Is There an External World?
George Stuart Fullerton

HOW THE PLAIN MAN THINKS HE KNOWS THE WORLD

As schoolboys we enjoyed Cicero’s joke at the expense of the “minute philosophers.” They denied the immortality of the soul; he affirmed it; and he congratulated himself upon the fact that, if they were right, they would not survive to discover it and to triumph over him.

At the close of the seventeenth century the philosopher John Locke was guilty of a joke of somewhat the same kind. “I think,” said he, “nobody can, in earnest, be so skeptical as to be uncertain of the existence of those things which he sees and feels. At least, he that can doubt so far (whatever he may have with his own thoughts) will never have any controversy with me; since he can never be sure I say anything contrary to his own opinion.”

Now, in this chapter and in certain chapters to follow, I am going to take up and turn over, so that we may get a good look at them, some of the problems that have presented themselves to those who have reflected upon the world and the mind as they seem given in our experience. I shall begin by asking whether it is not possible to doubt that there is an external world at all. The question cannot best be answered by a jest. It may, of course, be absurd to maintain that there is no external world; but surely he, too, is in an absurd position who maintains dogmatically that there is one, and is yet quite unable to find any flaw in the reasonings of the man who seems to be able to show that this belief has no solid foundation. And we must not forget that the men who have thought it worth while to raise just such questions as this, during the last twenty centuries, have been among the most brilliant intellects of the race. We must not assume too hastily that they have occupied themselves with mere trivialities.

Since, therefore, so many thoughtful men have found it worth while to ask themselves seriously whether there is an external world, or, at least, how we can know that there is an external world, it is not unreasonable to expect that, by looking for it, we may find in our common experience or in science some difficulty sufficient to suggest the doubt which at first strikes the average man as preposterous. In what can such a doubt take its rise? Let us see.

I think it is scarcely too much to say that the plain man believes that he does not directly perceive an external world, and that he, at the same time, believes that he does directly perceive one. It is quite possible to believe contradictory things, when one’s thought of them is somewhat vague, and when one does not consciously bring them together.

As to the first-mentioned belief. Does not the plain man distinguish between his ideas of things and the things themselves? Does he not believe that his ideas come to him through the avenues of the senses? Is he not aware of the fact that, when a sense is disordered, the thing as he perceives it is not like the thing “as it is”? A blind man does not see things when they are there; a color-blind man sees them as others do not see them; a man suffering under certain abnormal conditions of the nervous system sees things when they are not there at all, i.e. he has hallucinations. The thing itself, as it seems, is not in the man’s mind; it is the idea that is in the man’s mind, and that represents the thing. Sometimes it appears to give a true account of it; sometimes it seems to give a garbled account; sometimes it is a false representative
throughout—there is no reality behind it. It is, then, the *idea* that is immediately known, and not the *thing*; the thing is merely *inferred* to exist.

I do not mean to say that the plain man is conscious of drawing this conclusion. I only maintain that it seems a natural conclusion to draw from the facts which he recognizes, and that sometimes he seems to draw the conclusion half-consciously.

On the other hand, we must all admit that when the plain man is not thinking about the distinction between ideas and things, but is looking at some material object before him, is touching it with his fingers and turning it about to get a good look at it, it never occurs to him that he is not directly conscious of the thing itself.

He seems to himself to perceive the thing immediately; to perceive it *as* it is and *where* it is; to perceive it as a really extended thing, out there in space before his body. He does not think of himself as occupied with mere images, representations of the object. He may be willing to admit that his mind is in his head, but he cannot think that what he sees is in his head. Is not the object *there*? does he not *see* and *feel* it? Why doubt such evidence as this? He who tells him that the external world does not exist seems to be denying what is immediately given in his experience.

The man who looks at things in this way assumes, of course, that the external object is known directly, and is not a something merely inferred to exist from the presence of a representative image. May one embrace this belief and abandon the other one? If we elect to do this, we appear to be in difficulties at once. All the considerations which made us distinguish so carefully between our ideas of things and the things themselves crowd in upon us. Can it be that we know things independently of the avenues of the senses? Would a man with different senses know things just as we do? How can any man suffer from an hallucination, if things are not inferred from images, but are known independently?

The difficulties encountered appear sufficiently serious even if we keep to that knowledge of things which seems to be given in common experience. But even the plain man has heard of atoms and molecules; and if he accepts the extension of knowledge offered him by the man of science, he must admit that, whatever this apparently immediately perceived external thing may be, it cannot be the external thing that science assures him is out there in space beyond his body, and which must be a very different sort of thing from the thing he seems to perceive. The thing he perceives must, then, be *appearance*; and where can that appearance be if not in his own mind?

The man who has made no study of philosophy at all does not usually think these things out; but surely there are interrogation marks written up all over his experience, and he misses them only because he does not see clearly. By judiciously asking questions one may often lead him either to affirm or to deny that he has an immediate knowledge of the external world, pretty much as one pleases. If he affirms it, his position does not seem to be a wholly satisfactory one, as we have seen; and if he denies it, he makes the existence of the external world wholly a matter of inference from the presence of ideas in the mind, and he must stand ready to justify this inference.

To many men it has seemed that the inference is not an easy one to justify. One may say: We could have no ideas of things, no sensations, if real things did not exist and make an impression upon our senses. But to this it may be answered: How is that statement to be proved? Is it to be proved by observing that, when things are present and affect the senses, there come into being ideas which represent the things? Evidently such a proof as this is out of the question, for, if it is true that we know external things only by inference and never immediately, then we can never prove by observation that ideas and things are thus connected. And if it is not to be proved by observation, how shall it be proved? Shall we just assume it dogmatically and pass on to something else? Surely there is enough in the experience of the plain man to justify him in raising the question whether he can certainly know that there is an external world.
THE PSYCHOLOGIST AND THE EXTERNAL WORLD

We have seen just above that the doubt regarding the existence of the world seems to have its root in the familiar distinction between ideas and things, appearances and the realities which they are supposed to represent. The psychologist has much to say about ideas; and if sharpening and making clear this distinction has anything to do with stirring up doubts, it is natural to suppose that they should become more insistent when one has exchanged the ignorance of everyday life for the knowledge of the psychologist.

Now, when the psychologist asks how a given mind comes to have a knowledge of any external thing, he finds his answer in the messages which have been brought to the mind by means of the bodily senses. He describes the sense-organs and the nervous connections between these and the brain, and tells us that when certain nervous impulses have traveled, let us say, from the eye or the ear to the brain, one has sensations of sight or sound.

He describes for us in detail how, out of such sensations and the memories of such sensations, we frame mental images of external things. Between the mental image and the thing that it represents he distinguishes sharply, and he informs us that the mind knows no more about the external thing than is contained in such images. That a thing is present can be known only by the fact that a message from the thing is sent along the nerves, and what the thing is must be determined from the character of the message. Given the image in the absence of the thing,—that is to say, an hallucination,—the mind will naturally suppose that the thing is present. This false supposition cannot be corrected by a direct inspection of the thing, for such a direct inspection of things is out of the question. The only way in which the mind concerned can discover that the thing is absent is by referring to its other experiences. This image is compared with other images and is discovered to be in some way abnormal. We decide that it is a false representative and has no corresponding reality behind it.

This doctrine taken as it stands seems to cut the mind off from the external world very completely; and the most curious thing about it is that it seems to be built up on the assumption that it is not really true. How can one know certainly that there is a world of material things, including human bodies with their sense-organs and nerves, if no mind has ever been able to inspect directly anything of the sort? How can we tell that a sensation arises when a nervous impulse has been carried along a sensory nerve and has reached the brain, if every mind is shut up to the charmed circle of its own ideas? The anatomist and the physiologist give us very detailed accounts of the sense-organs and of the brain; the physiologist even undertakes to measure the speed with which the impulse passes along a nerve; the psychologist accepts and uses the results of their labors. But can all this be done in the absence of any first-hand knowledge of the things of which one is talking? Remember that, if the psychologist is right, any external object, eye, ear, nerve, or brain, which we can perceive directly, is a mental complex, a something in the mind and not external at all. How shall we prove that there are objects, ears, eyes, nerves, and brains,—in short, all the requisite mechanism for the calling into existence of sensations,—in an outer world which is not immediately perceived but is only inferred to exist?

I do not wish to be regarded as impugning the right of the psychologist to make the assumptions which he does, and to work as he does. He has a right to assume, with the plain man, that there is an external world and that we know it. But a very little reflection must make it manifest that he seems, at least, to be guilty of an inconsistency, and that he who wishes to think clearly should strive to see just where the trouble lies.

So much, at least, is evident: the man who is inclined to doubt whether there is, after all, any real external world, appears to find in the psychologist’s distinction between ideas and things something like an excuse for his doubt. To get to the bottom of the matter and to dissipate his doubt one has to go rather deeply into metaphysics. I merely wish to show just here that the doubt is not a gratuitous one, but is really suggested to the thoughtful mind by a reflection upon our experience of things. And, as we are all apt to think that the man of science is less given
to busying himself with useless subtleties than is the philosopher, I shall, before closing this chapter, present some paragraphs upon the subject from the pen of a professor of mathematics and mechanics.

THE “TELEPHONE EXCHANGE.”

We are accustomed to talk,” writes Professor Karl Pearson,[1] “of the ‘external world,’ of the ‘reality’ outside us. We speak of individual objects having an existence independent of our own. The store of past sense-impressions, our thoughts and memories, although most probably they have beside their psychical element a close correspondence with some physical change or impress in the brain, are yet spoken of as inside ourselves. On the other hand, although if a sensory nerve be divided anywhere short of the brain, we lose the corresponding class of sense impression, we yet speak of many sense-impressions, such as form and texture, as existing outside ourselves. How close then can we actually get to this supposed world outside ourselves? Just as near but no nearer than the brain terminals of the sensory nerves. We are like the clerk in the central telephone exchange who cannot get nearer to his customers than his end of the telephone wires. We are indeed worse off than the clerk, for to carry out the analogy properly we must suppose him never to have been outside the telephone exchange, never to have seen a customer or any one like a customer—in short, never, except through the telephone wire, to have come in contact with the outside universe. Of that ‘real’ universe outside himself he would be able to form no direct impression; the real universe for him would be the aggregate of his constructs from the messages which were caused by the telephone wires in his office. About those messages and the ideas raised in his mind by them he might reason and draw his inferences; and his conclusions would be correct—for what? For the world of telephonic messages, for the type of messages that go through the telephone. Something definite and valuable he might know with regard to the spheres of action and of thought of his telephonic subscribers, but outside those spheres he could have no experience. Pent up in his office he could never have seen or touched even a telephonic subscriber in himself. Very much in the position of such a telephone clerk is the conscious ego of each one of us seated at the brain terminals of the sensory nerves. Not a step nearer than those terminals can the ego get to the ‘outer world,’ and what in and for themselves are the subscribers to its nerve exchange it has no means of ascertaining. Messages in the form of sense-impressions come flowing in from that ‘outside world,’ and these we analyze, classify, store up, and reason about. But of the nature of ‘things-in-themselves,’ of what may exist at the other end of our system of telephone wires, we know nothing at all.

“But the reader, perhaps, remarks, ‘I not only see an object, but I can touch it. I can trace the nerve from the tip of my finger to the brain. I am not like the telephone clerk, I can follow my network of wires to their terminals and find what is at the other end of them.’ Can you, reader? Think for a moment whether your ego has for one moment got away from his brain exchange. The sense-impression that you call touch was just as much as sight felt only at the brain end of a sensory nerve. What has told you also of the nerve from the tip of your finger to your brain? Why, sense-impressions also, messages conveyed along optic or tactile sensory nerves. In truth, all you have been doing is to employ one subscriber to your telephone exchange to tell you about the wire that goes to a second, but you are just as far as ever from tracing out for yourself the telephone wires to the individual subscriber and ascertaining what his nature is in and for himself. The immediate sense-impression is just as far removed from what you term the ‘outside world’ as the store of impresses. If our telephone clerk had recorded by aid of a phonograph certain of the messages from the outside world on past occasions, then if any telephonic message on its receipt set several phonographs repeating past messages, we have an image analogous to what goes on in the brain. Both telephone and phonograph are equally removed from what the clerk might call the ‘real outside world,’ but they enable him through
their sounds to construct a universe; he projects those sounds, which are really inside his office, outside his office, and speaks of them as the external universe. This outside world is constructed by him from the contents of the inside sounds, which differ as widely from things-in-themselves as language, the symbol, must always differ from the thing it symbolizes. For our telephone clerk sounds would be the real world, and yet we can see how conditioned and limited it would be by the range of his particular telephone subscribers and by the contents of their messages.

“So it is with our brain; the sounds from telephone and phonograph correspond to immediate and stored sense-impressions. These sense-impressions we project as it were outwards and term the real world outside ourselves. But the things-in-themselves which the sense-impressions symbolize, the ‘reality,’ as the metaphysicians wish to call it, at the other end of the nerve, remains unknown and is unknowable. Reality of the external world lies for science and for us in combinations of form and color and touch—sense-impressions as widely divergent from the thing ‘at the other end of the nerve’ as the sound of the telephone from the subscriber at the other end of the wire. We are cribbed and confined in this world of sense-impressions like the exchange clerk in his world of sounds, and not a step beyond can we get. As his world is conditioned and limited by his particular network of wires, so ours is conditioned by our nervous system, by our organs of sense. Their peculiarities determine what is the nature of the outside world which we construct. It is the similarity in the organs of sense and in the perceptive faculty of all normal human beings which makes the outside world the same, or practically the same, for them all. To return to the old analogy, it is as if two telephone exchanges had very nearly identical groups of subscribers. In this case a wire between the two exchanges would soon convince the imprisoned clerks that they had something in common and peculiar to themselves. That conviction corresponds in our comparison to the recognition of other consciousness.”

I suggest that this extract be read over carefully, not once but several times, and that the reader try to make quite clear to himself the position of the clerk in the telephone exchange, i.e. the position of the mind in the body, as depicted by Professor Pearson, before recourse is had to the criticisms of any one else. One cannot find anywhere better material for critical philosophical reflection.

As has been seen, our author accepts without question, the psychological doctrine that the mind is shut up within the circle of the messages that are conducted to it along the sensory nerves, and that it cannot directly perceive anything truly external. He carries his doctrine out to the bitter end in the conclusion that, since we have never had experience of anything beyond sense-impressions, and have no ground for an inference to anything beyond, we must recognize that the only external world of which we know anything is an external world built up out of sense-impressions. It is, thus, in the mind, and is not external at all; it is only “projected outwards,” thought of as though it were beyond us. Shall we leave the inconsistent position of the plain man and of the psychologist and take our refuge in this world of projected mental constructs?

Before the reader makes up his mind to do this, I beg him to consider the following:—

(1) If the only external world of which we have a right to speak at all is a construct in the mind or ego, we may certainly affirm that the world is in the ego, but does it sound sensible to say that the ego is somewhere in the world?

(2) If all external things are really inside the mind, and are only “projected” outwards, of course our own bodies, sense-organs, nerves, and brains, are really inside and are merely projected outwards. Now, do the sense-impressions of which everything is to be constructed “come flowing in” along these nerves that are really inside?

(3) Can we say, when a nerve lies entirely within the mind or ego, that this same mind or ego is nearer to one end of the nerve than it is to the other? How shall we picture to ourselves “the conscious ego of each one of us seated at the brain terminals of the sensory nerves”? How can the ego place the whole of itself at the end of a nerve which it has constructed within itself? And why is it more difficult for it to get to one end of a nerve like this than it is to get to the
other?

(4) Why should the thing “at the other end of the nerve” remain unknown and unknowable? Since the nerve is entirely in the mind, is purely a mental construct, can anything whatever be at the end of it without being in the mind? And if the thing in question is not in the mind, how are we going to prove that it is any nearer to one end of a nerve which is inside the mind than it is to the other? If it may really be said to be at the end of the nerve, why may we not know it quite as well as we do the end of the nerve, or any other mental construct?

It must be clear to the careful reader of Professor Pearson’s paragraphs, that he does not confine himself strictly to the world of mere “projections,” to an outer world which is really inner. If he did this, the distinction between inner and outer would disappear. Let us consider for a moment the imprisoned clerk. He is in a telephone exchange, about him are wires and subscribers. He gets only sounds and must build up his whole universe of things out of sounds. Now we are supposing him to be in a telephone exchange, to be receiving messages, to be building up a world out of these messages. Do we for a moment think of him as building up, out of the messages which came along the wires, those identical wires which carried the messages and the subscribers which sent them? Never! we distinguish between the exchange, with its wires and subscribers, and the messages received and worked up into a world. In picturing to ourselves the telephone exchange, we are doing what the plain man and the psychologist do when they distinguish between mind and body,—they never suppose that the messages which come through the senses are identical with the senses through which they come.

But suppose we maintain that there is no such thing as a telephone exchange, with its wires and subscribers, which is not to be found within some clerk. Suppose the real external world is something inner and only “projected” without, mistakenly supposed by the unthinking to be without. Suppose it is nonsense to speak of a wire which is not in the mind of a clerk. May we under such circumstances describe any clerk as in a telephone exchange? as receiving messages? as no nearer to his subscribers than his end of the wire? May we say that sense-impressions come flowing in to him? The whole figure of the telephone exchange becomes an absurdity when we have once placed the exchange within the clerk. Nor can we think of two clerks as connected by a wire, when it is affirmed that every wire must “really” be in some clerk.

The truth is, that, in the extracts which I have given above and in many other passages in the same volume, the real external world, the world which does not exist in the mind but without it, is much discredited, and is yet not actually discarded. The ego is placed at the brain terminals of the sensory nerves, and it receives messages which flow in; i.e. the clerk is actually placed in an exchange. That the existence of the exchange is afterward denied in so many words does not mean that it has not played and does not continue to play an important part in the thought of the author.

It is interesting to see how a man of science, whose reflections compel him to deny the existence of the external world that we all seem to perceive and that we somehow recognize as distinct from anything in our minds, is nevertheless compelled to admit the existence of this world at every turn.

But if we do admit it, what shall we make of it? Shall we deny the truth of what the psychologist has to tell us about a knowledge of things only through the sensations to which they give rise? We cannot, surely, do that. Shall we affirm that we know the external world directly, and at the same time that we do not know it directly, but only indirectly, and through the images which arise in our minds? That seems inconsistent. Certainly there is material for reflection here.

Nevertheless the more we reflect on that material, the more evident does it become that the plain man cannot be wrong in believing in the external world which seems revealed in his experiences. We find that all attempts to discredit it rest upon the implicit assumption of its existence, and fall to the ground when that existence is honestly denied. So our problem
changes its form. We no longer ask: Is there an external world? but rather: What is the external world, and how does it differ from the world of mere ideas?

NOTES