MIND is an appearance—an unreal appearance—suggested by the modes of activity of living things. For the plain man, consciousness is an inevitable and unrecognized assumption. He finds himself conscious as naturally as he finds the world external.

It is only necessary, however, to consider living-activity with sufficient philosophical innocence to see that consciousness is an assumption. And once that position is attained it is not difficult to account for the facts of life on other and less debatable grounds. The value of an assumption is to lay the problems that haunt us, but the assumption of consciousness raises rich crops of them. My account of life may be found in the appearance of mind; here I need only say that it dispenses altogether with the notion of consciousness, regarding plants and animals as manifestations of activity occurring according to laws which can be formulated in non-subjective terms. Whether or not it is an advance, scientifically, to regard men and monkeys as manifestations of activity occurring according to law rather than as conscious subjects acting according to the imaginations of their own hearts, depends on whether the new account is more explanatory than the old, whether it solves more problems than the old, while not raising worse new ones. Emphatically it does not depend on whether we like it or not. We did not like being ousted from the central position in the universe; we are not likely to welcome the proposition that, as persons, we do not exist at all.

If the notion of the conscious subject is a mistaken one, philosophically, it follows that knowledge, as an attribute of the subject, is also illusion, philosophically. Now this is not new in philosophy. The arguments of philosophers of all kinds continually lead them towards scepticism. But they simply say, "But this leads to scepti-
cism" (lately they say "to pragmatism"; behaviorism has not yet attained the dignity of being mentioned to be rejected) and forthwith try another line. That is to say, the possibility of knowledge, real knowledge, is held by philosophers to be beyond question—a sad lack of philosophical innocence—presumably because to do otherwise they would deny themselves. But it is surely not an unfamiliar paradox if I suggest that, for a philosopher, to lose his soul, his subjectivity, is the only way to find it. Doubtless it is especially hard for a philosopher to give up his knowledge; he has great possessions.

Speculation by no mean involves a speculator, activity an actor. The increasing insight of science into the activities of nature has banished the whole cast of dramatis personae who played before our primitive ancestors. But the play goes on. And I may banish myself and still continue to speculate on the nature of things, without absurdity.

It has been said that Kant's pure reason is scepticism and his practical reason the contradiction of it. So far as his pure reason led him towards scepticism, so far he was right; but there he went wrong. Having arrived at scepticism, he took it for granted that the pure reason was not in all cases applicable and thereupon asserted the authority of the practical reason. This was simply the plain man's prejudice asserting itself: in the language of Paul, one might say, it was the old Adam intruding.

Having reached an objective scepticism, Kant should have gone on to a subjective scepticism. Having proved the impossibility of knowing anything, he should have wondered whether it was not because there is no one to know it. But indeed his pure reason had never been very pure at all. It had not consisted in the banishment of subjectivity, but in a refinement of that subjectivity, in an attempt to rationalize it while preserving it. One can be a philosopher and a plain man but not at the same time. The philosopher must give up all the plain man's prejudices, not only his prejudice that a spade is a spade, but also his prejudice that a person is a person. It is because Kant's dualism of the two kinds of reason is not complete that it is ineffective; one simply sceptical and the other simply and irrationally contradicting it.

May I remind the reader at this point of the manner of my approach to the theory of knowledge. I have formed a scientific hypothesis as to the nature of life, a hypothesis according to which the knowing subject has no other existence than as a "scientific
object," and a mistaken one. It thus becomes incumbent on me to examine the status of what we call knowledge. But the reader must remember that I am not arguing philosophically against the possibility of knowledge. The hypothesis I assume simply takes its impossibility for granted. The fact that philosophers have been led to scepticism by their reasoning is so much, if negative, support for my hypothesis.

When I am said to see something, what is the nature of the event thus described, according to my theory? It is the occurrence in me of a tendency on the occasion of a change in the situation, an occurrence as necessary as when a chemical reaction responds to a change in its conditions. Out of this fact arise our notions of a "person," a "thing" and a relation of the former to the latter of "perception." The thing, as seen, is not a real at all; all that its reality consists in is in being the "object of perception," i.e., the occasion of a tendency.

Now let the event be "my judging that something presented is an orange." In this case the event is the occurrence of a particular kind of tendency in me in respect of a change in the situation, the tendency, namely, in this case, to judge "It's an orange," a tendency as little subjective as the other. Out of this fact arise our notions of the thinking subject, its objects (ideas) and a relation between them variously named. The reality of the concept "orange" consists in its being the "object of the understanding" and that is all its reality. In particular its reality does not consist in its being representative of a "real" sense-object. That is its value.

Thus my knowledge, whether "by acquaintance" or "by description," is knowledge by courtesy only.

The illusoriness of knowledge in both kinds has long been recognized. We need not delay over the case of knowledge by acquaintance. It is clearly relative to the unique character of the knower, his particular morphological character, his anatomy and physiology. Senses and their acuity vary not only from species to species but also within the species.

As to knowledge by description, which arises in "inter-subjective" intercourse, it is a confusion as to the function of description that is responsible for our delusion that we can make true propositions. If a man tells me something and I understand the fact to be or to have been, what it actually is or was, the function of description is adequately performed, in one sense. His proposition is true, in one sense. And this is the original and, as it were, proper func-
tion of "description," namely, the adequate conveyance of the knowledge of a fact from one person to another. But it is perfectly clear that the adequacy of the man's speech as an objective description of the fact conveyed is quite another thing. As an objective description of the fact his speech might be quite inadequate, untrue, indeed must be inadequate, must be untrue. For even though he were a logician and a scientist, expert in the class of fact at issue, he could not frame a proposition about it which, as logician, he could claim to be true. Truth, simply does not apply to the case of description of reality. To think so is like thinking our senses give us knowledge of the real world.

Our knowledge is necessarily anthropomorphic. The terms in which we describe the simplest brute fact are human terms. They are interpretation. We are a mirror up to Nature and our knowledge the reflection therein—a figure not to be pressed to the question—reflection for whom? The world known by acquaintance and by description, is a "mental construction" and to know it better is to have more and acuter senses and more adequate concepts. How adequate? Harmonizing with our ethical and aesthetic ideals? With the rest of our concepts? With the facts of sense-experience? Harmonizing with the facts. Take care of the pence, says the proverb. If we take care of the facts, the ethical and aesthetic ideals will take care of themselves.

My own reading of the facts of life dispenses with the mind. (This does not imply that it dispenses with the spirit: it is able to give an account of spiritual values.) Mind is explained away—in theory always. What there is is life—a particular kind of physico-chemical activity—manifesting itself in its own particular ways. So much for my own concept of the animate world. What of the inanimate?

In explaining away Mind one explains away Matter, the object of sense, as well as Knowledge, the activity, or the product of activity, of the understanding. But only Matter as the plain man understands it, and this had already been done long ago both by philosophers and by scientists. It is generally agreed by philosophers that the existence of the external world is a matter of faith, not of knowledge; and scientists willingly admit that not only do they study phenomena merely, but that their verification of their theories consists in putting them to the test of sense-experience.

When language first began to be spoken the words used must have represented sense-objects or events or situations apprehended
through the senses. Yet even then much interpretation must have been implicit in speech, much have been taken for granted, the speakers themselves for instance, as conscious persons, the reality of their objects, Space and Time, concepts that were not made explicit anywhere on earth perhaps for millions of years.

But very early also there must have been explicit interpretation. Men feeling the wind blow postulated a blower, hearing the thunder, a thunderer. This is the beginning of science, for the essence of science is hypothesis, the interpretation of fact. "Explicit interpretation" does not imply that the interpretation was recognized as such. On the contrary experience shows that interpretative concepts are very apt to be regarded as having the same standing as concepts representative of sense-objects or events, i. e., as representative of "reality," in the sense of phenomenal reality. This is an illusion which is still common today. So much so, that one of these interpretative concepts. "Mind." is regarded by perhaps the majority of philosophers as the only reality.

The fact is that interpretative concepts are analogous not to objects of sense but to the senses by which we are aware of objects; they are modes of insight, the senses of the understanding. The concept "atom." for instance, gives us what we suppose a better insight than we had before into the nature of chemical interactions. The interpretative concept is a way of looking at nature, not the representative of an actual existent in nature.

It does not follow, of course, that interpretative concepts necessarily have no potentially sensible counterparts. We may keep an open mind as to whether potentially sensible atoms do in fact exist. The planet Neptune was a scientific object which turned out to correspond to an "existent." It became a sense-object. And then interpretation was out of place. We do not interpret objects of sense; we perceive them and give names to them if we are sufficiently interested.

The world is sensibly appreciated by different species of animals according to their kind. And we are not justified in presuming that we appreciate it more truly than our fellow-animals. Similarly, the world is conceptually appreciated by different men in different ways. Now in a sense no man is justified in presuming that he conceives it more truly than another. The animistic interpretation of nature is one mode of conceiving it; another mode regards nature as a field of events. This latter mode is the scientific and its ideal is to find uniformity in the way events happen and so to state the
“necessary” conditions of their happening. It attempts to describe the events with as little interpretation as possible, while at the same time it is forced ultimately to interpretation by its passion to explain how events are connected; for the connections are not revealed to sense.

The primitive animistic and the modern scientific interpretations of nature are both anthropomorphic. And the latter can hardly be considered truer than the former since the concept of force is not more intelligible than that of God. And if the scientist says that what he calls the concept force is simply “the way things happen,” it is open to the primitive man, and the modern theologian, to retort that that is what he calls God. Both parties can make their definition less and less anthropomorphic, less transcendent and more immanent, less capricious and more necessary, can in short sophisticate it ad lib.

As philosopher, then, I cannot assert anything whatever of the universe. My scepticism is complete, since my incapacity to know arises from the fact that I do not exist, as a knowing subject. I do not know what “I know” means. Philosophically, I am simply a manifestation of life.

But as a plain man, with the plain man’s prejudices diluted with a little of the pure reason, I venture to believe that there are real changes, and that they arise in a real external world, not simply in my body, or in my imagination. This external world appears to me in phenomena. In these phenomena I may find orderliness without limit, but the order I find in them affords no guarantee whatever of the orderliness of the real world. The order of that world may be as non-existent as purpose in life. This would not imply disorder. It is merely our weakness that supposes the world must be either orderly or disorderly. These concepts may be transcended by the physicist just as those of moral goodness and badness are transcended in my theory of life. Order in phenomena implies necessity. But it may be that the necessity of phenomenal events is made up of contingencies, like the necessities of statistics. And a contingency itself may be regarded as a necessity, is at any rate made up out of necessities. The mysteries of physics indeed remind one of those of theology, how for instance to reconcile God’s fore-knowledge and man’s freedom. And perhaps they are as impossible to solve, inasmuch as like the latter they are concerned with what are mere inventions. “Necessity” and “contingency” are as conceptual as “God” and “free will.”
From the beginning of philosophy the notion of the order of the universe has been associated with those of Time and Space. It has been analyzed into them. Lately these two have been synthesized into the concept of a world of four dimensions. In this world, it seems, events do not happen either necessarily or contingently, they simply are.

This appears to be the crowning mercy for Science, considered as the study, the interpretation, of the order of the phenomenal world. But it is only the order of nature that is thus conceived. "And yet," says Professor Eddington, "in regard to the nature of things, this knowledge is only an empty shell—a form of symbols. It is knowledge of structural form, and not knowledge of content . . . the mind has but regained from nature that which the mind has put into nature."¹ The physicist, like the philosopher, admits his ignorance of the events that underlie phenomena.

The epistemology, then, of my theory of life is simple. Practical truth is what works: of theoretical truth there is none.

¹ *Space, Time and Gravitation*, p. 200.