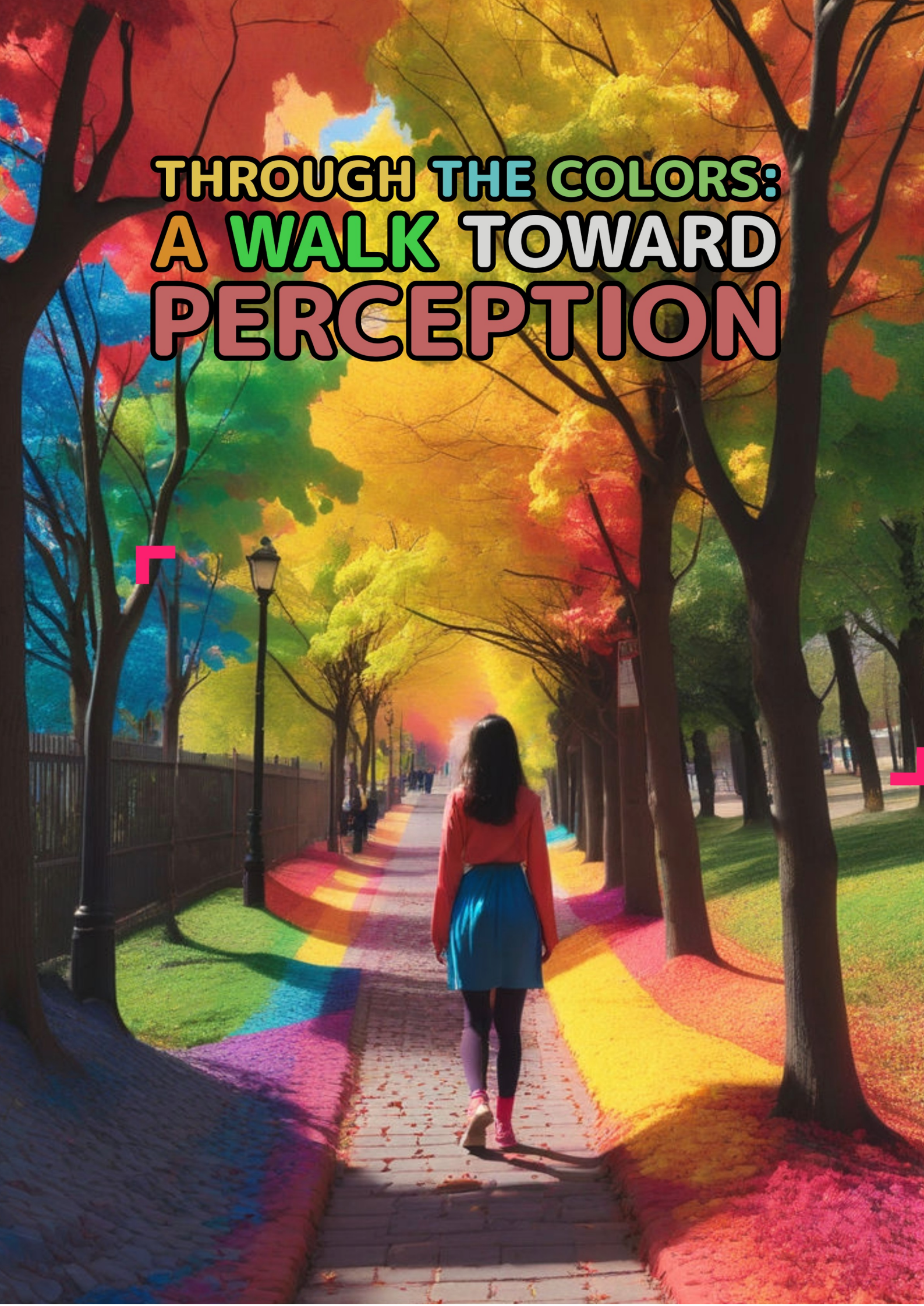


THROUGH THE COLORS: A WALK TOWARD PERCEPTION



Our blue patch of color grows larger and larger; it ceases to be blue and faint; at the last it has been replaced by an expanse of vivid green, and we see the tree just before us. During our whole walk we have been seeing the tree. This appears to mean that we have been having a whole series of visual experiences, no of which were just alike, and each of which was taken as a representative of the tree. Which of these representatives is most like the tree? Is the tree really a faint blue, or is it really a vivid green? Or is it of some intermediate color?

Probably most persons will be inclined to maintain that the tree only seems blue at a distance, but that it really is green, as it appears when one is close to it. In a sense, the statement is just; yet some of those who make it would be puzzled to tell by what right they pick out of the whole series of experiences, each of which represents the tree as seen from some particular position, one individual experience, which they claim not only represents the tree as seen from a given point but also represents it as it is. Does this particular experience bear some peculiar earmark which tells us that it is like the real tree while the others are unlike it? REAL THINGS.—And what is this real tree that we are supposed to see as it is when we are close to it?

About hundred years ago the philosopher pointed out that the distinction commonly made between things as they look, the apparent, and things as they are, the real, is at bottom the distinction between things as presented to the sense of sight and things as presented to the sense of touch. The acute analysis which he made has held its own ever since.

We have seen that, in walking towards the tree, we have a long series of visual experiences, each of which differs more or less from all of the others. Nevertheless, from the beginning of our progress to the end, we say that we are looking at the same tree. The images change color and grow larger. We do not say that the tree changes color and grows larger. Why do we speak as we do? It is because, all along the line.

we mean by the real tree, not what is given to the sense of sight, but something for which this stands as a sign. This something must be given in our experience somewhere, we must be able to perceive it under some circumstances or other, or it would never occur to us to recognize the visual experiences as signs, and we should never say that in being conscious of them in succession we are looking at the same tree. They are certainly not the same with each other; how can we know that they all stand for the same thing, unless we have had experience of a connection of the whole series with one thing?

This thing for which so many different visual experiences may serve as signs is the thing revealed in experiences of touch. When we ask: In what direction is the tree? How far away is the tree? How big is the tree? we are always referring to the tree revealed in touch. It is nonsense to say that what we see is far away, if by what we see we mean the visual experience itself. As soon as we move we lose that visual experience and get another, and to recover the one we lost we must go back where we were before. When we say we see a tree at a distance, we must mean, then, that we know from certain visual experiences which we have that by moving a certain distance we will be able to touch a tree.

And what does it mean to move a certain distance? In the last analysis it means to us to have a certain quantity of movement sensations. Thus the real world of things, for which experiences of sight serve as signs, is a world revealed in experiences of touch and movement, and when we speak of real positions, distances, and magnitudes, we are always referring to this world. But this is a world revealed in our experience, and it does not seem a hopeless task to discover what may properly be called real and what should be described as merely apparent, when both the real and the apparent are open to our inspection. Can we not find in this analysis a satisfactory explanation of the plain man's claim that under certain circumstances he sees the tree as it is and under others he does not?

What he is really asserting is that one visual experience gives him better information regarding the real thing, the touch thing, than does another. But what shall we say of his claim that the tree is really green, and only looks blue under certain circumstances? Is it not just as true that the tree only looks green under certain circumstances? Is color any part of the touch thing? Is it ever more than a sign of the touch thing? How can one color be more real than another? Now, we may hold to analysis and maintain that, in general, the real world, as contrasted with the apparent, means to us the world that is revealed in experiences of touch and movement; and yet we may admit that the word "real" is sometimes used in rather different senses.

It does not seem absurd for a woman to Say: This piece of silk really is yellow; it only looks white under this light. We all admit that a white house may look pink under the rays of the setting sun, and we never call it a pink house. We have seen that it is not unnatural to say: That tree is really green; it is only its distance that makes it look blue. When one reflects upon these uses of the word "real," one recognizes the fact that, among all the experiences in which things are revealed to us, certain experiences impress us as being more prominent or important or serviceable than certain others, and they come to be called real. Things are not commonly seen by artificial light; the sun is not always setting; the tree looks green when it is seen most satisfactorily.

In each case, the real color of the thing is the color that it has most satisfactorily. In each case, the real color of the thing is the color that it has under circumstances that strike us as normal or as important. We cannot say that we always regard as most real that aspect under which we most commonly perceive things, for if a more unusual experience is more serviceable and really gives us more information about the thing, we give the preference to that. we look with the naked eye at a moving speck on the table before us, and we are unable to distinguish its parts. We place a microscope over the speck and perceive an insect with all its members.

The second experience is the more unusual, but would not every one say: Now we perceive the thing as it is? **ULTIMATE REAL THINGS.**—Let us turn away from the senses of the word "real," which recognize one color or taste or odor as more real than another, and come back to the real world of things presented in sensations of touch. All other classes of sensations may be regarded as related to this as the series of visual experiences above mentioned was related to the one tree which was spoken of as revealed in them all, the touch tree of which they gave information. Can we say that this world is always to be regarded as reality and never as appearance?

We have already seen that science does not regard as anything more than appearance the real things which seem to be directly presented in our experience. This pen that I hold in my hand seems, as I pass my fingers over it, to be continuously extended. It does not appear to present an alternation of filled spaces and empty spaces. I am told that it is composed of molecules in rapid motion and at considerable distances from one another. I am further told that each molecule is composed of atoms, and is, in its turn, not a continuous thing, but, so to speak, a group of little things. If I accept this doctrine, as it seems I must, am I not forced to conclude that the reality which is given in my experience, the reality with which I have contrasted appearances and to which I have referred them, is, after all, itself only an appearance?

The touch things which I have hitherto regarded as the real things that make up the external world, the touch things for which all my visual experiences have served as signs, are, then, not themselves real external things, but only the appearances under which real external things, themselves imperceptible, manifest themselves to me. It seems, then, that I do not directly perceive any real thing, or, at least, anything that can be regarded as more than an appearance. What, then, is the external world? What are things really like? Can we give any true account of them, or are we forced to say with the skeptics that we only know how things seem to us, and must abandon the attempt to tell what they are really like?

Now, before one sets out to answer a question it is well to find out whether it is a sensible question to ask and a sensible question to try to answer. He who asks: Where is the middle of an infinite line? When did all time begin? Where is space as a whole? does not deserve a serious answer to his questions. And it is well to remember that he who asks: What is the external world like? must keep his question a significant one, if he is to retain his right to look for an answer at all. He has manifestly no right to ask us: How does the external world look when no one is looking? How do things feel when no one feels them? How shall I think of things, not as I think of them, but as they are? If we are to give an account of the external world at all, it must evidently be an account of the external world; it must be given in terms of our experience of things.

The only legitimate problem is to give a true account instead of a false one, to distinguish between what only appears and is not real and what both appears and is real. Bearing this in mind, let us come back to the plain man's experience of the world. He certainly seems to himself to perceive a real world of things, and he constantly distinguishes, in a way very serviceable to himself, between the merely apparent and the real. There is, of course, a sense in which every experience is real; it is, at least, an experience; but when he contrasts real and apparent he means something more than this.

Experiences are not relegated to this class or to that merely at random, but the final decision is the outcome of a long experience of the differences which characterize different individual experiences and is an expression of the relations which are observed to hold between them. Certain experiences are accepted as signs, and certain others come to take the more dignified position of thing signified; the mind rests in them and regards them as the real. We have seen above that the world of real things in which the plain man finds himself is a world of objects revealed in experiences of touch. When he asks regarding anything: How far away is it? How big is it?

In what direction is it? it is always the touch thing that interests him. What is given to the other senses is only a sign of this. We have also seen that the world of atoms and molecules of which the man of science tells us is nothing more than a further development of the world of the plain man. The real things with which science concerns itself are, after all, only minute touch things, conceived just as are the things with which the plain man is familiar. They exist in space and move about in space, as the things about us are perceived to exist in space and move about in space. They have size and position, and are separated by distances.

We do not perceive them, it is true; but we conceive them after the analogy of the things that we do perceive, and it is not inconceivable that, if our senses were vastly more acute, we might perceive them directly. Now, when we conclude that the things directly perceptible to the sense of touch are to be regarded as appearances, as signs of the presence of these minuter things, do we draw such a conclusion arbitrarily? By no means. The distinction between appearance and reality is drawn here just as it is drawn in the world of our common everyday experiences. The great majority of the touch things about us we are not actually touching at any given moment.

We only see the things, i.e. we have certain signs of their presence. None the less we believe that the things exist all the time. And in the same way the man of science does not doubt the existence of the real things of which he speaks; he perceives their signs. That certain experiences are to be taken as signs of such realities he has established by innumerable observations and careful deductions from those observations.

To see the full force of his reasonings one must read some work setting forth the history of the atomic theory. If, then, we ask the question: What is the real external world? it is clear that we cannot answer it satisfactorily without taking into consideration the somewhat shifting senses of the word "real." What is the real external world to the plain man? It is the world of touch things, of objects upon which he can lay his hands. What is the real external world to the man of science?

It is the world of atoms and molecules, of minuter touch things that he cannot actually touch, but which he conceives as though he could touch them. It should be observed that the man of science has no right to deny the real world which is revealed in the experience of the plain man. In all his dealings with the things which interest him in common life, he refers to this world just as the plain man does. He sees a tree and walks towards it, and distinguishes between its real and its apparent color, its real and its apparent size. He talks about seeing things as they are, or not seeing things as they are. These distinctions in his experience of things remain even after he has come to believe in atoms and molecules.

The touch object, the tree as he feels it under his hand, may come to be regarded as the sign of the presence of those entities that science seems, at present, to regard as ultimate. Does this prevent it from being the object which has stood as the interpreter of all those diverse visual sensations that we have called different views of the tree? They are still the appearances, and it, relatively to them, is the reality. Now we find that it, in its turn, can be used as a sign of something else, can be regarded as an appearance of a reality more ultimate. It is clear, then, that the same thing may be regarded both as appearance and as reality—appearance as contrasted with one thing, and reality as contrasted with another.

But suppose one says: I do not want to know what the real external world is to this man or to that man; I want to know what the real external world is. What shall we say to such a demand? There is a sense in which such a demand is not purely meaningless, though it may not be a very sensible demand to make. We have seen that an increase of knowledge about things compels a man to pass from the real things of common life to the real things of science, and to look upon the former as appearance.

Now, a man may arbitrarily decide that he will use the word "reality" to indicate only that which can never in its turn be regarded as appearance, a reality which must remain an ultimate reality; and he may insist upon our telling him about that.

How a man not a soothsayer can tell when he has come to ultimate reality, it is not easy to see. Suppose, however, that we could give any one such information. We should then be telling him about things as they are, it is true, but his knowledge of things would not be different in kind from what it was before. The only difference between such a knowledge of things and a knowledge of things not known to be ultimate would be that, in the former case, it would be recognized that no further extension of knowledge was possible. The distinction between appearance and reality would remain just what it was in the experience of the plain man.

THE BUGBEAR OF THE "UNKNOWABLE."—It is very important to recognize that we must not go on talking about appearance and reality, as if our words really meant something, when we have quite turned our backs upon our experience of appearances and the realities which they represent. That appearances and realities are connected we know very well, for we perceive them to be connected. What we see, we can touch. And we not only know that appearances and realities are connected, but we know with much detail what appearances are to be taken as signs of what realities.

The visual experience which I call the house as seen from a distance I never think of taking for a representative of the hat which I hold in my hand. This visual experience I refer to its own appropriate touch thing, and not to another. If what looks like a beefsteak could really be a fork or a mountain or a kitten indifferently,—but I must not even finish the sentence, for the words "look like" and "could really be" lose all significance when we loosen the bond between appearances and the realities to which they are properly referred.

Each appearance, then, must be referred to some particular real thing and not to any other. This is true of the appearances which we recognize as such in common life, and it is equally true of the appearances recognized as such in science. The pen which I feel between my fingers I may regard as appearance and refer to a swarm of moving atoms. But it would be silly for me to refer it to atoms "in general." The reality to which I refer the appearance in question is a particular group of atoms existing at a particular point in space.

The chemist never supposes that the atoms within the walls of his test-tube are identical with those in the vial on the shelf. Neither in common life nor in science would the distinction between appearances and real things be of the smallest service were it not possible to distinguish between this appearance and that, and this reality and that, and to refer each appearance to its appropriate reality. Indeed, it is inconceivable that, under such circumstances, the distinction should have been drawn at all. These points ought to be strongly insisted upon, for we find certain philosophic writers falling constantly into a very curious abuse of the distinction and making much capital of it.

It is argued that what we see, what we touch, what we conceive as a result of scientific observation and reflection—all is, in the last analysis, material which is given us in sensation. The various senses furnish us with different classes of sensations; we work these up into certain complexes. But sensations are only the impressions which something outside of us makes upon us. although we seem to ourselves to know the external world as it is, our knowledge can never extend beyond the impressions made upon us.

we are absolutely shut up to appearances, and can know nothing about the reality to which they must be referred. Touching this matter writes as follows: "When we are taught that a piece of matter, regarded by us as existing externally, cannot be really known, but that we can know only certain impressions produced on us, we are yet, by the relativity of thought, compelled to think of these in relation to a cause —the notion of a real existence which generated these impressions becomes nascent.

If it be proved that every notion of a real existence which we can frame is inconsistent with itself,—that matter, however conceived by us, cannot be matter as it actually is,—our conception, though transfigured, is not destroyed: there remains the sense of reality, dissociated as far as possible from those special forms under which it was before represented in thought." This means, in plain language, that we must regard everything we know and can know as appearance and must refer it to an unknown reality. Sometimes calls this reality the Unknowable, sometimes he calls it the Absolute, and sometimes he allows it to pass by a variety of other names, such as Power, Cause, etc.

He wishes us to think of it as "lying behind appearances" or as "underlying appearances." Probably it has already been remarked that this Unknowable has brought us around again to that amusing "telephone exchange" discussed in the chapter. But if the reader feels within himself the least weakness for the Unknowable, I beg him to consider carefully, before he pins his faith to it, the following:— If we do perceive external bodies, our own bodies and others, then it is conceivable that we may have evidence from observation to the effect that other bodies affecting our bodies may give rise to sensations. In this case we cannot say that we know nothing but sensations; we know real bodies as well as sensations, and we may refer the sensations to the real bodies.

If we do not perceive that we have bodies, and that our bodies are acted upon by others, we have no evidence that what we call our sensations are due to messages which come from "external things" and are conducted along the nerves. It is then, absurd to talk of such "external things" as though they existed, and to call them the reality to which sensations, as appearances, must be referred. In other words, if there is perceived to be a telephone exchange with its wires and subscribers, we may refer the messages received to the subscribers, and call this, if we choose, a reference of appearance to reality.

But if there is perceived no telephone exchange, and if it is concluded that any wires or subscribers of which it means anything to speak must be composed of what we have heretofore called "messages," then it is palpably absurd to refer the "messages" as a whole to subscribers not supposed to be composed of "messages"; and it is a blunder to go on calling the things that we know "messages," as though we had evidence that they came from, and must be referred to, something beyond themselves. We must recognize that, with the general demolition of the exchange, we lose not only known subscribers, but the very notion of a subscriber.

It will not do to try to save from this wreck some "unknowable" subscriber, and still pin our faith to him. We have seen that the relation of appearance to reality is that of certain experiences to certain other experiences. When we take the liberty of calling the Unknowable a reality, we blunder in our use of the word.