

know of the existence of material objects at all, merely on the ground that we do not know them in any of the ways specified by Hume. These views of Hume's are, moreover, of great importance historically. Certain points in them suggested to the German philosopher, Kant, some of the most remarkable of his own views; and those remarkable views of Kant's which were suggested to him by Hume, have, I think, had more influence on the subsequent course of philosophy than have the views of all the philosophers who preceded Kant put together.

Chapter V

HUME'S THEORY

THE question which I am about to discuss is this. Under what circumstances (if any) does a man, when he believes a proposition, not merely believe it but also absolutely *know* that it is true? We are all quite certain that men do sometimes believe propositions, which they do not really *know* to be true. Sometimes they not merely believe them, but feel very certain that they are true; and yet, in spite of the fact that they feel very certain, they do not really *know* them to be so. Sometimes, for instance, when a man feels very certain indeed that something or other is true, we find out afterwards that he was quite mistaken—that after all it was not. The mere feeling of certainty, therefore, even though it be very intense, is not the same thing as knowledge—knowledge in the sense which I have called knowledge *proper*. The feeling of certainty is sometimes present, in a very intense degree, where *knowledge proper* is absent. The question is, then: What other conditions, *beside* the mere fact that a man feels very certain of a proposition, must be fulfilled, if he is to *know* that it is true? And many philosophers, by way of answer to this question, have tried to lay down rules to the following effect. They have said: A man *never* really *knows* a proposition to be true, unless, besides the mere fact that he feels certain of its truth, one or other of certain other specified conditions is also fulfilled. Hume, I said, for one, tried to lay down certain particular rules to this effect. And I proposed to begin my discussion by stating some of the rules which he laid down.

To begin with then, he divides all propositions, true and false alike, into two classes: those which assert that some particular thing has existed, does exist, or will exist, and those which do not assert the existence of anything. By propositions which do not assert the existence of anything he meant such propositions as these: Twice two are four; the three angles of a triangle are equal to two right angles; black differs from white. And he thought that the conditions which must be fulfilled, if we are to know any proposition of this kind to be true, were quite different from those which must be

fulfilled if we are to know propositions asserting existence to be true. Propositions which *do not* assert existence, can, he says, be known in two ways: some can be known by *intuition* and others can be known by *demonstration*. By demonstration he means the strictly *deductive* sort of proof which is employed in mathematics: and we do all commonly suppose that mathematicians do absolutely *know* immense numbers of propositions which they have learnt in this way. Hume holds, then, that no proposition, of the sort which does not assert existence, can be really known to anybody, unless *either* it has been demonstrated; *or* it is known *intuitively*. And the sort of knowledge that he means by *intuitive* knowledge is the sort of knowledge you may have of a proposition, when, as soon as you really understand what the proposition means, you can *see* that it is true. For instance, consider this proposition, which is one of the axioms of Euclid: Things which are equal to the same thing are equal to one another. It does seem as if, as soon as you really understand what this proposition means, you can *see* that it is true. And Hume would say that this proposition was known *intuitively*; and another way of saying the same thing is to say that it is self-evident. What he means to say then, in the case of *all* propositions which do not assert existence, is that *none* of them can be *known* to be true unless they are *either* known in the way in which this one is known, *or* they have been *demonstrated*, by the strictly deductive kind of proof by which mathematical propositions are demonstrated.

But, now, he thinks that no propositions which assert the *existence* of anything, past, present or future, can be known in either of these two ways: none of them, he thinks, can be either proved *deductively* to be true, nor be known *intuitively* in the way in which it is known that: Things which are equal to the same thing are equal to one another. Neither of these two conditions can ever be fulfilled in the case of propositions which assert the existence of anything. And in their case, therefore, he proposes a different set of conditions.

He says that no man ever really *knows* a proposition which asserts the *existence* of anything, past, present or future, unless one or other of *three* conditions are fulfilled.

And the first *two* conditions, which he mentions are these.

(1) A man *may* really *know* that a thing does exist, if, at the very moment when he believes that it exists, he actually is *directly apprehending* the thing in question—directly apprehending it in the sense I have explained. And (2) A man may really *know* that a thing *did*

exist in the past, if he *did* directly apprehend it in the past and *now* remembers it.

These two are, I think, comparatively simple conditions and need no explanation. But it is otherwise with the third condition which Hume lays down. A great deal is contained in it; and I want to explain it as clearly and carefully as possible. Obviously it is far the most important of the three. For if we never really *knew* of the existence of anything at all, except in cases where one or other of the first two conditions are fulfilled, we should only know a very small part indeed of the things which we suppose ourselves to know. The things which I am now directly apprehending and have directly apprehended in the past, form but a very small part of those in the existence of which I believe. The question is then this: Under what conditions can we know of the existence of a thing (past, present or future), when *neither* of these first two conditions is fulfilled—when we are *not* directly apprehending the thing at the moment when we believe that it exists, and when also we *have not* directly apprehended it in the past?

And in order to avoid the repetition of cumbrous phrases, I will, in future, speak of this question as being the question: Under what conditions does a man know of the existence of anything which he *has never* directly apprehended? meaning by *has never* directly apprehended, *both is* not directly apprehending at the moment *and has never* directly apprehended in the past. You must please, understand, then, that when I talk of a thing which a man *has* directly apprehended, I shall mean anything whatever which he *either is* directly apprehending at the moment *or has* directly apprehended in the past; and similarly when I talk of a thing which a man *never* has directly apprehended, I shall mean anything whatever which he *neither is* directly apprehending at the moment *nor has* directly apprehended in the past.

Our question is then this: Under what conditions does a man ever really *know* of the existence of anything whatever which he has *never* directly apprehended (including under the term '*has* directly apprehended' what he *is* directly apprehending at the moment, as well as what he *has* directly apprehended in the past)?

And one main principle, which Hume means to assert, in answer to this question, is, I think, the following.

Suppose a man believes, at a given moment, in the existence, past, present or future, of some definite thing A, which he has never directly apprehended (*i.e.* is not directly apprehending now, and

never has directly apprehended). Now, says Hume, whatever A may be, that man can never really *know* of the existence of A, unless he knows also that some other thing B, which he *has* directly apprehended, *would not* have existed, *unless A had* existed, *were* existing, or *was about to* exist as well. In other words: Suppose I am now directly apprehending or have directly apprehended some thing B with regard to which I know that it, B, would not have existed at all *unless* something else, A, had existed *before* it: then, says Hume, I may really know that A did exist before it. Or suppose again I know, with regard to B, which I have directly apprehended, that it would not have existed at all unless A had been existing simultaneously with it: *then* I may really know that A did or does exist simultaneously with it. Or suppose again, I know with regard to B, that it would not have existed at all, unless A had been *going to* exist after it: then I may really know that A did exist after it or will exist after it. But *unless* one or other of these three conditions is fulfilled, then, says Hume, I cannot possibly really *know* that A either has ever existed, does now exist, or will ever exist.

This, I think, is a correct statement of Hume's first principle. But the principle is a little complicated, and my statement of it may have been a little difficult to follow. So I will try to make it still plainer exactly what the principle is by giving particular examples. Let me, first of all, take any example whatever of a thing which I believe to exist at the present moment, but am *not* directly apprehending. I will, for instance, take my own brain. I do in fact believe now that a more or less definite sort of thing, which I call my brain, and which I am not directly apprehending, really does exist at this very moment. Well, says Hume, I cannot *really* know that my own brain is existing at this moment, *unless* I also know one or other of two things. I must *either* know that something which I *am* now directly apprehending would not be existing *unless* my brain were existing too. This is *one* alternative. For instance, I am now directly apprehending an act of consciousness of my own which I call the *hearing* of certain words—I am now hearing the words I am now speaking and am directly apprehending my hearing of them. Well then, *if* I *know*, no matter how, that this act of consciousness, this hearing, which I *am* directly apprehending, would not be existing, unless my brain were existing at the same time, then, says Hume, I *may* really know that my brain is existing now. And similarly, if I *know* that anything else whatever, which I *am* directly apprehending at this moment, would not be existing now, *unless* my brain were existing

too, then I *may* really *know* that my brain is existing now. This is *one* alternative. But there is another, which Hume's theory allows. Suppose I *really* knew that something, which I did directly apprehend a moment ago, would not have existed then, unless my brain had been *going to* exist now at this moment: then also, Hume allows, I might really *know* that my brain is existing at this moment. No matter whether I could really know, or how I could really know, that the existence of anything a moment ago did entail the existence of my brain now at this moment: all Hume says is that *if* I did really know this, then I *might* know that my brain is existing now. This is the second alternative. And unless one or other of these alternatives is fulfilled, I cannot, Hume says, possibly really *know* that my brain is existing at this moment. Nobody can, he says, possibly *know* of the *present* existence of anything whatever, which he is *not* directly apprehending, unless he knows that its present existence is necessarily connected either with the existence of something which he is directly apprehending now, *or* with the existence of something, which he has directly apprehended in the past: *necessarily connected* in the sense that the directly apprehended thing *would not* have existed, *unless* the thing not directly apprehended *were* existing simultaneously with it, or had been going to exist after it.

This, then, is an example of what this first principle of Hume's means in the case of a belief concerning the *present* existence of anything, which is *not* being directly apprehended. But I want to make as plain as possible the whole of what this first principle does mean, and, therefore, at the risk of wearying you, I will give two other examples: an example of what it means in the case of a belief about the *past* existence of anything, and of what it means in the case of a belief about the *future* existence of anything.

Let us take, then, a belief about the past. I do, in fact, believe now that Julius Caesar was murdered in the Senate House at Rome nearly two thousand years ago. And I certainly did not directly apprehend this murder. Here then is a belief in the past existence of something which I have never directly apprehended. And what Hume says is this: I do not really *know* that Julius Caesar was murdered, *unless* one or other of *four* conditions is fulfilled. Either I must know that something, which I am directly apprehending *now*, would not have existed, unless Julius Caesar had been murdered. Or I must know that something which I have directly apprehended in the past, would not have existed unless Julius Caesar had been murdered before it existed. These are *two* of the conditions under which I

might know that Julius Caesar was murdered: and, in this particular case, these are the only ones which can have been fulfilled. Obviously one or other of these *may* have been fulfilled. I have, for instance, directly apprehended in the past sense-data of many words both spoken and written, the meaning of which was that Julius Caesar was murdered. And it may be that I do really know, no matter how, that all these sense-data would not have existed, unless Julius Caesar really had been murdered. And I think we should all be inclined to agree with Hume, that, *unless* I do know this, I do not really know that Julius Caesar was murdered at all. If I do not know it in this way, it does seem that I cannot know it in any way at all. But there are two other conditions under which, according to Hume's theory, I *might* know such a past fact as that Julius Caesar was murdered. I might know it, if I had in the past directly apprehended something, which would not have been existing, *unless* the murder of Julius Caesar was taking place simultaneously with its existence. Or I might know it, if I had directly apprehended something, which would not have existed, unless the murder of Julius Caesar had been going to take place *afterwards*. We know that, in this particular case, neither of these conditions are fulfilled, because I certainly did not directly apprehend anything at all either at or before the time when Julius Caesar's murder is supposed to have taken place. But, in the case of many past events, both these two other conditions might conceivably be fulfilled. For instance, I believe now that the moon was in existence at two o'clock in the morning this day last week. I did not at that time directly apprehend the moon. But I may, for instance, have directly apprehended the moonlight coming in at my window. Well, if I *know* (no matter whether I could know) that the moonlight, which I did then directly apprehend, would not have been existing, *unless* the moon had been existing simultaneously, then, says Hume, I may really *know* now that the moon was existing at that moment. Or to take an example of the *fourth* condition. I directly apprehended the other day sense-data of the sort which we call the appearance of a bird flying in the air. But I did not watch it until it alighted anywhere; and even if I had, I should not, according to Hume, have directly apprehended the bird alighting: I should only have directly apprehended certain sense-data, which might have been connected with the bird's alighting. I did not, then, directly apprehend the bird alighting. But I may, Hume's theory allows, nevertheless know now that that very bird did alight somewhere, *if* I *know* that the sense-data, which I

directly apprehended, when (as we say) I saw it flying, would not have existed then, *unless* the bird had been going to alight somewhere later on. I do not say that I could absolutely *know* this; but Hume's theory allows that *if* I do know it, then I may absolutely know now that that bird did alight somewhere. This is an example of the *fourth* condition, under which I may know now of the past existence of something which I have never directly apprehended. And *unless* one or other of these four conditions is fulfilled, nobody, says Hume, can ever absolutely *know* of the past existence of anything whatever which he has not directly apprehended. He must know, that is, either that the thing in question necessarily preceded something which he is apprehending *now*; or that it necessarily *preceded* something which he has apprehended in the past; or that it necessarily accompanied something which he has apprehended in the past; or that it necessarily *followed* something which he has apprehended in the past. Meaning by *necessarily* in each case merely this: that the thing directly apprehended would not have existed, *unless* the other thing, which was not directly apprehended, had preceded, or accompanied, or followed it as the case may be.

In the case, then, of a belief in the *present* existence of anything which we have not directly apprehended, there were *two* conditions, one or other of which must be fulfilled, if we are ever to know that such a belief is true; in the case of a belief about the past there are four conditions, one or other of which must be fulfilled if we are absolutely to know that the belief is true; and in the case of a belief about the future there are again only *two* conditions, one or other of which must be fulfilled.

For instance, I do believe now that five minutes hence something or other will be existing. And I cannot, says Hume, really *know* this, I cannot really know but that five minutes hence the whole Universe will have ceased to exist, except under one or other of two conditions. I must either know that something, which I am *now* directly apprehending, would not be existing now, unless *something*, at least, were going to exist five minutes hence. Or I must know that something which I have directly apprehended in the past would not have existed, unless *something*, at least, were going to exist five minutes hence. And so, too, with regard to all beliefs about particular events in the future. I do in fact believe now that the sun will rise tomorrow, and that my body, dead or alive, will be out of this room before it rises. Perhaps you will say I obviously cannot really *know* that either of these two events will occur; and I agree that I cannot

absolutely *know* it. But they will do to illustrate Hume's principle. His principle is that I certainly cannot know either of these two things, *unless either* I know that something, which I am directly apprehending *now*, would not be existing now, *unless* they were going to occur; *or else* unless I know that something, which I have directly apprehended in the past, would not have existed *then*, unless they had been going to occur.

This, then is Hume's first principle. And, I think, it is obviously a very plausible one. It does seem very plausible to say: I can never know of the existence of anything which I have *not* directly apprehended, unless I know that some one thing or some set of things, which I *have* directly apprehended, would not have existed, unless the other thing, which I have *not* directly apprehended, really existed also—either before, or after, or at the same time, as the case may be.

Hume himself identifies this first principle with the principle that I cannot know of the existence of anything B, which I have *not* directly apprehended, unless I know that B is related to something or some set of things, which I have directly apprehended, by the *relation of cause and effect*. And I think the two principles really have at least this in common. Namely, if I know that any one thing A *must* have been caused by another B, then I do know that A would not have existed, unless B had existed before it. And also, if I know that any one thing A *must* have B for its effect, then I do know that A would not have existed unless B had been going to follow. But it does not follow that the two principles are identical, and it will, I think, be better to keep this discussion quite apart from the question what exactly the relation of cause and effect is.

This, then, is Hume's first principle. And he goes on to add to it a second. He now asks: Under what conditions can I know that any one thing or set of things A would not have existed, unless another, B, had existed, did exist or were about to exist also? And his first answer to this question also is, I think, extremely plausible. His answer is that nothing but *Experience* can teach me this; I cannot possibly know it except by the help of Experience. And this, so far as it goes, is an answer which has constantly been given by all sorts of philosophers. All sorts of philosophers have insisted, for instance, that I cannot possibly know that any one thing, A, would not have existed, unless another, B, had *preceded* it, except by the help of experience; and that I cannot possibly know that any one thing, A, must be followed by another, B, except by the help of experience.

How, for instance, can I know that, if I were to drop this paper, it would fall? It seems obvious to say, that I could not know this except by experience. Or how, when I see a child, can I know that it must have had two parents? It seems obvious to say that I could not know this also except by the help of experience.

But merely to say that we cannot know any such things except by the help of Experience is rather vague. And Hume tries to define more exactly what sort of Experience I must have had, in order to know that any two things are necessarily connected. And here also, I think, he does it very plausibly. I will here, to avoid being unnecessarily cumbrous, speak only of the case where what we are supposed to know is that one thing, B, must have been *preceded* by another, A. What I say with regard to this case will also apply, *mutatis mutandis*, to the other two cases: the case where what we are supposed to know is that one thing, B, must have been *accompanied* by another, A; and the case where what we are supposed to know is that one thing, B, must be or have been *followed* by another, A.

I confine myself, then, for the sake of illustration, to the cases where I suppose myself to know that one thing, B, must have been *preceded* by another, A.

If, says Hume, I am ever absolutely to know this, I must constantly have observed in the past that, whenever a thing *like* B did exist, it *was* preceded by a thing *like* A. And by saying that I must *constantly* have observed this, he does not mean to say, that when I observed a thing like B, I must absolutely *always* have observed a thing like A before it. All that he means is that I must never have observed a case where a thing like B did exist, and where a thing like A certainly did *not* exist before it. If I am absolutely to *know* that B must have been preceded by A, I must, he says, have done at least this. I must have observed several cases in which, when a thing like B did exist, a thing like A did exist before it; and I must have observed no case, in which, when a thing like B did exist, a thing like A certainly did *not* exist before it.

But he adds to this a supplementary principle which is very important. The fact is we very often do not even suppose ourselves to know when a thing B exists, that it absolutely *must* have been preceded by another thing A. We often only suppose ourselves to know that it is more or less *probable* that A preceded it: often, very highly probable indeed, but sometimes only slightly probable, and sometimes with various degrees of probability between these two. And Hume thinks that by a suitable modification of his principle, he can

lay down a rule for these cases also. He says we can never know that one thing, B, was even *probably* preceded by A, unless we have actually observed *some* cases (at least *one* case) in which a thing like B was preceded by a thing like A. But in order to know that B was *probably* preceded by A, we need not have observed that things like B were in the past *constantly* preceded by things like A. Even though we have observed more than one case in which a thing like B was certainly *not* preceded by a thing like A, we may still know that B in our case was *probably* preceded by A. The degree of probability will, he says, depend upon the *proportion* of the cases where we have observed a thing like B preceded by a thing like A, to those in which, when we observed a thing like B, a thing like A certainly did *not* precede it. In order to know that B was at all *probably* preceded by A, we must, when we observed a thing like B in the past, *generally* have observed that a thing like A preceded it: *generally*, in the sense that there must have been *more* cases in which a thing like A *did* precede it, than cases in which a thing like A certainly did *not* precede it. And if we have observed *many* cases in which a thing like A did precede it, and only a few in which it did not, then we may know that it is *highly* probable that A did precede B in our case.

Hume, then, lays down two rules: (1) That in order absolutely to know that B *must* have been preceded by A, I must have observed in the past that things like B were *constantly* preceded by things like A; and (2) That in order to know that B was *probably* preceded by A, I must have observed in the past that things like B were *generally* preceded by things like A.

And both of these two rules do, I think, at first sight seem very plausible. But let us look at them a little more closely. What they assert is this: I, they say, can never know that one thing B was even *probably* preceded by another A, unless *I myself* have observed cases in which things like B were preceded by things like A. *No man* can ever know that one thing B was *probably* preceded by another A, unless *that man himself* has observed cases in which things like B were preceded by things like A. They assert, therefore, that each of us can only learn things of this sort by means of *his own* experience. But is it really plausible to say this? Can I, in fact, never learn anything whatever by the experience of *other people*? Cannot I ever learn that one kind of thing has been generally preceded by another, by learning the fact that *other people* have observed that they are? It seems absurd to deny that I can learn such things by the experience of other people. And Hume himself, so far as this part of his

theory is concerned, certainly does not mean to deny that I can. What he does *not* notice is that, *if* I can, then his two principles, just as he states them, cannot be true; they must be modified in some way. And the sort of way in which he meant them to be modified is, I think, the following. How, he asks, can I myself ever know that any other person ever has experienced anything whatever? This is itself a case of the very sort for which he began to lay down his rules. The fact that another person has had certain experiences is itself a thing which I myself have never directly apprehended. If, therefore, I am to know that another person really has had any particular experiences, I must know that certain things which I *have* directly apprehended, would *not* have existed unless some other person had had the experiences in question. And this, he says, I *can* only learn in the first instance by my own experience. I cannot ever learn it unless I have *myself* observed that when I hear or read certain words or directly apprehend other signs, then the statements conveyed by these words or signs are, as a general rule, true. And obviously this is a sort of thing which I could, conceivably, learn by my own experience in the way Hume lays down. If I hear statements made to the effect that I myself shall observe or have observed certain things, and if I constantly observe that, when I do hear such statements, made in a certain way and under certain conditions, then I do really see or have really seen the things which the statements asserted that I had seen or should see, I might, in this way, upon Hume's own principles, arrive at the generalisation that statements made in a certain way were as a general rule *true*. And I might, then, apply this generalisation to *all* statements made in the way and in the circumstances, in which I have myself observed that statements are generally true: I might apply it, therefore, to statements which asserted the existence of things which I myself had never seen, and might thus come to know that other people really had experienced things which I had not experienced. It is in some such way as this, I think, that Hume intended his original rules to be modified. But it must be observed that this really is a modification of the rules in question. To allow this modification is to *give up* the rules as originally stated. What the rules asserted was that I can never know that one thing B was even probably preceded by another A, unless I have *myself* observed that things like B were in the past generally preceded by things like A. And this rule must now be given up. But we may, perhaps, express the necessary modification by saying this: *I* can never know that B was even probably preceded by A, unless

either I have *myself* observed that things like B were generally preceded by things like A; or unless I have myself observed that statements like some statement, which asserts that *some one* else has observed a general connection between things like B and A, are generally true—*i.e.* are generally either preceded or accompanied or followed by the existence of that which they assert.

Now, when this modification has been made, Hume's rules do, I think, again become plausible. Let us consider them as including this modification. What I want now to call attention to is another point about them. What they assert, you see, is that any knowledge I may have of the existence or probable existence of anything whatever that I have not directly apprehended, must be based on *observation*: either my own observations, or the observations of other people; but, if the latter, then my knowledge that any other person did observe the things in question, must itself, in the last resort, be based upon *my own* observation. And I think these rules owe their plausibility very largely to the use of this word 'observation'. We are all accustomed to think that our knowledge of what has happened, is happening, and is likely to happen is very largely based upon observation—upon observation and experiment, meaning by *experiment* merely observation under particular conditions artificially arranged. How, for instance, was it learnt that there are corpuscles in the blood? By observation, we should say. Men examined drops of blood under the microscope, and under these conditions they *observed* the bodies which are now called corpuscles: they *saw* these bodies. But now what do we mean when we say that they *observed* these things? What we *say* is that they actually *observed* the drop of blood itself, and *observed* the corpuscles in it. But, as we have seen, on the accepted theory with regard to sense-data, they did not *directly apprehend* either the drop of blood itself, or any part of it; they did not directly apprehend either the corpuscles themselves or any part of them. All that any man can ever have directly apprehended is certain sense-data, no one of which and no part of which is even a part of the material object, a drop of blood. When, therefore, we talk of *observation* in the sense in which it seems so obvious that much of our knowledge is based upon *observation*, we do not mean by 'observation' *direct apprehension*. We mean by *observation*, the relation which we have to the material objects themselves, *when* we directly apprehend certain sense-data: we do not mean by it the relation of *direct apprehension* which we have to the sense-data. What I *observe*, for instance, now, is the movement of my hand. But I am

not directly apprehending the movement of my hand; I am merely directly apprehending certain sense-data, which, on the accepted theory, are not even in part identical with my hand itself or with its movements. When, therefore, we talk of knowledge that is based on observation, we do not generally mean by 'observation' direct apprehension. And when Hume himself gives instances to show how much of our knowledge is based on observation, the plausibility of his instances depends upon the fact that he means by observation what we all commonly do mean—namely, a relation to the material objects themselves, not merely the relation which we have to certain sense-data. When, for instance, he urges that it is by means of observation we learn that a stone, when dropped, will fall to the ground, or that a fire will burn; he is thinking that we have in the past actually observed stones falling and fires burning. But if we were to understand the word observation, in this sense, *in his rules themselves*, it would obviously make nonsense of them. Observation, in this sense, is a relation which we have to an object which we do *not* directly apprehend. But the very purpose of his rules is to state under what conditions we can ever know of the existence of an object, which we do *not* directly apprehend. And what they state is that we can never know of the existence of any such object unless we have previously *observed* a similar object. But obviously, even if we had previously *observed* a similar object, this could not help us at all, if 'observation' is not to mean direct apprehension. For, even when we did previously observe the similar object, we should not have directly apprehended it; and hence should not have known of its existence, unless we had again *observed* previously to it, another object similar to it, and so on *ad infinitum*. So that if I am ever to have knowledge of the existence of an object which I observe, I must have previously observed an absolutely infinite series of similar objects. To lay down such a rule as this would plainly be absurd; and it is certainly not what Hume means. In his rules, he certainly means by *observation* a relation, by which we can know of the existence of the object observed, *when* we observe it, even if we observe it for the first time. And, according to him, the *only* relation of which this is true is that of *direct apprehension*. *In his rules*, therefore, he means by 'observation' *direct apprehension*. And when we understand this they cease to be quite so plausible. What they amount to *now* is this: I can never know of the existence of any object which I have *not* directly apprehended, unless I have previously directly apprehended some object like it or know that somebody else has. Thus

understood they lose the plausibility which arises from the fact that so much of our knowledge does seem to be based on previous *observation*—observation, in the sense in which we *do* observe material objects, and in which observation does *not* mean direct apprehension. And I think that the reason why they have seemed plausible to so many philosophers is largely because of this confusion between observation, in the sense in which we commonly use the word, and *direct apprehension*. But still they *have* seemed plausible. Many philosophers have, I think, consciously or unconsciously adopted them; they have argued as if these principles of Hume were true. And they *may* seem plausible, even if we understand quite clearly that by *observation* is to be meant direct apprehension and direct apprehension only. These principles have, I think, as I said, been one chief reason why many philosophers have doubted whether we ever know of the existence of any material object; and what I wish now to do is to consider whether, supposing them to be true, we *could ever know* of the existence of any material object. Many philosophers have held that supposing them to be true, we could not ever know of the existence of any material object—not even that it *probably* existed; and that is one chief reason why they have held that we *do not* know, even with probability, of the existence of any material object.

But, first of all, I will try to state again, as carefully as possible, exactly what the rules are.

They try to provide for two cases: (1) the case where we believe that something which we have not directly apprehended *certainly* did exist, or is existing, or will exist; and (2) the case where we believe that something which we have not directly apprehended, *probably* did exist, or is existing, or will exist.

And in the first case what they say is this. No man can ever know such a belief to be true, know, that is, that anything whatever A, which he has not directly apprehended, *certainly* did exist, or is existing or will exist, unless he knows that some thing or set of things B, which he has directly apprehended, would *certainly* not have existed, unless A had existed too, either before or at the same time or after B. And they add: And no man can ever know this last, unless *either he himself* has directly apprehended things like B *before*, and, *when* he directly apprehended them, has also directly apprehended things like A preceding or accompanying or following them as the case may be, and *also* has never found a case in which when he directly apprehended things like B, things like A *certainly* did *not*

exist: *or* unless he knows that some other person has had direct apprehensions of this sort. And they add that, in this latter case, his knowledge that any other person has had them must *itself* be based on direct apprehensions of *his own*.

In the second case, the case where we believe that something which we have not directly apprehended *probably* exists or has existed or will exist, what Hume's rules say is this. No man can ever know any such belief to be true unless he knows that some thing B, which he *has* directly apprehended would not have existed *unless* the thing A, which he believes probably to exist, had *probably* existed also. *And* (they add) he cannot know this last unless *either* he himself *or* some other person has directly apprehended things like B before, and, *when* this happened, has *generally* directly apprehended things like A, before, or after, or at the same time; and here again, if what he relies on is the experience of *another* person, he cannot do this, unless he *knows* that that other person certainly or probably has had the experience in question, and this he cannot *know*, except where one or other of these very rules has been complied with.

These rules, you see, are rather complicated; but, I hope the general principle is clear.

Now let us consider what would follow, supposing these rules were true. I will take a particular instance. I do, in fact, believe that there are at the present moment *bones* in this hand of mine—a skeleton, of the shape with which we are probably all of us familiar from pictures of the skeleton of a hand. I do, in fact, believe, not only that there probably are, but that there *certainly* are, bones of that shape at this moment in this hand. But I am certainly not directly apprehending at this moment any of these bones. How, then, can I know, according to Hume's principles, that they even probably exist? One possible way is this. I am at this moment directly apprehending certain sense-data—the colour and shape, etc., which might be called the visible appearance of the skin of my hand. And I might have found, in the past, by direct apprehension, that visible appearances similar to these were generally connected in certain ways with other sense-data—for instance, with sense-data of the sort that I should see, if I saw the skeleton of my hand, or of the sort that I should feel if I felt the skeleton. In fact people, when they dissect a hand, do find that sense-data, similar to those which I now directly apprehend, are connected in certain ways with such sense-data as the appearance of a skeleton. Let us call the sense-data which I now see, the visible appearance of the skin of my hand. Other people

have, I believe, when they dissected a hand, found that the visible appearance of the skin of a hand, which they directly apprehended at one moment, was followed by the visible appearance of a skeleton, which appeared to stand in certain spatial relations, within the same directly apprehended space, to the visible appearances of the skin which they saw just before. I have, I should explain, never dissected a hand myself, or seen one dissected. But I might according to Hume's principles, possibly have learnt that other people had experienced a connection between the visible appearance of the skin of a hand, and the visible appearance of its skeleton, such as I have just described. I might, therefore, possibly know, on the basis of *their* experience, that, if this hand were dissected, visible appearances similar to those which I now see *would*, in all probability, be followed by the visible appearance of a skeleton. And I might possibly know, too, by other experiences (I do not say I *could*) that when the visible appearance of a skeleton exists at one moment it generally exists for a considerable time before and after. I might have watched the visible appearance of a skeleton, and found that it is a sort of thing which does not quickly disappear. And I might, therefore, possibly be able to infer that since the visible appearance of a skeleton, *would* probably exist in a few moments if my hand were dissected now, it must also probably exist *already* at this moment. I might, therefore, on Hume's principles possibly know that the visible appearance of the skeleton of a hand does probably really exist now, having certain definite spatial relations, within the space which I now directly apprehend, to this visible appearance of the skin of my hand. I might possibly know this with regard to the *visible appearance* of a skeleton. And similarly I might possibly know it with regard to other sense-data; for instance, the sense-data which I should *feel*, if I touched the skeleton of a hand. It does, therefore, seem that according to Hume's principles, I might possibly know that there do exist at this moment, in connection with this visible appearance, certain other sense-data, of the sort which I should see if I saw the skeleton of a hand, or should feel if I touched it.

But now, supposing I could, according to Hume's principles, know as much as this; what would follow? Obviously the things, whose present existence I should, on this hypothesis, be able to infer would be things of the same sort as those with regard to which I gave what I called the accepted theory—they would be sense-data—they would be sense-data more or less resembling those which I should see or feel, if I saw or felt a skeleton. All that Hume's princi-

ples do seem to allow that I am able to infer is that there are *existing now*, in connection with those sense-data which I directly apprehend, other sense-data more or less like those, which I should see or feel, if I saw or felt a skeleton. If I am able to infer the existence of anything at all, even resembling the skeleton in whose existence I believe, I must, it would seem, be able to infer the existence of its *colour*—a *colour* more or less resembling that which I should see, if I directly apprehended the visible appearance of a skeleton. But many philosophers have supposed that there are insuperable objections to supposing that any such colour—the colour of the skeleton—does really exist at this moment in connection with the sense-data which I see. They have, in fact, adopted an extension of the theory which I called the accepted theory with regard to sense-data—an extension, which should be carefully distinguished from the original theory itself. The original theory asserted, you remember, that none of the sense-data, which any of us ever directly apprehend, ever exists at all *except* in that person's mind. The *extension* asserts not merely that those *same* sense-data cannot exist except in somebody's mind, but *also* that no *sense-data at all*—nothing resembling a sense-datum—can ever exist except in somebody's mind: that there cannot exist, except in somebody's mind, anything at all *like* any sense-datum that I directly apprehend. For instance, it asserts that no such thing as a colour or a sound ever exists at all, except when it is being directly apprehended by some one, or, at least, is in some one's mind. And some philosophers, Berkeley, for instance, have declared that this extension of the theory and not only the theory itself, is *self-evident*. And, if it really were so, then, of course, all discussion as to how we can know of the existence of material objects would be cut short at once. It would then be certain, not only that we can never *know* of the existence of a material object, but also that no material object can exist. For whatever we mean by a material object we do at least mean two things, namely (1) something which can exist, without being in anybody's mind, and (2) something which does, in at least one respect resemble sense-data—namely in respect of the fact that it has a *shape* and is situated in some kind of a space. If, therefore, it were self-evident, as Berkeley says, that nothing resembling a sense-datum can ever exist except in some one's mind, it would follow that no material object exists at all. But, as I said, it seems to me that this is certainly not self-evident. And most philosophers have, I think, argued as if it were not so. They have allowed that a material object which resembled sense-

data in respect of having *shape*, might conceivably exist. But they have argued that we cannot *know* that it exists for the following reasons. The only way in which we could know it, is, they have said, in accordance with Hume's principles. But these principles, if they allowed us to know of it at all, would allow us to know of the existence of colours and sounds and other sense-data, in addition to shapes, which are *not* in anybody's mind. And there are the same difficulties in supposing that a colour, which I do not directly apprehend, can be part of a material object, as in supposing that one that I *do* directly apprehend can be so. Take, for instance, the supposed colour of the skeleton of my hand. Am I to suppose that the colour which it now has, is the colour which I should see, if my hand were dissected; or the colour which somebody else, with eyes of different power, would see? Am I to suppose that it is the colour which I should see, under a light of ten candle-power, or that which I should see under a light of a hundred candle-power? Am I to suppose that it is the colour which I should see under a yellowish light, or the different one which I should see under a bluish light? There would seem, upon Hume's theory, to be equally good reasons for supposing it to be any one of these colours; and yet it is difficult to suppose that *all* these colours do now exist at the same place inside my hand. For reasons like these, most philosophers have supposed that no colour at all can really be existing inside my hand at this moment. And since Hume's theory, *if* it gives reason for supposing that there is now in my hand a skeleton at all, seems to give reason for supposing that there is in it a *coloured* skeleton; they have supposed it can give no reason for believing that there *is* a skeleton at all. And since Hume's principles state the *only* conditions, under which I could know, even with probability, that there is a skeleton now in my hand; therefore, they conclude, I do *not* know that there even probably is one. And what applies to the present existence of the skeleton of my hand, applies equally to the existence, past, present or future, of any material object whatever. I can never know that any material object even probably exists. The only things whose existence I can know of beyond what I myself have directly apprehended are (1) the past and future contents of my own mind, including both my acts of consciousness and also all the things I directly apprehend, and (2) the contents of the minds of other people in the same sense.

This is, I think, a fair statement of one line of reasoning which has led many philosophers to suppose that I cannot possibly know

of the existence of any material object. The reasoning does not seem to me to be conclusive; but it does seem to me to be plausible enough to require some sort of answer. And I will now try to give it the best answer I can.

Chapter VI

HUME'S THEORY EXAMINED

I have just been occupied mainly in stating one particular answer, which I called Hume's answer, to the following question: Under what circumstances (if any) does a man ever *know* of the existence, past, present, or future, of anything whatever, which he himself is not directly apprehending at the moment, and has not directly apprehended in the past?

And the answer to this question which I represented as given by Hume, was in two parts.

The first part was this. Let us say that the existence of one thing, A, is a *sure sign* of the existence of another thing B, whenever you can truly say: *Since* A exists, it is certain that B did exist before it, does exist at the same time, or will exist after it. And let us say that the existence of one thing, A, is a *probable sign* of the existence of another thing B, whenever you can truly say: *Since* A exists, it is *probable* that B did exist before it, does exist at the same time, or will exist after it. Well then, the first part of Hume's answer consists in saying two things: Firstly: Nobody ever knows that anything B, which he himself has not directly apprehended, *certainly* did exist, or does exist, or will exist, unless he knows that the existence of some thing or set of things, A, which he *has* directly apprehended, is a *sure sign* of the existence of B. And secondly: Nobody ever knows that anything, B, which he himself has not directly apprehended, *probably* did exist, or does exist, or will exist, unless he knows that the existence of some thing or set of things, A, which he *has* directly apprehended, is a *probable sign* of the existence of B.

This was the first part of Hume's answer to our question; and the second part was this:

Let us say that a man has experienced a *general conjunction* between *things like* A and *things like* B, if, when he has directly apprehended a thing like A in the past, he has *generally* directly apprehended a thing like B, either before or after, or at the same time. '*Conjunction*', a word which Hume himself uses, is a convenient word, because we can say that things like A are *generally*

conjoined with things like B, *both* when we mean that they generally precede them, *and* when we mean that they generally follow them, *and* when we mean that they generally accompany them. Let us say, then, that a man has experienced a *general conjunction* between things like A and things like B, if, when he has directly apprehended a thing like A in the past, he has *generally* directly apprehended a thing like B also, either before or after or at the same time. Well then, if we understand the phrase 'experienced a general conjunction' in this sense, the second part of Hume's answer consists in saying this. No man, he says, ever knows that the existence of any one thing A is either a *sure sign* or even a *probable sign* of the existence of another thing B, unless *somebody* has in the past experienced a general conjunction between *things like* A and *things like* B. But obviously something more can be added to this answer. For even if somebody else has experienced a general conjunction between *things like* A and *things like* B, yet if I myself have not, and also I do not *know* that anybody else has, I shall be as far as ever from knowing that the existence of A is a sign of the existence of B. But the fact that anybody else has ever experienced anything whatever is always a fact which I myself have never directly apprehended. If, therefore, I am to know that anybody else has experienced any general conjunction, I must know that some thing A, which I *have* directly apprehended, is a *sign* that they have. And I can only know this if I *myself* have experienced a conjunction between things like A and things like the fact that somebody else has experienced the conjunction in question.

This was the second part of Hume's answer to our question. And these two rules or principles were what I tried to explain at length last time. They are, I think, very difficult to express quite accurately: I have not even tried to express them *quite* accurately even now: and yet, I think, it is very easy to see almost exactly what is meant by them, although they are so difficult to express. I will call the first the rule: That nobody can ever know of the existence of anything which he has not directly apprehended, unless he knows that something which he has directly apprehended is a *sign* of its existence. And I will call the second the rule: That nobody can ever know that the existence of any one thing A is a *sign* of the *existence* of another thing B, unless he himself (or, under certain conditions, somebody else) has experienced a *general conjunction* between *things like* A and *things like* B. And the important thing to remember about this second rule is that nobody can be said to have *experienced a conjunction* between any two things, unless he has *directly apprehended*

both the things. I will call these two rules, then, Hume's first rule, and Hume's second rule. But, when I call them Hume's, I ought, perhaps, to warn you of two things. If you were to look for them in Hume, you would not find either of them expressed exactly in the form in which I have expressed them; and also you *would* find, mingled with statements which seem to be statements of these rules, other statements which mean something very different indeed, and which Hume himself does not seem to distinguish very clearly from these two rules. I do not pretend, then, that these two rules are at all a complete statement of what Hume has to say about our knowledge of the existence of things which we do not directly apprehend. All that I do mean to claim is that they certainly do express a part, and a very important part, of what he did think about this subject; and so far as I know, he was the first philosopher who did definitely think of these two rules.

But now I said that many philosophers seem to me to have been led to conclude that we cannot ever know of the existence of any material object, by the assumption, conscious or unconscious, that these rules of Hume's are true. They have, I think, argued first, with some plausibility, that, *if* these rules are true, then none of us ever knows of the existence of any material object; and *then* they have concluded that, *since* these rules *are* true, none of us does ever know that any material object exists—not even that there is the slightest probability of its existence. Both steps in this argument, I said, do seem to me plausible enough to need an answer; and I said that in this lecture I should do my best to meet it. Obviously it must be met, if at all, in one or other of two ways: you must either try to shew that, even if Hume's rules are true, we might yet know of the existence of material objects; or you must try to shew that Hume's rules are not true. I shall presently consider both of these two ways of meeting it. But first of all, I want to try to state more clearly exactly what the point at issue is.

There are, I think, two views, both very plausible and both very commonly held, which owe their plausibility, in the way I have suggested, to the assumption that Hume's rules are true.

Both of them start by admitting, as Hume does, that every man can know of the existence of things which he himself is directly apprehending at the moment, or has directly apprehended in the past and now remembers. But they hold that the only existing things which any man ever does directly apprehend are (1) his own acts of consciousness and (2) his own private sense-data and images. And,

except for the possibility that some of the sense-data which we directly apprehend may not be *private* to us—the possibility, that is, that two or more of us may sometimes directly apprehend the very same sense-datum—I think they are plainly quite right so far. Nobody, I think, does ever learn by direct apprehension of the existence of anything whatever except his own acts of consciousness, on the one hand, and sense-data and images on the other: and these sense-data and images may, I think, as these views hold, be *all* of them always *private* to the person who directly apprehends them: I think this is very possibly so, only I do not feel quite sure. At all events, nobody ever does know, by direct apprehension, of the existence of anything whatever except his own acts of consciousness and the sense-data and images which he directly apprehends. As to this we are agreed. The only question is as to what things *beside* his own acts of consciousness and the sense-data and images which he directly apprehends a man can ever know to exist: and it is here that Hume's rules come in.

One of the two views I am speaking of, holds this, namely: That every man's knowledge as to what exists, or even *probably* exists, *beyond* what he himself has directly apprehended, is entirely confined to two classes of things. A man may know, it says, to a certain extent, what acts of consciousness he himself is likely to perform in the future, and what sense-data and images he is likely to directly apprehend; and so too he may be able to know that he himself has in the past, or probably has, performed certain acts of consciousness and directly apprehended certain sense-data, even though he has quite forgotten them. This is one class of things which he may know to exist, probably or certainly, by inference, according to Hume's rules. Let us say that this class consists entirely of *contents*, past and future, of his own mind—assuming, that is, that the sense-data and images which he directly apprehends are in his own mind—are *contained* in it. And the other class of things which, according to this view, a man may know to exist (probably or certainly) consists, in the same sense, entirely of the *contents of other people's minds*. A man may know, that is, that other people, beside himself, have performed, are performing, and probably will perform certain acts of consciousness; and that they also have directly apprehended, are directly apprehending and probably will directly apprehend certain sense-data. These two classes of things—certain contents past and future of his own mind—and certain contents, past, present, and future, of other people's minds, a man may know to exist, at least *probably*,

even though he has not directly apprehended them, or, if he has, has quite forgotten them. *But* (this view says) nobody can ever know, even probably, that anything else whatever, not belonging to these two classes, does exist or will exist in the Universe at all. Nobody can know that there even probably has existed, does exist, or will exist in the Universe anything else whatever except certain things which are in his own mind or else in somebody else's mind. This is one view, which has, I think, been very commonly held, and which is, I think, plainly due to the assumption that Hume's rules are true. Hume's second rule states that nobody can ever know of the existence of anything which he himself has not directly apprehended, unless he has previously apprehended something *like* it. But the only existing things which any man ever has directly apprehended are things in his own mind—either his own acts of consciousness, or the sense-data and images which he has directly apprehended. It is then argued, with some plausibility, that anything else which is sufficiently *like* these to be inferred according to Hume's rule, must also be something in somebody's mind. And hence it is concluded that nobody ever does know of the existence of anything whatever except what is in somebody's mind, either his own mind or somebody else's.

This, then, is one of the two views, which seems to me to be due to the assumption that Hume's rules are true. And the second is exactly like it except in one respect. This view also holds that the only definite kinds of things which Hume's rules allow me to infer are certain contents, past and future, of my own mind and certain contents past, present, and future, of other people's minds. But it holds also that none of the events in my own mind or in other people's, which I can thus know of, are sufficient to *account for* the existence of the sense-data, which I or other people directly apprehend. This view holds, therefore, that I *can* know that *something else* exists in the Universe—because something else must have existed, in order to *cause* the existence of my own and other people's sense-data. But, it says, I cannot possibly know whether this something else, which is the cause of sense-data, is or is not in any respect *like* anything which anybody has ever directly apprehended. I cannot possibly know, for instance, whether it has shape or is situated in space or not. I cannot possibly know whether it is or is not in anybody's mind. The only means by which I can know what *sort* of a thing is likely to have caused any particular kind of thing is, by means of Hume's rules. But Hume's rules only allow me to infer the

existence of certain things in my own mind and in other people's minds. I *know* that these things, which I can infer, are *not* sufficient to cause my own sense-data and other people's sense-data. I know, therefore, that *something else* must exist in the Universe. But with regard to this something else I know nothing whatever except simply that it does exist and that it causes my own and other people's sensations. I cannot possibly know that it is in the least respect similar to anything whatever which I or anybody else has ever directly apprehended.

These two views, then, I say, both deny that we can ever know of the existence of any material object—they both deny that we can ever know that any material object even *probably* exists. But curiously enough many of those who hold them have thought that they were not denying our knowledge of material objects. They have thought that, to allow that we do know of the things, which they say that we do know of, is *the same thing* as to allow that we do know of the existence of material objects. They have thought that they were not denying our power to know anything which Common Sense supposes itself to know. And what I wish now, first of all, to make plain is that both of these views *do* deny our power to know of the existence of material objects; and that in doing so they do flatly contradict Common Sense. I want to make plain how utterly and extremely different these views are from those which we take, when we do believe in the existence of material objects. And thus, at the same time, to make plain exactly what the question at issue is, when it is asked whether we can, if Hume's rules are true, ever know of the existence of any material object.

Let us take a particular instance. Look at this pencil. It is just an ordinary wooden pencil. And, when you see it, you directly apprehend a patch of brownish colour, bounded on two sides by fairly long parallel straight lines, and at the ends by much shorter lines, which, in the case of some of you, are probably curved. You directly apprehend these sense-data, and both the two views we are considering allow that, when you directly apprehend these sense-data, you may know them—these visual sense-data—to exist. But you have all often seen a pencil before; that is to say, you have directly apprehended sense-data similar to these that you are now seeing. And when you did so, you may often have directly apprehended *other sense-data* in *conjunction* with visual sense-data similar to those you are now directly apprehending. For instance, you may often have felt a pencil in your hands; and you all know the sort of sense-data

you directly apprehend, when you do this—the feeling of smoothness and hardness and of a cylindrical shape. Again you have probably sometimes split a pencil in halves longwise along this line of division, and you know what sort of sense-data you would see and feel, if you looked at the pencil or felt it after doing this. Again you have probably cut one through its breadth, so, and you know what sort of sense-data, you would see and feel, if you looked at and felt the two new ends, after cutting it. These past experiences, which you may have had, of the *conjunction* of other sense-data, visual and tactual, with visual sense-data similar to those which you are now directly apprehending, are what are often called by those who hold the views I am now discussing ‘routines of sensations’. And both views allow that on the ground of these past ‘routines’, you may, according to Hume’s rules, know *now* that you *would*, if you did certain things—that is to say, if you directly apprehended the sense-data which you would directly apprehend, if you took this pencil in your hand and split it or cut it—that you *would*, that is under certain conditions, directly apprehend other sense-data, visual and tactual, of the sort to which I have referred. They allow, that is, that these sense-data, which you now directly apprehend, really are *signs* of *something* else: are *signs*, not indeed that anything else *will*, even probably, exist, but only that certain other sense-data *would* exist, *if*, in addition to the sense-data which you now directly apprehend, you were also to apprehend directly certain others. But neither view pretends that these other sense-data, of which those which you now see are in this remote way *signs*, do exist *now*. Neither view pretends that that cylindrical shape, which you would feel, if you handled the pencil, exists *now*; or that the sense-data, which you might feel or see, if you split the pencil or cut it open, exist *now*. And as regards the first view, it holds that the sense-data which you now see cannot be known by you to be a sign of the *present* existence of *anything whatever*. The pencil, so far as you mean by the pencil something which you know, even probably, to exist *now*, consists *solely* of those visual sense-data which you are now directly apprehending; *either* of these alone or, perhaps it would be said, also of any images, which you may now be directly apprehending—images of sense-data which you *would* see or feel under other circumstances. But it is not pretended that these images, even if some of them are images of what you would see or feel, if you cut the pencil open, are *inside* the pencil now. The pencil simply has no inside, so far as you know. You cannot possibly know that it has any. All that the sense-data,

which you now see, are a *sign* of, is not anything which exists now, but only of certain other sense-data, which you would see or feel, *if* certain other conditions also were realised, which may never be realised.

This is what the first view holds. And the second merely adds to it this. It adds that the visual sense-data you now see really can be known to be a sign of the present existence of *something* else: not, indeed, quite strictly, of the *present* existence of anything else; since this something else can only be known as the *cause* of what you now see, and the *cause* must exist *before* the effect. But it does allow that you may know that these sense-data are a sign that *something* existed a moment ago—something different from anything which you or anybody else, so far as you know, directly apprehended at that moment. But with regard to this something else, it says, you cannot possibly know that it has any shape, or is situated anywhere in space, or that it is in any respect similar to anything which you have ever directly apprehended. You cannot know, for instance, that what causes the sense-data you see is part of a cylindrical surface, or that there is anything whatever *inside* that cylindrical surface. You could not know this, even if you had the advantages which I enjoy, and could examine the pencil both by touch and sight as closely as I can. So far as the sense-data which I directly apprehend can be known to be signs of anything having shape and occupying space at all, they can only, as the first view said, be signs of certain other sense-data, which *would* be seen or felt, under other conditions, which may perhaps never be realised: they are *not* signs of the *present* or *past* existence of anything that has shape or occupies space at all.

Now it seems to me quite plain that these views are utterly different from what we all commonly believe, when we believe in the existence of material objects. What we believe is that these sense-data which we now directly apprehend are signs of the existence of something which exists *now*, or at least did exist a moment ago—not merely of something, which *would* exist, under conditions similar to what we have experienced in the past. And we believe—we all cannot help believing, even though we may hold philosophical views to the contrary—that this something which exists now or existed a moment ago, is not merely a something which may or may not have shape or be situated in space—something with regard to which we cannot possibly tell whether it has a shape or not. We believe quite definitely that the sense-data which we now see are *signs* of the present or immediately past existence of something, which certainly has a cylindrical shape—roughly cylindrical—and which certainly

has an inside. I, for instance, claim to *know* that there does exist now, or did a moment ago, not only these sense-data which I am directly apprehending—seeing and feeling—but *also* something else which I am not directly apprehending. And I claim to know not merely that this something else is the *cause* of the sense-data which I am seeing or feeling: I claim to know that this cause is situated *here*; and though by *here* I do not necessarily mean *in* the space which I directly apprehend, yet I do mean *in space*—somewhere in *some* space. And moreover I claim to know, not merely that the cause of my sensations is situated here in space, and has therefore some shape, but also roughly *what* its shape is. I claim to know that the cause of the sense-data I am now directly apprehending is part of the surface of something which is really roughly cylindrical; and that what is enclosed within this cylindrical surface is something different from what is here just outside it. It is, I think, plainly things like these that we all of us believe, when we believe in the existence of material objects. We do not always believe we know exactly what the shape of the objects is, but we do believe that they have some shape. We do take the sense-data which we directly apprehend to be *signs* of the *present*, or *immediately past* existence, of something having shape and in space: *not* merely to be signs of the *possible* future existence of something having shape and in space; *nor* merely signs of the present or immediately past existence of a bare something—something with regard to which we cannot tell whether it has shape or not.

The question is, then, whether we can, consistently with Hume's second rule, ever know that the sense-data which we directly apprehend are *signs* of the existence of a material object in this sense. And in considering this question we may as well again take this pencil as an example. If I do not know *now* that these sense-data, which I now directly apprehend, are really signs of the present or immediately past existence of a body, which I do not directly apprehend, but which is really roughly cylindrical; then, I think, I must admit that I do not ever *know* of the existence of *any* material object. If I do not know of the existence of this pencil now and here, I can hardly ever know of the existence of any material object at all. I do not suppose I have ever had better evidence for the existence of any than I have for this. Can I, then, if Hume's second rule is true, really know now that this cylindrical body, in whose existence I believe but which I *do not* directly apprehend, does, even probably, now exist, or did, even probably, exist a moment ago?

What makes it, at first sight, seem possible that I might know this, even if Hume's second rule were true, is, I think, the following circumstance. Namely, I certainly have directly apprehended in the past, *in conjunction* with sense-data similar to those which I now directly apprehend, other sense-data which were really similar, in some respects, to *parts* of the material object, in whose existence I believe. I believe, for instance, that this material object—this pencil—really is composed of a number of surfaces, similar to that which I now directly apprehend when I look at this end or feel it with my hand, in respect of the fact that they are *circular* or very nearly circular. And I have in the past, when I cut a pencil through, directly apprehended circular surfaces of this sort standing in a certain relation to sense-data similar to those which I now directly apprehend when I look at the length of the pencil. I might, therefore, it would seem, in accordance with Hume's rule, possibly know that there really exist at this moment circular surfaces standing to every point in this length which I directly apprehend in a similar relation to that in which I have found similar surfaces conjoined to points in a similar length before. I might, that is, possibly know that there really exist *at this moment*, all along this pencil a series of circular patches of colour, similar to those which I should see, if I cut it through at any point; and also a series of circular patches of smoothness and hardness, or whatever the qualities may be which I should feel, if I felt the ends, after cutting it through. Also, I or somebody else, may have sometimes examined a circular patch, similar to this, under the microscope, and have then directly apprehended colours and forms different from those which I now apprehend by the naked eye but still all enclosed in a circle. And I might, therefore, know that there really exist at this moment all along the length of this pencil, not only circular patches of colour similar to those which I should see, if I cut through the pencil, and then looked at the ends with the naked eye, but also, and *in the same place*, patches similar to those which I should see, if I looked at the ends through a microscope. It seems to me that I might, according to Hume's second rule, possibly know that these sense-data which I now directly apprehend really are signs of the present or immediately past existence of sense-data of all these kinds; are *signs* that all these sense-data really do exist *now*, though I do not directly apprehend them, and not merely that they *would* exist in the future, *if* certain other conditions were also fulfilled. I might, that is, possibly know that there really do exist now not only those sense-data which

I *do* directly apprehend, but also, in certain relations to them, immense numbers of others, which I do not directly apprehend, but similar to those which I have directly apprehended in the past in conjunction with sense-data similar to these. And these other sense-data would really be similar to parts of the material object—the pencil—in whose existence I do believe. For I do believe that there are, all along this pencil, circular surfaces, and that there are, within the circle which bounds each of these surfaces things having shapes similar to those which I should see with the naked eye, if I cut the pencil and looked at the ends: for instance, the smaller circle, of a different colour, within the larger circle, which represents the place where the lead is: I believe that there really is within this pencil, all along it, *something* similar in shape to this round surface of lead which I now see within the larger circle. And also that there really are within it, all along it, differences of structure similar in shape to those which I should see, if I cut it and examined it with a microscope. The material object, in whose present existence I believe, is, therefore, really in many respects similar to sense-data, which I *should* see in conjunction with these, which I now see, under certain circumstances; and similar also therefore, to sense-data which I have directly apprehended in conjunction with sense-data like these in the past. And Hume's second rule would, so far as I can see, allow us to infer that these sense-data, which I should see under certain circumstances, do all really exist *now*.

I might, therefore, even if Hume's second rule were true, *know* of the present existence of something very *like* in many respects to the material object, in which I believe; something consisting of parts very similar in shape, to the parts of the object which I believe to exist. I might know, that there really do exist *now* sense-data of a sort, which, according to the two views I am attacking, I can only know *would* exist under certain conditions, that are *not* now fulfilled. Hume's rule would, therefore, allow of my knowing something much more *like* what I believe, than these two views did.

But nevertheless it seems to me it would *not* allow me to know of the existence of exactly that, in which I believe—the material object, the pencil. For all these things similar in shape to parts of the pencil, which it would allow me to know of, are, it must be remembered, patches of *colour* of a certain shape, patches of *hardness*, and *smoothness or roughness* of a certain shape. And even if it might be true that there do really exist inside the pencil now colours similar to those which I should see, if I cut it open; and even if it might be true that

different colours, of different sizes, might all exist in the same place: yet these patches of colour and of hardness and smoothness certainly do not constitute the *whole* of the material object in which I believe. Even if there are *here* now all sorts of colours, which I do not see, and all sorts of tactual qualities, which I do not feel, yet the pencil, in which I believe, certainly does not consist *solely* of colours and of tactual qualities: what I believe when I believe that the pencil exists is that there exists something which really is cylindrical in shape, but which does not consist *merely* of any number of patches of colour or of smoothness or hardness, or any other sort of sense-data which I have ever directly apprehended. Even if sense-data of all these kinds really are now in the same place where the pencil is—and I think there are good reasons for doubting whether they are—I certainly believe that there is in that place *something else besides*. This something else, even if it be not the *whole* material object, is certainly a *part* of it. And it seems to me that, if Hume's second rule were true, I could not possibly know of the existence of this something else. For I have never directly apprehended in the past anything whatever that was like *it*: I have only directly apprehended sense-data which had a similar *shape* to that which it has.

I think, therefore, those philosophers who argue, on the ground of Hume's principles, that nobody can ever know of the existence of any material object, are right so far as the first step in their argument is concerned. They are right in saying: *If* Hume's principles are true, nobody can ever *know* of the existence of any material object—nobody can ever know that any such object even probably exists: meaning by a material object, an object which has shape and is situated in space, but which *is not* similar, except in these respects, to any of the sense-data which we have ever directly apprehended. But are they also right in the second step of their argument? Are they also right, in concluding: *Since* Hume's principles are true, nobody ever *does* know, even probably, of the existence of any material object? In other words: Are Hume's principles true?

You see, the position we have got to is this. If Hume's principles are true, then, I have admitted, I do *not* know *now* that this pencil—the material object—exists. If, therefore, I am to prove that I *do* know that this pencil exists, I must prove, somehow, that Hume's principles, one or both of them, are *not* true. In what sort of way, by what sort of argument, can I prove this?

It seems to me that, in fact, there really is no stronger and better argument than the following. I *do* know that this pencil exists; but

I could not know this, if Hume's principles were true; *therefore*, Hume's principles, one or both of them, are false. I think this argument really is as strong and good a one as any that could be used: and I think it really is conclusive. In other words, I think that the fact that, if Hume's principles were true, I could not know of the existence of this pencil, is a *reductio ad absurdum* of those principles. But, of course, this is an argument which will not seem convincing to those who believe that the principles are true, nor yet to those who believe that I really do not know that this pencil exists. It seems like begging the question. And therefore I will try to shew that it really is a good and conclusive argument.

Let us consider what is necessary in order that an argument may be a good and conclusive one. A really conclusive argument is one which enables us to *know* that its conclusion is true. And one condition, which must be satisfied, if an argument is to enable us to know this, is that the conclusion must really follow from the premisses. Let us see, first, how my argument compares with that of my opponent in this respect.

My argument is this: I do know that this pencil exists; therefore Hume's principles are false. My opponent's argument on the contrary is: Hume's principles are true; therefore you do not know that this pencil exists. And obviously in respect of the certainty with which the conclusion follows from the premiss, these two arguments are equally good. *If* my opponent's conclusion follows from his premiss, my conclusion must certainly also follow from mine. For my opponent's conclusion does not follow from his premiss, except on one condition, namely, unless the following hypothetical proposition is true: *If* Hume's principles are true, then I do not know that this pencil exists. But if this proposition is true, then *my* conclusion also follows from my premiss. In fact, both arguments depend in this respect on exactly the same hypothetical proposition—the proposition which both I and my opponent have admitted to be true: namely that: If Hume's principles are true, then I do not know that this pencil exists. Neither conclusion follows from its premiss, unless this proposition is true; and each does follow from its premiss, if this proposition is true. And this state of things is an excellent illustration of a principle, which many philosophers are, I think, apt to forget: namely, that the mere fact that one proposition coheres with or follows from another does not by itself give us the slightest presumption in favour of its truth. My conclusion coheres with my premiss, exactly as strongly as my opponent's coheres with

his. And yet obviously this mere fact does not give the slightest presumption in favour of either.

Both arguments, therefore, equally satisfy the first condition that is necessary to make an argument conclusive. Both equally satisfy the condition that the conclusion must follow from the premiss. What other condition, then, is necessary if an argument is to enable us to *know* that its conclusion is true?

The second condition, that is necessary, is this: Namely that we should *know* the premiss to be true. Obviously, I think, this condition must be satisfied, if the argument is to enable us to *know* that its conclusion is true. It is not sufficient merely that the premiss should *be* true, if we do not *know* that it is so. For suppose that the premiss is true, and the conclusion does follow from it, and *yet* I do not *know* that the premiss is true. How can this state of things possibly enable me to know that the conclusion is true? Obviously so long as this is the whole state of the case, I shall be just as far from *knowing* that the conclusion is true, as if I had never thought of the premiss at all. The argument may be, and is, a good argument in the sense that the conclusion does follow from the premiss, that the premiss is, in fact, true, and that, therefore the conclusion also is in fact true. But it is not a good argument in the sense that it can possibly enable either me or any one else to *know* that the conclusion is true. The mere fact that the premiss *is* true will not, by itself, enable any one whatever to know that the conclusion is so. If anybody whatever is to be enabled by the argument absolutely to *know* the conclusion, that person must himself first absolutely *know* that the premiss is true. And the same holds not only for absolute certainty but also for every degree of probability short of it. If any argument whatever is to enable me to know that its conclusion is in any degree probable, I must first know that its premiss is probable in at least the same degree. In other words, no argument is a good one, even in the sense that it enables us to know its conclusion to have any probability whatever, unless its premiss is at least as certain as its conclusion: meaning by 'certain', not merely true or probably true, but *known* to be so.

The only way, then, of deciding between my opponent's argument and mine, as to which is the better, is by deciding which premiss is known to be true. My opponent's premiss is that Hume's principles are true; and unless this premiss not merely *is* true, but is absolutely known to be so, his argument to prove that I do not know of the existence of this pencil cannot be conclusive.

Mine is that I do know of the existence of this pencil; unless this premiss not only *is* true, but is absolutely known to be so, my argument to prove that Hume's principles are false cannot be conclusive. And moreover the degree of certainty of the conclusion, in either case, supposing neither is quite certain, will be in proportion to the degree of certainty of the premiss. How is it to be decided which premiss, if either, is known? or which is the more certain?

One condition under which a premiss may be known to be true, is a condition which we have already stated. Namely, any proposition is known to be true, if we have a conclusive argument in its favour; if, that is to say, it does really follow from some premiss or set of premisses already *known* to be true. I say some premiss or *set of premisses*; and this new qualification should be noticed, because it introduces a complication. If any argument from a *single* premiss is to be conclusive, the *single* premiss must, as we have seen, be at least as certain as the conclusion: the conclusion cannot, by the help of any such argument, be known with more certainty than the premiss. But obviously in the case of a set of premisses, the conclusion may be *more* certain than any *single* one of the premisses. Here, too, however, each of the premisses must be known to be at least probable in some degree: no amount of premisses, which were not known to be probable at all, could enable us to know that the conclusion which followed from them all was even in the least degree probable. One way, therefore, in which a proposition can be known to be true, is if it follows from some premiss or set of premisses, each of which is already known to be so with some degree of certainty. And some philosophers seem to have thought that this is the only way in which any proposition can ever be known to be true. They seem to have thought, that is, that no proposition can ever be known to be true, unless it follows from some other proposition or set of propositions already known to be so.

But it is, I think, easy to see that, if this view were true, no man ever has known any proposition whatever to be in the slightest degree probable. For if I cannot know any proposition whatever to be either true or probably true, unless I have first known some other proposition, from which it follows, to be so; then, of course, I cannot have known this other proposition, unless I have first known some third proposition, before *it*; nor this third proposition, unless I have first known a fourth before it; and so on *ad infinitum*. In other words, it would follow that no man has ever known any proposition whatever to be even probably true, unless he has previously known

an absolutely infinite series of other propositions. And it is quite certain that no man ever has thus known a really infinite series of propositions. If this view were true, then, neither my argument nor my opponent's argument could possibly be a good argument: neither of them could enable us to know that the conclusion was even in the least degree probable. And the same would be true of every other argument whatsoever. So that if this view—the view that we can never know any proposition whatever, unless we have a good argument for it—were true, then it would follow that we cannot ever know any proposition whatever to be true, since we never can have any good argument for it.

If, therefore, either my argument or my opponent's, or any other argument whatever, is to be a good one, it must be the case that we are capable of knowing at least *one* proposition to be true, *without* knowing any other proposition whatever from which it follows. And I propose to call this way of knowing a proposition to be true, *immediate* knowledge. And I wish to insist for a moment upon what *immediate* knowledge is. It is something utterly different from what I have called *direct apprehension*; and that is why I have chosen a different name for it, though, in fact, both of them are very often called by both names—they are both often called direct knowledge and both often called immediate knowledge. One difference between them is that *direct apprehension*, as I explained, is a relation which you may have to a proposition, equally when you believe it and when you do not, and equally when it is true and when it is false; whereas immediate knowledge is one form of the relation which I called knowledge *proper*: and knowledge *proper*, you may remember, is a relation which you never have to a proposition, unless, besides directly apprehending it, you also believe it; and unless, besides this, the proposition itself is true, *and also* some fourth condition is satisfied as well. And another difference between direct apprehension and immediate knowledge is that direct apprehension is a relation which you may have to things which are *not* propositions, whereas immediate knowledge, being a form of knowledge proper, is a relation which you can only have to propositions. For instance, at this moment, I directly apprehend the whitish colour of this paper; but I do not *immediately know* this whitish colour. When I directly apprehend it, I may *also*, if I happen to think of them, immediately know the proposition that I directly apprehend it and also the proposition that it exists. But both these propositions are something quite different from the whitish colour itself; and I may

at a given moment directly apprehend a colour, without at the same time immediately knowing either proposition; although, whenever I do directly apprehend a colour or any other sense-datum, I *can*, if I happen to think of them, also know both the proposition that I directly apprehend it and also the proposition that it exists. Immediate knowledge is, therefore, something quite different from direct apprehension. And there is one other point about it which should be mentioned. I have said it is the kind of way in which you know a proposition to be true—really *know* it, not merely directly apprehend it—when you *do not* know any other proposition from which it follows. And of course, if you do not know any proposition from which it follows, then, if you know it at all, you can only know it immediately. But it is important to insist that even when you do know a proposition immediately, you *may* also at the same time know some proposition from which it follows: you may know it *both* immediately and *also* because you know some other proposition from which it follows. If, therefore, we give the name *mediate* knowledge to all cases in which you know a proposition, because you know some other from which it follows; the result is that you may at one and the same time know the same proposition *both* mediately and *also* immediately. The relation, therefore, between mediate and immediate knowledge is very different from that between direct and indirect apprehension. When you are apprehending a thing directly you are never at the same time also apprehending it indirectly; and when you are apprehending a thing indirectly, you are never at the same time also apprehending it directly. But you may, at one and the same time, *know* a proposition both mediately and immediately. Of course, cases do occur where you *only* know a proposition mediately—*only* because you know some other proposition from which it follows; but it is important to distinguish such cases from cases where, though you do know the proposition, *because* you know some other from which it follows, and therefore do know it mediately, you do not know it *only* because of this, but *also* immediately.

It is certain, then, that if any proposition whatever is ever known by us mediately, or because some other proposition is known from which it follows, some one proposition at least, must also be known by us *immediately*, or *not merely* because some other proposition is known from which it follows. And hence it follows that the conditions necessary to make an argument good and conclusive may just as well be satisfied, when the premiss is only known *immediately*, as when there are other arguments in its favour. It follows, therefore,

that my argument: 'I know this pencil to exist; therefore Hume's principles are false'; may be just as good an argument as any other, even though its premiss—the premiss that I do know that this pencil exists—is only known immediately.

But is this premiss in fact known by me immediately? I am inclined to think that it is, though this might be disputed, for the following reasons. It must be noticed, that the premiss is: I know that this pencil exists. What, therefore, I am claiming to know immediately is *not*, that this pencil exists, but that I know it to exist. And it may be said: Can I possibly know immediately such a thing as this? Obviously, I cannot know *that* I know that the pencil exists, unless I do know that the pencil exists; and it might, therefore, be thought that the first proposition can only be mediately known—known *merely* because the second is known. But it is, I think, necessary to make a distinction. From the mere fact that I should not know the first, *unless* I knew the second, it does not follow that I know the first *merely* because I know the second. And, in fact, I think I do know *both* of them immediately. This might be disputed in the case of the second also. It might be said: I certainly do not know immediately that the pencil exists; for I should not know it at all, unless I were directly apprehending certain sense-data, and knew that they were signs of its existence. And of course I admit, that I should not know it, unless I were directly apprehending certain sense-data. But this is again a different thing from admitting that I do not know it immediately. For the mere fact that I should not know it, unless certain other things were happening, is quite a different thing from knowing it *only* because I know *some other proposition*. The mere direct apprehension of certain sense-data is quite a different thing from the knowledge of any proposition; and yet I am not sure that it is not by itself quite sufficient to enable me to know that the pencil exists.

But whether the exact proposition which formed my premiss, namely: I do know that this pencil exists; or only the proposition: This pencil exists; or only the proposition: The sense-data which I directly apprehend are a sign that it exists; is known by me immediately, one or other of them, I think, certainly is so. And all three of them are much more certain than any premiss which could be used to prove that they are false; and also much more certain than any other premiss which could be used to prove that they are true. That is why I say that the strongest argument to prove that Hume's principles are false is the argument from a particular case, like this

in which we do know of the existence of some material object. And similarly, if the object is to prove *in general* that we do know of the existence of material objects, no argument which is really stronger can, I think, be brought forward to prove this than particular instances in which we do in fact know of the existence of such an object. I admit, however, that other arguments may be more convincing; and perhaps some of you may be able to supply me with one that is. But, however much more *convincing* it may be, it is, I think, sure to depend upon some premiss which is, in fact, less certain than the premiss that I do know of the existence of this pencil; and so, too, in the case of any arguments which can be brought forward to prove that we do not know of the existence of any material object.

Chapter VII

MATERIAL THINGS

I have now discussed a great many different points which all have a bearing upon one single question—the question: Do we, any of us, ever know of the existence of any material object? A great many philosophers have come to the conclusion that we do not. But they have used two different sorts of arguments in favour of this conclusion. Some of them have tried to prove positively that no material objects do exist; a conclusion from which it will, of course, follow that we cannot *know* of the existence of any. But I have not hitherto, except in one single instance and very briefly, tried to deal with any of the arguments used in favour of this extreme conclusion. It seems to me, in fact, that the arguments used in favour of this conclusion are not so plausible and do not appeal to nearly so many people as those used in favour of a much more modest conclusion: namely, the conclusion that, whether material objects do exist or not, we do not *know* that they exist. This is a conclusion, which, I think, commends itself very easily to a great many people. And, before I go on to consider the arguments in favour of the more extreme conclusion that *no* material objects exist, I now want, first of all, to state, as simply as I can, the arguments which seem to me the most convincing *against* this more modest and plausible conclusion. I want, in short, to make a final effort to convince you that, even if you really *do not* know of the existence of material objects, at least, you do not *know* that you do not know it.

And the first thing that needs to be done is, I think, this: namely, to make as clear and definite as possible exactly what the point at issue is. The question, as I have stated it, is this: Whether we do or do not know of the existence of material objects? And, in order to make this question quite clear and definite, it is obviously necessary to consider two points. Namely, first, what is meant by *knowing* and *not knowing*; or, in other words, what is the difference between the meaning of the assertion 'I do *know* that so and so exists', and the meaning of the assertion 'I *do not* know that so and so exists.' And, secondly, what is meant by a 'material object'. I propose to take the