

Russell, Bertrand. (1912) "Appearance and Reality." In *Problems of Philosophy* (New York: Henry Holt & Co.).

Is there any knowledge in the world which is so certain that no reasonable man could doubt it? This question, which at first sight might not seem difficult, is really one of the most difficult that can be asked. When we have realized the obstacles in the way of a straightforward and confident answer, we shall be well launched on the study of philosophy -- for philosophy is merely the attempt to answer such ultimate questions, not carelessly and dogmatically, as we do in ordinary life and even in the sciences, but critically after exploring all that makes such questions puzzling, and after realizing all the vagueness and confusion that underlie our ordinary ideas.

In daily life, we assume as certain many things which, on a closer scrutiny, are found to be so full of apparent contradictions that only a great amount of thought enables us to know what it is that we really may believe. In the search for certainty, it is natural to begin with our present experiences, and in some sense, no doubt, knowledge is to be derived from them. But any statement as to what it is that our immediate experiences make us know is very likely to be wrong. It seems to me that I am now sitting in a chair, at a table of a certain shape, on which I see sheets of paper with writing or print. By turning my head I see out of the window buildings and clouds and the sun. I believe that the sun is about ninety-three million miles from the earth; that it is a hot globe many times bigger than the earth; that, owing to the earth's rotation, it rises every morning, and will continue to do so for an indefinite time in the future. I believe that, if any other normal person comes into my room, he will see the same chairs and tables and books and papers as I see, and that the table which I see is the same as the table which I feel pressing against my arm. All this seems to be so evident as to be hardly worth stating, except in answer to a man who doubts whether I know anything. Yet all this may be reasonably doubted, and all of it requires much careful discussion before we can be sure that we have stated it in a form that is wholly true.

To make our difficulties plain, let us concentrate attention on the table. To the eye it is oblong, brown and shiny, to the touch it is smooth and cool and hard; when I tap it, it gives out a wooden sound. Any one else who sees and feels and hears the table will agree with this description, so that it might seem as if no difficulty would arise; but as soon as we try to be more precise our troubles begin. Although I believe that the table is 'really' of the same color all over, the parts that reflect the light look much brighter than the other parts, and some parts look white because of reflected light. I know that, if I move, the parts that reflect the light will be different, so that the apparent distribution of colors on the table will change. It follows that if several people are looking at the table at the same moment, no two of them will see exactly the same distribution of colors, because no two can see it from exactly the same point of view, and any change in the point of view makes some change in the way the light is reflected.

For most practical purposes these differences are unimportant, but to the painter they are all-important: the painter has to unlearn the habit of thinking that things seem to have the color which common sense says they 'really' have, and to learn the habit of seeing things as they appear. Here we have already the beginning of one of the

distinctions that cause most trouble in philosophy -- the distinction between 'appearance' and 'reality', between what things seem to be and what they are. The painter wants to know what things seem to be, the practical man and the philosopher want to know what they are; but the philosopher's wish to know this is stronger than the practical man's, and is more troubled by knowledge as to the difficulties of answering the question.

To return to the table. It is evident from what we have found, that there is no color which preeminently appears to be *the* color of the table, or even of any one particular part of the table -- it appears to be of different colors from different points of view, and there is no reason for regarding some of these as more really its color than others. And we know that even from a given point of view the color will seem different by artificial light, or to a color-blind man, or to a man wearing blue spectacles, while in the dark there will be no color at all, though to touch and hearing the table will be unchanged. This color is not something which is inherent in the table, but something depending upon the table and the spectator and the way the light falls on the table. When, in ordinary life, we speak of *the* color of the table, we only mean the sort of color which it will seem to have to a normal spectator from an ordinary point of view under usual conditions of light. But the other colors which appear under other conditions have just as good a right to be considered real; and therefore, to avoid favoritism, we are compelled to deny that, in itself, the table has any one particular color.

The same thing applies to the texture. With the naked eye one can see the grain, but otherwise the table looks smooth and even. If we looked at it through a microscope, we should see roughnesses and hills and valleys, and all sorts of differences that are imperceptible to the naked eye. Which of these is the 'real' table? We are naturally tempted to say that what we see through the microscope is more real, but that in turn would be changed by a still more powerful microscope. If, then, we cannot trust what we see with the naked eye, why should we trust what we see through a microscope? Thus, again, the confidence in our senses with which we began deserts us.

The *shape* of the table is no better. We are all in the habit of judging as to the 'real' shapes of things, and we do this so unreflectingly that we come to think we actually see the real shapes. But, in fact, as we all have to learn if we try to draw, a given thing looks different in shape from every different point of view. If our table is 'really' rectangular, it will look, from almost all points of view, as if it had two acute angles and two obtuse angles. If opposite sides are parallel, they will look as if they converged to a point away from the spectator; if they are of equal length, they will look as if the nearer side were longer. All these things are not commonly noticed in looking at a table, because experience has taught us to construct the 'real' shape from the apparent shape, and the 'real' shape is what interests us as practical men. But the 'real' shape is not what we see; it is something inferred from what we see. And what we see is constantly changing in shape as we, move about the room; so that here again the senses seem not to give us the truth about the table itself, but only about the appearance of the table.

Similar difficulties arise when we consider the sense of touch. It is true that the table always gives us a sensation of hardness, and we feel that it resists pressure. But the sensation we obtain depends upon how hard we press the table and also upon what

part of the body we press with; thus the various sensations due to various pressures or various parts of the body cannot be supposed to reveal *directly* any definite property of the table, but at most to be signs of some property which perhaps *causes* all the sensations, but is not actually apparent in any of them. And the same applies still more obviously to the sounds which can be elicited by rapping the table.

Thus it becomes evident that the real table, if there is one, is not the same as what we immediately experience by sight or touch or hearing. The real table, if there is one, is not *immediately* known to us at all, but must be an inference from what is immediately known. Hence, two very difficult questions at once arise; namely, (1) Is there a real table at all? (2) If so, what sort of object can it be?

It will help us in considering these questions to have a few simple terms of which the meaning is definite and clear. Let us give the name of 'sense-data' to the things that are immediately known in sensation: such things as colors, sounds, smells, hardnesses, roughnesses, and so on. We shall give the name 'sensation' to the experience of being immediately aware of these things. Thus, whenever we see a color, we have a sensation *of* the color, but the color itself is a sense-datum, not a sensation. The color is that *of* which we are immediately aware, and the awareness itself is the sensation. It is plain that if we are to know anything about the table, it must be by means of the sense-data -- brown color, oblong shape, smoothness, etc. -- which we associate with the table; but, for the reasons which have been given, we cannot say that the table is the sense-data, or even that the sense-data are directly properties of the table. Thus a problem arises as to the relation of the sense-data to the real table, supposing there is such a thing.

The real table, if it exists, we will call a 'physical object'. Thus we have to consider the relation of sense-data to physical objects. The collection of all physical objects is called 'matter'. Thus our two questions may be re-stated as follows: (1) Is there any such thing as matter? (2) If so, what is its nature?

The philosopher who first brought prominently forward the reasons for regarding the immediate objects of our senses as not existing independently of us was Bishop Berkeley (1685-1753). His *Three Dialogues between Hylas and Philonous, in Opposition to Sceptics and Atheists*, undertake to prove that there is no such thing as matter at all, and that the world consists of nothing but minds and their ideas. Hylas has hitherto believed in matter, but he is no match for Philonous, who mercilessly drives him into contradictions and paradoxes, and makes his own denial of matter seem, in the end, as if it were almost common sense. The arguments employed are of very different value: some are important and sound, others are confused or quibbling. But Berkeley retains the merit of having shown that the existence of matter is capable of being denied without absurdity, and that if there are any things that exist independently of us they cannot be the immediate objects of our sensations.

There are two different questions involved when we ask whether matter exists, and it is important to keep them clear. We commonly mean by 'matter' something which is opposed to 'mind', something which we think of as occupying space and as radically incapable of any sort of thought or consciousness. It is chiefly in this sense that Berkeley

denies matter; that is to say, he does not deny that the sense-data which we commonly take as signs of the existence of the table are really signs of the existence of something independent of us, but he does deny that this something is nonmental, that it is neither mind nor ideas entertained by some mind. He admits that there must be something which continues to exist when we go out of the room or shut our eyes, and that what we call seeing the table does really give us reason for believing in something which persists even when we are not seeing it. But he thinks that this something cannot be radically different in nature from what we see, and cannot be independent of seeing altogether, though it must be independent of our seeing. He is thus led to regard the 'real' table as an idea in the mind of God. Such an idea has the required permanence and independence of ourselves, without being -- as matter would otherwise be -- something quite unknowable, in the sense that we can only infer it, and can never be directly and immediately aware of it.

Other philosophers since Berkeley have also held that, although the table does not depend for its existence upon being seen by me, it does depend upon being seen (or otherwise apprehended in sensation) by *some* mind -- not necessarily the mind of God, but more often the whole collective mind of the universe. This they hold, as Berkeley does, chiefly because they think there can be nothing real -- or at any rate nothing known to be real except minds and their thoughts and feelings. We might state the argument by which they support their view in some such way as this: 'Whatever can be thought of is an idea in the mind of the person thinking of it; therefore nothing can be thought of except ideas in minds; therefore anything else is inconceivable, and what is inconceivable cannot exist.'

Such an argument, in my opinion, is fallacious; and of course those who advance it do not put it so shortly or so crudely. But whether valid or not, the argument has been very widely advanced in one form or another; and very many philosophers, perhaps a majority, have held that there is nothing real except minds and their ideas. Such philosophers are called 'idealists'. When they come to explaining matter, they either say, like Berkeley, that matter is really nothing but a collection of ideas, or they say, like Leibniz (1646-1716), that what appears as matter is really a collection of more or less rudimentary minds.

But these philosophers, though they deny matter as opposed to mind, nevertheless, in another sense, admit matter. It will be remembered that we asked two questions; namely, (1) Is there a real table at all? (2) If so, what sort of object can it be? Now both Berkeley and Leibniz admit that there is a real table, but Berkeley says it is certain ideas in the mind of God, and Leibniz says it is a colony of souls. Thus both of them answer our first question in the affirmative, and only diverge from the views of ordinary mortals in their answer to our second question. In fact, almost all philosophers seem to be agreed that there is a real table. They almost all agree that, however much our sense-data -- color, shape, smoothness, etc. -- may depend upon us, yet their occurrence is a sign of something existing independently of us, something differing, perhaps, completely from our sense-data whenever we are in a suitable relation to the real table.

Now obviously this point in which the philosophers are agreed -- the view that there is a real table, whatever its nature may be is vitally important, and it will be worth while

to consider what reasons there are for accepting this view before we go on to the further question as to the nature of the real table. Our next chapter, therefore, will be concerned with the reasons for supposing that there is a real table at all.

Before we go farther it will be well to consider for a moment what it is that we have discovered so far. It has appeared that, if we take any common object of the sort that is supposed to be known by the senses, what the senses *immediately* tell us is not the truth about the object as it is apart from us, but only the truth about certain sense-data which, so far as we can see, depend upon the relations between us and the object. Thus what we directly see and feel is merely 'appearance', which we believe to be a sign of some 'reality' behind. But if the reality is not what appears, have we any means of knowing whether there is any reality at all? And if so, have we any means of finding out what it is like?

Such questions are bewildering, and it is difficult to know that even the strangest hypotheses may not be true. Thus our familiar table, which has roused but the slightest thoughts in us hitherto, has become a problem full of surprising possibilities. The one thing we know about it is that it is not what it seems. Beyond this modest result, so far, we have the most complete liberty of conjecture. Leibniz tells us it is a community of souls; Berkeley tells us it is an idea in the mind of God; sober science, scarcely less wonderful, tells us it is a vast collection of electric charges in violent motion.

Among these surprising possibilities, doubt suggests that perhaps there is no table at all. Philosophy, if it cannot answer so many questions as we could wish, has at least the power of asking questions which increase the interest of the world, and show the strangeness and wonder lying just below the surface even in the commonest things of daily life.