "natural laws," is an essential part of the austere beauty of the world. This was recognized by the Founder of the Christian Religion, who told us that God "maketh His sun to rise on the evil and on the good, and sendeth rain on the just and on the unjust." The Old Testa-

ment, as well, in certain passages brings out this sense of the self-expression of the Divine wholly out of relation to any human interest or consideration. "Where wast thou when I laid the foundations of the earth? . . . Whereupon are the foundations thereof fastened? Or who laid the corner-stone thereof, when the morning stars sang together and all the sons of God shouted for joy? . . . Who hath divided a water-course for the overflowing of waters, or a way for the lightning of thunder; to cause it to rain on the earth where no man is; on the wilderness wherein there is no man?"

If we are to take this "Spiritual Pantheism" seriously we must go the whole way with it. God is to be found not only in the sweet and safe, but in the austere and the terrifying as well. "The beauty of the Lord" is not in the little alone. We must be prepared to trace it in the overwhelmingly immense, and to believe it possible that there may be a transcendent beauty on a scale too large, and in a complication of detail too multiform, for our little minds, with their particular interests and instinctive fears, to grasp or to appreciate. If God be the World Soul there is an element of wildness in Him not recognized in the usual picture of "Our heavenly Father." Even in such excellent and recent books as the able treatises by Dr. Tennant and Archbishop Temple, the figure of God that emerges retains a little too much of the glorified clergyman. The terrific conception of the Divine under the form of Kali, in Indian Shaktism, though a one-sided exaggeration, has still a certain degree of justification because it has a certain degree of truth. "Our God is a consuming fire." His life is full of finite death, his delight includes sorrow and anguish; endless spontaneity and immeasurable contrasts, pleasure and pain, stars and the sweep of systems, the terror of the storm as well as the calm of the June day, wildness, cold, darkness, joy,—all these are actualities in His nature; but so united, it may be, that were our minds

great enough to comprehend them together, we should find in the Whole an overwhelming and unspeakable beauty, a beatific vision.

In thus depicting the pantheistic World Soul I may seem to have forgotten the human self, whose individuality the preceding chapters sought so earnestly to defend. This surely I must not and shall not do. My confidence in the reality of the finite self is much greater than my trust in the truth of the overbeliefs suggested in this chapter. If the pantheistic view here presented be incompatible with the reality and the relative independence of the self, I shall without hesitation modify it, or even give it up. But I do not see that the two views are fundamentally inconsistent. For the Over-soul I have sought to present is not a Vedantic Brahma nor a Roycean Absolute. Our experiences are not conceived as being identical parts of its experience. Our minds are not identical parts of its mind, though certainly our bodies are parts of its body. This statement may seem at first an inconsistent position, but further reflection, I believe, will show that it is not. I have not made it in order to save the hypothesis of this chapter, but because it follows necessarily from the oft-repeated doctrine concerning the physical and the psychical which has been so fundamental to this volume. Matter is divisible into parts: mind is not. It is perfectly easy to see how our bodies can be, and are, parts of the physical universe: to assert that one mind is a part of another mind is really meaningless. Minds do not have parts, nor can different minds be combined so as additively to compose a new one. There is a sense—a very special sense—in which one might be justified in referring to the World Mind as *all-inclusive*. But this would be a justifiable expression only if intended to mean that the World Mind experiences all the objects that all finite minds experience, and that it knows about the content of all finite minds. For reasons already

set down (and perfectly obvious), finite experiences *qua* finite cannot be had by an "all-inclusive" mind. There is something necessarily unique about each finite experience and each finite self. God may be as "omnipotent" as you like, but He cannot *be* you. We must give up, once and for all, the notion that "mind" is like so much liquid that can be poured into pails of various sizes, and finally emptied into an all-inclusive hogshead. And once we do that, we shall realize that selves are essentially and necessarily unique, and not, in any intelligible sense, "parts" of something else.

This, it seems to me, is plain enough about perceptual, cognitional, and emotional experience; and I think it should be equally plain as to volition. When I will, it is I that will. My neighbor, a finite God, the World Mind, may all will identically the same thing that I will; but the recognition of this agreement of wills impinging upon a common object, this sharing of the same purpose, does not mean that my will is not my own but someone else's. The individual's will is just as much his own, just as unique, just as free in the pantheistic world I have outlined as it would be in any other.

If this is the case, we cannot say that all things are always in accordance with the will of God. Since finite individuals are real and have genuine wills of their own, it is possible for them to choose and to act in ways not in perfect harmony with those of the Cosmic Mind. This is the price which the universe pays for creating individuals. As the divine Will may well come to clearest finite expression in the life and voluntary acts of the thoroughly rational man who wills the universal, so in the acts of a self-centered and evil man, it may suffer something like temporary defeat.

La gloria di Colui che tutto muove
Per l'universo penetra, e resplende
In una parte piu, e meno altrove.

We as selves grow out from the universal life, in somewhat the same mysterious or simple fashion in which buds, in the springtime, grow out from the twigs and branches of the trees. The World itself is soul and body, and both our souls and our bodies grow quite naturally out of it. The details of the process are unknown to us; but if one adopts the general principles of causation and efficient purpose suggested in this volume, I do not see that there is any special difficulty in this derivation of individual selves. Doubtless we should like to have more information about it, and doubtless, in it, as in all the cases of physical causation, there is a *given* element or aspect which we simply have to accept. But these considerations will not force me to consider the hypothesis untenable until I have been shown that some other theory of the origin of selves is entirely transparent and without blind spots or difficulties.

In an earlier part of this chapter I expressed the opinion that the facts of the mystical consciousness are metaphysically significant and that they point in general to some religious interpretation of the universe. Of the three interpretations that come under this head it seems to me that Spiritual Pantheism is the most thoroughly compatible with the mystical experience. This experience, as everyone knows, has various forms, but the most characteristic type is that which combines a sense of union with a sense of distinction. Both of these characters are essential. Without the union the most characteristic thing in mysticism would be lacking: without the distinction, subject and object, the finite, and the infinite, would so merge that no consciousness of union would be left. Consciousness of union involves consciousness of difference. The One may be *nearly* all, but enough distinction must remain to enable the finite to say, "I am I." Now it is difficult to see how this can be possible if between the finite and the infinite that absolute and utter

identity holds which is asserted by the Advaita Vedanta, or the nihilistic Madhyamika, or the idealistic Absolutism of Royce and his school. The transcendent God of orthodox Christian Theism, on the other hand, could, indeed, perfectly well sustain that rather external relation to finite selves which "prophetic religion" (to use Heiler's term) attributes to Him; but it is difficult to see how with such a Being a soul could partially merge in the final "unitive" experience to which nearly all the great mystics testify. Be that as it may, certainly the Spiritual Pantheism I have tried to outline has more room for both the union and the difference which mysticism demands than any other *Weltanschauung*. If it were true, if the world were as it suggests, if the human self were the direct outgrowth of the World Soul and shared its nature, we should expect to find that intuition of the Divine, that sense of sharing its very life, of communing with the Eternal Spirit, of which the mystics and the poets have told us. For on this hypothesis the Over Soul is the source of our spirits; and it might well be also, in Augustine's phrase, "the goal of our pilgrimage, and our resting place by the way." Nor would it be unreasonable to suppose that He has made us for Himself, and that our hearts are, therefore, restless till they rest in Him.

This brings us to one final question about the God of Spiritual Pantheism which we must not unfairly dodge, even though we cannot answer it. Can such a God as I have suggested be called good? Many philosophers both West and East have insisted that this question must receive a negative answer. Morality, it is said, is a category that applies only to the finite: it tends to destroy itself, and in its completed form to cease to be morality and to merge into religion. The position one should take upon this question will plainly depend in part upon the interpretation one gives to morality. If it be conformity to rules, or victory over obstacles, plainly

the Determiner of Destiny as portrayed in this chapter cannot be moral. But if (as I for one hold) morality be the creation and development of the highest values, I can see nothing incompatible between the Cosmic Self and genuine and supreme goodness. Clearly the Cosmic Self suggested in our discussion eternally creates what are for Himself the highest values. It will be asked, Does he create values for us also? And this question, I suppose, is one with the question whether He has "made us for himself." I do not know whether philosophy can answer. Religion can and does. And if philosophy is unable to make here any positive assertion, I do not see how it can forbid the conviction of both Buddhism and Christianity that insight and love are at the very heart of Being.

Well, these are my over-beliefs, my ultimate guesses. I do not pretend even to have suggested a solution for all the great questions. And I am painfully aware that difficulties might be pointed out in many of the suggestions I have made. For many even of those positions which I have defended most confidently I would not claim absolute demonstrability. The reader, I trust, will recall that from the first chapter to the last, I have claimed for the conclusions of philosophy in general, so far as it deals with the existential world, no absolute certainty but the more modest and tempered hope of a balance of probability. I think these beliefs and over-beliefs of mine are probable. I think, on the whole, they are more consistent with the facts and more inwardly plausible, than any of the rival hypotheses. They are not certain. As Xenophanes said, 2500 years ago, "There never was nor will be a man who has clear certainty about the gods and about all things; for even if he does chance to say what is true, yet he himself does not know that it is so. But all are free to guess. These are guesses something like the truth."

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