

BERKELEY'S DENIAL OF MATERIAL SUBSTANCE

1. *Preliminary Clarification.* Before considering Berkeley's arguments it will be wise to ask what is commonly understood by 'material substance,' and in what sense Berkeley denied its existence. For he always maintains that he is denying only the theories of certain scientists or philosophers, e.g., the Newtonians, Descartes, and Locke. He asserts that his own view admits the existence of all that plain men understand by 'bodies' or 'material things'. It will also be wise to clear up beforehand the notions of 'perception' and 'sensation'. These preliminaries will take up a considerable part of the paper.

1.1. *What do we understand by a 'material thing'?* It is always dangerous for philosophers to dogmatise about the opinions of plain men. What one ascribes to them is in fact an inference, drawn partly from one's introspection of oneself in one's 'plainer' moments, and partly from the phraseology of everyday speech in the few languages with which one is familiar. There is always a risk of putting into the mouths of babes and of sucklings what could have occurred only to the wise and prudent. But, provided that one is alive to the risks that one is taking, there is no great harm in taking them.

It seems to me that a plain man means by a 'solid body' or a 'bit of matter' something which has all the following characteristics. (1) It is literally extended. It is bounded by a closed surface and has an outside and a front. (2) It is literally pervaded throughout its volume and over its surface with certain extensible qualities, e.g., colors, temperature, roughness or smoothness, and so on. (3) It is a centre from which there emanate certain sensible 'atmospheres', which form a kind of aura about it, e.g., a characteristic field of sound in the case of a tolling bell or a waterfall, a characteristic field of odour in the case of an apple, a field of sensible warmth in the case of a radiator, and so on. (4) Some of the qualities mentioned under

headings (2) and (3) are revealed by some of our senses and others by others. But the very same part of the same body, e.g., the upper face of a certain coin, has at the same time qualities proper to various senses, e.g., colour, temperature, and textural qualities. It has temperature and texture when one is looking at it and not touching it and therefore is sensibly aware only of its colour; and it has colour when one is touching it and not looking at it and therefore is sensibly aware only of its temperature and its texture. Moreover, it has temperature, when one is only looking at it, in precisely the same sense in which it has temperature when one is feeling it; and when one is only touching it it has colour in precisely the same sense in which it has colour when one is looking at it. Lastly, it may have extensible qualities which none of our senses are fitted to reveal to us. (5) Beside having extensible qualities, which it may present to us sensibly, a bit of matter has certain causal or dispositional properties, active or passive. Among these may be mentioned inertial mass, impenetrability, greater or less elasticity and so on. (6) The *same* person can perceive the same part or different parts of the same bit of matter on *various* occasions by means of the same sense or different senses. (7) *Different* persons can perceive the same part or different parts of the same bit of matter, by means of the same sense or different senses, on the *same* occasion. (8) A bit of matter can exist, and change or remain unaltered, and act upon or be acted upon by other bits of matter, at times when no one is perceiving it. None of its extensible qualities or its powers is altered or abolished or reinstated by its becoming or ceasing to be perceived.

I do not say that all or any of these common sense beliefs are *true*. But I do say that, unless there be particulars which answer to all these eight conditions, then there are no 'bodies' or 'material things' in the plain straightforward sense of these phrases.

It is worth while to notice that philosophers who have explicitly or implicitly denied that there are material things, have done so for one or another of two fundamentally different reasons. One of these is much more radical than the other. The more radical line is to argue that the notion of one or more of the characteristics which enter into the notion of 'material

thing' involves a contradiction, and therefore that nothing could possibly have that characteristic. This is the line taken, e.g., by Leibniz and by McTaggart. They argue that nothing could possibly be *extended*, because to be extended would entail consequences—e.g., being composed of parts which are themselves composed of parts and so on without end—which are palpably absurd. The other way is to argue that, although each of the characteristics involved in the notion of 'material thing' may *severally* belong to something or other, yet, *collectively* they could not be combined in *any one* particular. This is in fact the line which Berkeley takes. According to him, there are particulars which are extended, particulars which are coloured, particulars which have sensible hotness, and so on. But, in the first place, no particular which had colour could possibly have temperature, none which had temperature could possibly have colour, and so on. And, secondly, every such particular is confined in its existence to some one particular occasion in the mental history of some one particular person. He calls such particulars 'ideas'. Then again, according to him, there are also particulars which are persistent, capable of acting and being acted upon, and which exist independently of being perceived. But these are all *unextended*, and it is meaningless to ascribe to them colour, temperature, motion-or-rest, etc., or to suppose that they could be perceived by means of any conceivable *sense*. They are in fact minds or spirits; their activity consists in volition, and their passivity in being caused to have sensations or images by telepathic or immanent action.

1.2. *Perception and Sensation.* Berkeley unfortunately uses the one word 'perceive' to cover two quite different, though closely interconnected, kinds of experience. One is the non-inferential cognition which we take ourselves to have of material things and of certain physical events by means of sensation. This is the kind of experience which one would naturally express by saying: 'I see a cow over there', 'I am touching a bit of ice', 'I see a flash of lightning', 'I hear a bell tolling', and so on. The other kind of experience is having a sensation or quasi-sensation. When Berkeley is being careful he no doubt intends to mark this distinction by the use of the phrases 'perceive' and 'immedi-

ately perceive' respectively. When he uses 'perceive' in the wide sense it includes, besides what he calls 'immediate perception', a great deal of what he would call 'suggestion'. He takes the latter to consist of images, evoked through association by an immediate perception. But generally he uses 'perceive' for what he should describe as '*immediately* perceive'. This is a dangerous practice, and it is well to avoid it altogether. I shall use 'perceive' *only* in the usual sense, in which the proper grammatical object of the verb is the name or a description of some material thing or physical event, e.g., 'a cow', 'a brown, round, flat bit of copper', 'a flash of lightning', and so on. I shall use the technical word 'sense' as equivalent to what Berkeley in his more careful moments would describe as 'immediately perceive'.

Even if we confine ourselves to using 'perceive' in the way just mentioned, there is still a tiresome ambiguity about it, which we must now notice. 'Perceive', when so used, is a general name for seeing, hearing, touching, etc. Now it is customary to use such words as 'see', 'hear', 'touch', etc., only with the implication that the following two conditions are fulfilled. (i) That the experience is *veridical*, at any rate in its main outlines, i.e., that there is in fact a certain one body or physical event, answering pretty clearly to the description which the experient would naturally give of the object which he claims to be perceiving at the time. (ii) That the experience is *normally evoked*. In the case of normal perception this means that it is evoked by light coming to the experient's eyes directly or indirectly from a region outside his body. In the case of auditory perception it means that it is evoked by sound-waves coming to the experient's ears directly or indirectly from an external source. And similarly *mutatis mutandis* for other cases. If we believe that *either* of these conditions is unfulfilled, we should not commonly say that a person is 'seeing' or 'hearing' or in general 'perceiving'. Suppose, e.g., that I knew or believed that a person, who claimed to be seeing an oasis in the desert or to be hearing a voice, was dreaming or hallucinated. Then it would be contrary to usage for me to say: 'He is seeing an oasis' or 'He is hearing a voice'. I might say: 'He *seems to himself* to be seeing an oasis' or 'He *seems to himself* to be hearing a voice'. Or, if I were making my

statement in writing, I might put the words 'see' or 'hear' in inverted commas. Suppose, again, that I knew or believed that a person's visual or auditory experience corresponded to a certain distant scene or event so closely as to exclude all question of chance-coincidence. And suppose that I knew that the experience could not possibly have been evoked in him directly or indirectly by light-waves or sound-waves coming to his body from the region of that distant scene or event. Then, again, it would be contrary to ordinary usage for me to say: 'He saw such and such a scene' or 'He heard such and such a sound'. I should say: 'He seemed to himself to see it' or 'He seemed to himself to hear it'; and I should add: 'But really it must have been a case of telepathy or clairvoyance or clairaudience'. Here the experience is veridical, but not normally evoked.

It is evident, then, that we need a word which shall be purely descriptive and shall not carry with it any implications either of veridicality or of normal evocation. We want a word which will cover, e.g., normal waking sense-perceptions, waking hallucinations (both delusive and veridical), and dreams. I propose to use the phrase '*ostensible* perception', and the corresponding phrases '*ostensible* seeing', '*ostensible* hearing', etc., for its various specific forms. With this terminology 'to *see*' is to have an ostensible visual perception which is both veridical in its main outlines and normally evoked. And similar remarks apply *mutatis mutandis* to the words 'to *hear*', 'to *touch*', and so on.

Now, whenever a person is having an ostensible perception he is *ipso facto* having a certain sensation or *quasi*-sensation. (I introduce the second alternative in order to cover the case of dreams and of certain kinds of waking hallucination. In these cases it might well be denied that the experient is having *sensations*, if that word is used so as to imply that the experiences are due to the stimulation of his external sense-organ. But he is certainly having colour-experiences, sound-experiences, and so on, which very clearly resemble in their intrinsic character sensations which are normally evoked.)

To illustrate these terms let us suppose, e.g., that a person has an experience, whether veridical or delusive, normally or abnormally evoked, which would correctly be described as

'ostensibly seeing a cricket-ball'. An essential part of that experience would consist in having a colour-sensation or a colour-quasi-sensation of a certain characteristic kind. The precise character of this could vary within certain ill-defined limits according to circumstances. If it were a normal waking perception, e.g., the details of the sensation would vary according to the part of the ball facing the percipient, according to his distance from it, the state of his eyesight, the lighting, and so on. But it would certainly be a sensation of a round-looking, convex-looking, brownish expanse.

But, although a colour-sensation or a colour-quasi-sensation of this kind is an essential factor in any experience which could properly be called 'ostensibly seeing a cricket-ball', it is not the whole of it. By a 'cricket-ball' we mean something which is solid and spherical; which has coldness and smoothness and hardness as well as brownness; which has parts which are not at the moment manifesting themselves to the observer's senses; and which has causal properties, such as mass, impenetrability, hardness, and elasticity. By 'ostensibly seeing a cricket-ball' we do not mean just having a sensation of a round-looking, convex-looking, brownish expanse. We mean (i) having such a sensation, and (ii) being led by it, without any explicit process of inference and without even any experience of associative transition, to take oneself to be facing an object answering to the description which I have just given.

It would be *logically* possible to have such a sensation without being led by it to take for granted anything of the kind. It might be suggested that that would be the case with a young baby, looking at a cricket-ball for the first time. If so, it would be incorrect to say that the baby was ostensibly seeing a cricket-ball, and it might well be incorrect to make even the vaguer statement that it was ostensibly seeing a globular body. But I would not like to commit myself to the statement that a young baby would or even could (in the *causal* sense of possibility) have a visual sensation precisely like that which a grown person would have in a similar situation. It is possible, and it seems to me likely, that the character of the visual sensation itself is subtly modified by the associations which it comes to evoke.

Then, again, it is quite possible, both logically and causally, for a grown person to have such a sensation and *not* be led by it to take himself to be facing a cricket-ball or even a body of any such kind. He might know or have reason to believe that he was subject to an optical delusion or a hypnotic suggestion. But in his case there would certainly be a strong incipient tendency to take himself to be facing a cricket-ball, and, unless he made and kept up a pretty deliberate effort, he would find himself slipping into that state of mind. Lastly, a grown person might be dreaming or hallucinated and be at the time quite unaware of the fact. In that case he *would* ostensibly be seeing a cricket-ball, but his ostensible perception would be wholly delusive.

1.3. *Analysis of Sensation.* I come now to the analysis of sensation or *quasi*-sensation. At any rate in the case of those visual and tactual sensations which occur when one ostensibly perceives a body of definite outline and selectively attends to it, the following analysis seems plausible. It seems plausible in such cases to say that having a sensation consists in being immediately aware of a particular, which *has* certain characteristics, e.g., a certain colour spread out within a certain contour, and which *manifests* those characteristics to one in and through the sensation. Take, e.g., the visual sensation which a person has when he is ostensibly seeing a cricket-ball. It seems highly plausible to say that having this sensation consists in being immediately aware of a particular which is, and *sensibly presents itself to one* as being, round and convex and brown. On the assumption that this kind of analysis is correct, I shall give the name 'sensing' to the act or process of being immediately aware of a particular as having certain qualities, e.g., colour in visual sensation, temperature in tactual sensation, and so on. I shall call any particular which is capable of being sensed a 'sensible'. So the assumption which we are making, and which is embodied in this terminology, is that to have a visual or tactual sensation is to be sensing a sensible which *has* certain sensible qualities and to be *sensing it as having* some at least of the qualities which it has.

I can now define the word 'sense-datum'. I shall say that a sensible is a 'sense-datum' for a certain person on a certain occasion, if and only if he is sensing that sensible on that occasion.

Before going further I want to make it quite clear that these phrases are intended to leave all the following questions quite open. (1) Whether or not one and the same sensible can combine qualities which can be sensed *only by different senses*, e.g., whether one and the same sensible could have both sensible colour and sensible temperature. (It will be noted that, if this question should be answered in the affirmative, then a sensible which is being sensed by a certain person on a certain occasion may have sensible qualities *beside* those which he then senses it as having.) (2) Whether or not one and the same sensible could be sensed by the same person on *more than one occasion*, either by the same sense or by different senses. (3) Whether or not one and the same sensible could be sensed by two *different* persons, either on the same or on different occasions, and either by the same or by different senses. (4) Whether or not there could be sensibilia which are *sometimes* not sensed by anyone, or again sensibilia which are *never* sensed by anyone. (5) Whether the sensible which a person senses when he ostensibly sees or touches a certain part of the surface of a body is sometimes or is never *identical with* that part of the surface of that body.

To all these questions Berkeley would unhesitatingly give a negative answer. In our terminology he would assert the following proposition:—Any sensible is necessarily a sense-datum for some one and only one person on some one and only one occasion, and it could not conceivably have any characteristics *beside* those which that person senses it as having on that occasion.

Now I strongly suspect that this assertion of Berkeley's rests upon a certain other proposition, which is more fundamental than it. We may approach this in the following way. I defined a 'sensible' as a particular which *has* certain sensible characteristics, e.g., sensible redness and sensible coldness. Again, I said that having a sensation consists in sensing a sensible, and that an essential factor in this is sensing it *as having* certain qualities, e.g., as round or as red or as cold, and so on. Now these statements plainly leave open a further question, which I have not as yet mentioned, viz., whether or not a sensible could be sensed as having a quality which it did *not in fact have*. Could it, e.g., be sensed as red when in fact it had no colour at all? or

could it, e.g., be sensed as elliptical in contour when it was in fact circular? I have kept this question separate from the others, because nearly everyone who has accepted the analysis of visual and tactual sensations which is embodied in the present terminology has explicitly or tacitly answered it in the negative.

We are now in a position to state the more fundamental proposition which I suspect Berkeley to have held. I think that he would deny the distinction between *having* a sensible quality and *being sensed as having* a sensible quality. I think he would hold that no meaning whatever can be attached to *being* sensibly red or *being* sensibly round or *being* sensibly cold except *being sensed by someone* as red or as round or as cold, as the case may be. In fact, to *be* sensibly red just is to *look* or *sensibly appear* red to someone; to *be* sensibly cold just is to *feel* cold to someone; and so on for any sensible quality. It would follow at once from this that to talk of a sensible which was not a sense-datum to anyone would be a contradiction in terms. For to describe something as a 'sensible' is to imply that it *has* some sensible characteristic or other, and to deny that it is a sense-datum to anyone is to deny that it is *sensed by anyone as having* any sensible characteristic. Now, if the only meaning that can be attached to '*having* a sensible characteristic' is *being sensed by someone* as having that characteristic, this assertion and this denial contradict each other. It would also be meaningless to suggest either (a) that a sense-datum could have any quality which it is not sensed as having, or (b) that it could be sensed as having any quality that it does not have.

It should be noted that the proposition, which I have supposed to be at the back of Berkeley's mind, would not in itself entail that one and the same sensible could not be sensed by different persons, either simultaneously or successively. All that it entails is that a sensible must always be a sense-datum to *someone or other*. Again, it does not, strictly speaking, exclude the possibility that one and the same *particular* might sometimes be sensed and sometimes not sensed. All that it entails is that, if that were so, that particular could not possibly be called a 'sensible' except at the times when it is a sense-datum to someone or other.

Now there is another, and still more radical, proposition, which would entail all the negative propositions which Berkeley maintains. It is this. Perhaps the suggested analysis of having a sensation, e.g., of a round, convex, brown expanse, is altogether mistaken. Perhaps it does not consist in sensing a certain particular as round and convex and brown. That analysis implies that there are two factors, viz., an act or process of sensing and a particular which is sensed, and that the latter might conceivably exist without being the object of the former. But might not a sensation be a completely unitary occurrence, not analysable into act of sensing and object sensed, but just having two radically different but inseparable aspects? In respect of one of these aspects, viz., its being a state or modification of the percipient's mind, it is called a '*sensation of his*', and counts as an event in his mental history. In respect of the other aspect it is called a '*sensation of so-and-so*', e.g., of a brown, round, convex expanse. On this view the fundamental mistake is to suppose that 'of' here has the same kind of meaning as 'of' in such phrases as '*memory of so-and-so*', '*thought of so-and-so*', etc. In these latter phrases it certainly does denote the relation of a *cognitive act or process* to a *cognised object*, and the latter always is in principle existentially independent of the former. The mistake, it would be said, is to treat a sensation as a kind of cognition, and to regard the 'of' in the phrase '*sensation of so-and-so*' as denoting the relation of a cognitive act or process to a cognised object. We might talk, on this view, of the 'content' of a sensation, but not of its 'object'. This view was held, e.g., by Prichard.

If this view were accepted, the negative Berkeleian propositions follow at once. What we have called a 'sensible' would simply be a sensation considered in *one* of its two inseparable aspects. In its other aspect a sensation is an occurrence in the mental history of some one and only one person at some one and only one date. That, I suspect, is what Berkeley ought to have held and perhaps did hold. But, if so, his language often tends to disguise his meaning.

2. *Berkeley's Arguments.* We can now consider Berkeley's own explicit arguments. We may divide them into three groups, viz.,

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(1) direct arguments for his view, (2) attacks on certain alternative views, and (3) discussion of certain possible objections to his view. I shall confine myself here to the direct arguments against the existence of material substance. These may be divided into (i) the '*esse*' = '*percipi*' argument, and (ii) a pair of supplementary arguments. We will now consider these three in turn.

2.1. *The 'esse' = 'percipi' argument.* At the end of Section 4 of the *Principles of Human Knowledge* Berkeley asks three rhetorical questions, and they constitute his main positive argument on this topic. I will now deal with them in the light of our preliminary clarification.

The questions are these: (1) "What are" houses, mountains, etc., "but the things which we perceive by sense?" (2) "What do we perceive beside our own ideas or sensations?" (3) "Is it not plainly repugnant [i.e., internally inconsistent] that any of" our ideas or sensations "or any combination of them, should exist unperceived?" Berkeley evidently expects us to answer the first two questions with 'nothing', and the third with 'yes'. If we do so, the argument would then run as follows: 'Houses, mountains, etc., are nothing but things which we perceive with our senses. Things that we perceive with our senses are nothing but our own ideas or sensations. But it is plainly self-contradictory to suppose that any one of our ideas or sensations, or any combination of them, should exist unperceived. Therefore, it is self-contradictory to suppose that houses, mountains, etc., should exist unperceived'. I will now take the three rhetorical questions in turn.

(1) If there are such things as 'houses', 'mountains', etc., they are certainly things which we can and often do perceive with our senses. But they would be a great deal more than that. They would be particulars which, even when we are perceiving them, have many parts and many qualities which they are not directly manifesting to our senses. For they would have insides as well as outsides, backs as well as fronts, temperatures and textures as well as colours, and so on. Again, each of them would be a thing which can be perceived by several persons simultaneously or successively, and by the same person on many different occasions, from various points of view and by means of various

kinds of sensations. Lastly, they would be things which have characteristic powers and dispositions, which interact with each other, and which unfold their various histories whether anyone happens to be perceiving them or not. Berkeley is arguing from the common meanings and usages of ordinary words and sentences. If so, he ought to take into account their *full* meanings and implications, and not just a small selection which specially favours his case.

(2) Either the word 'perceive' is being used in the same sense in the second question as in the first, or in a different sense. If it is used in a different sense, the argument collapses through having an ambiguous middle term. But, if it is used in the same sense, it is simply untrue that what a person perceives is 'his own ideas and sensations'. What we ostensibly perceive is houses, mountains, rivers, etc. To apply the phrase 'one's own' to these, in the sense in which it is used in the phrase 'one's own sensations', is quite meaningless. It can be applied to them only in the quite different and irrelevant sense of legal ownership, as when one talks of 'my umbrella' or 'your bicycle'. You and I may perceive *St. Paul's Cathedral*; it is quite meaningless to say that you perceive *your* St. Paul's and I perceive *mine*.

There is one and only one interpretation which I can put on the second question which would enable me to answer it affirmatively. I should have to transform it as follows: 'What does a person *sense*, on any occasion when he is perceiving a material thing, but a sensible? Is it not plain that this cannot be identified with the thing as a whole, and doubtful whether it can be identified even with a part of the thing's surface? Is it not plain, in any case, that it does not manifest to the percipient all the qualities which he takes to be possessed by the part of the thing which he is perceiving? And is not the fact that a person senses such and such a sensible on a certain occasion, and that it then manifests to him such and such sensible characteristics, always determined to some extent by his position and orientation and by the sense-organs which he is using at the time?' I think that the answer to *these* questions is: 'Yes'. But an affirmative answer to them does not help Berkeley's argument.

(3) The third question is equivalent to the following: 'Is it

not self-contradictory to suppose that there might be unsensed sensibilia?' In Section 3 of the *Principles* Berkeley says that the statement: 'There was a sound' just means: 'A sound was heard'; 'There was an odour' just means: 'An odour was smelled'; and so on. He sums this up by saying that 'to exist', as applied to sensible objects, just means 'to be perceived'. (For reasons which I have already given, I shall substitute 'to be sensed' for 'to be perceived'.)

It is plain, however, from what he says elsewhere that Berkeley would wish to modify this at least in one or other of the following two ways. (i) 'There was a sound' means: 'Either a sound was actually heard by some man or animal, or one would have been heard if certain conditions, wholly describable in terms of sensations, had been fulfilled'. (ii) 'There was a sound' means: 'Either a sound was heard by some man or animal, or, if not, a sound was in some way present to the mind of God'. I think it is fairly plain that Berkeley really took the *second* alternative. In Section 48 of the *Principles* he writes as follows: "For, though we hold . . . the objects of sense to be nothing . . . but ideas which cannot exist unperceived; yet we may not then conclude that they have no existence except only when perceived by us, since there may be some other spirit that perceives them, though we do not. Wherever bodies are said to have no existence without the mind, I would not be understood to mean this or that particular mind, but all minds whatsoever." Again, in Dialogue II of the *Dialogues between Hylas and Philonous* he makes the following explicit statement: "... I conclude, not that they have no real existence, but that, seeing that they depend not on my thought and have an existence distinct from being perceived by me, there must be some other mind wherein they exist." The fact is that Berkeley himself was not a phenomenalist, though phenomenism is a very natural alternative line of development from his principles.

Now I think it is fantastic to suggest that any proposition about God is part of the *meaning* of such a statement as: 'There was still a hooting sound going on when the ship's foghorn continued to blow after all the ship's company had moved away out of earshot in the lifeboats'. Let us, then, ignore this alternative

here, and consider the other, i.e., the phenomenalist one. According to this, the only meaning which can be attached to this statement, although it is in the indicative mood, is the *conditional* proposition that, *if* a man or other suitably equipped animal *had* been within earshot, he *would* have heard a hooting sound. What are we to say of this kind of contention?

(1) I think that many people would find it almost self-evident about odours and tastes, and highly plausible about sounds. But I would remark that the antecedent of the conditional involves the notion of being *within earshot* or some similar notion, i.e., the notion of an observer having a *body* which conditions his sensations and of that body being in a certain kind of *spatial relation* to another *body* which is supposed to be emitting the sound or the odour. I think that the plausibility and even the intelligibility of the proposed analysis vanish, if we try to analyse these features in the antecedent of the conditional in the way in which we have analysed the original proposition that there was a hooting sound.

(2) However that may be, does anyone find this kind of analysis in the least plausible, if applied to sensibilia of the kind which a person senses when he ostensibly sees or touches a body and when there is no ordinary common-sense reason to think that his ostensible perception is delusive? So far from it seeming obvious to me, it does not seem *prima facie* to be even plausible. When I look at a cricket-ball, e.g., I automatically take what is being sensibly presented to me, viz., a certain round convex brown expanse, to be part of the surface of a certain body. I unhesitatingly take for granted that the rest of its surface, which is *not* now being sensibly presented to me, is *now* round and convex and brown, in precisely *the same way* in which my present immediate object is so. I unhesitatingly take for granted that my present immediate object existed before I began to sense it and that it will continue to exist after I have ceased to do so. I assume that it then was and then will be round and convex and brown in precisely the way in which it now is so. I unhesitatingly take for granted that my present immediate object *now* is smooth and hard and cold, although I am not now sensing it as such; and that, if I were to touch it, I should *sense it as having* these qualities, which it *already has* but is not sensibly presenting

itself to me as having. Arguments may be produced to show that these instinctive beliefs are *false* or highly *doubtful*. But when I am told that I cannot possibly have them, because all this is meaningless nonsense which I cannot even *think*, and that I must instead be believing some conditional proposition about what I or someone else *would* sense under certain unfulfilled conditions, I remain wholly unconvinced.

Why is it that Berkeley's contention seems so obvious about odours, so plausible about sounds, and so unconvincing about the colour-expanses which one senses when one ostensibly sees bodies? We may begin by noting the following fact. The cases in which it seems *obvious* are those in which the percipient has no tendency to regard the sensible which he senses as part of the material thing which he ostensibly perceives. The cases where it seems *unplausible* are those in which he naturally takes for granted that the sensible which he senses is part of the surface of the material thing which he ostensibly perceives. Now in the former cases the percipient also has no tendency to believe that the sensible which he senses has other qualities or parts or spatio-temporal continuations besides those which it sensibly presents itself to him as having. In the later cases, as we have seen, he always takes such things for granted about the sensible which he senses. It is worth noticing that, even in the case of *visual* sensations, the Berkeleian contention is by no means *unplausible* for those vague, peripheral, or unusual sense-data which the percipient does *not* automatically and uncritically take to be a part of the surface of some body which he is looking at more or less directly. Take, e.g., the case of a visual after-sensation experienced with closed eyes, or the 'stars' which a person 'sees' when a blow is struck on his eye. It seems plausible, rather than shocking, to suggest that each of these exists only as sensed by a certain one person on a certain one occasion. And in the case of what are called 'mental *images*' of the visual kind, I suppose that everyone would find Berkeley's contention *prima facie* obvious, and the doctrine that such a coloured extended particular could exist except as imaged by a certain one person on a certain one occasion extremely paradoxical.

The fact is that Berkeley leads his readers 'up the garden

path' at this point by the following two devices. (1) He discusses explicitly the case of an *unheard sound*, i.e., a sensible of a kind which no one regards as a part of a body or of its surface even when it is sensed in connection with ostensibly perceiving a body, e.g., hearing a bell tolling. (2) He assimilates the sensible which one senses when one is ostensibly seeing a body, to a visual *mental image* or to the sense-datum of a visual *after-sensation*. He takes for granted that it has and can have only the qualities which it is now sensed as having, viz., a certain colour and a certain extension and figure; whereas the instinctive belief of common-sense is that it can and does have others besides, viz., a certain texture and a certain temperature, which it is not now sensed as having simply because the appropriate sense-organ is not in operation.

It is fair to say that he had already argued elaborately in the *New Theory of Vision* against the possibility that any particular prehended by sight should be identical with any particular prehended by touch. We must therefore briefly consider the argument at this point. For, if it were valid, it would justify Berkeley in holding that the visual sensibilia sensed when one ostensibly perceives a body resemble visual mental images and the sense-data of visual after-sensations in having none but *purely visual* qualities. The argument occurs in Section 49 of the *New Theory of Vision*. He assumes there as a premiss something which he claims to prove considerably later on, viz., in Section 121 and those that immediately follow it. The premiss is that no characteristic which a particular is visually sensed as having can be identical with any characteristic which a particular is tactually sensed as having, and conversely. Thus, e.g., if I say and say truly: 'This *looks* round' and 'That *feels* round', the word 'round' must stand in the one sentence for a determinate under one determinable and in the other sentence for a determinate under a wholly different determinable. We need not here discuss whether this is true or false, well established or ill established. Let us grant it for the sake of argument.

Berkeley says that the correct conclusion to draw from this premiss is that a visually sensed particular and a tactually sensed one could never be the same particular. It seems to me quite

plain that this does not follow from the premiss. In order to prove the conclusion the premiss needed is that characteristics which can be visually sensed are *incompatible* with those which can be tactually sensed. He has made no attempt to show this. And the more you insist that they fall under radically different determinables, the less reason you have to accept this. If the word 'round' in the sentence 'This feels round' and the word 'elliptical' in the sentence 'This looks elliptical' denote qualities which fall under quite different determinables, there is no obvious reason why a particular which feels round and a particular which looks elliptical should not be one and the same particular. *A fortiori* there is no obvious reason why a particular which looks brown and a particular which feels cold and smooth and hard should not be one and the same particular.

I have now examined in turn the three steps in Berkeley's 'esse' = 'percipi' argument. It is time to draw together the threads and examine the argument as a whole in the light of our comments on the parts. What Berkeley claims to prove is that it is self-contradictory to suppose that houses, mountains, and other bodies should exist unperceived. It is plain that in order to do this it is not enough to prove that it is self-contradictory to suppose that sensibilia should exist unsensed. It is necessary to add to this the premiss that a body is a sensible, or a set of interrelated sensibilia, and nothing besides. What emerges from my comments is that Berkeley is faced with the following dilemma. There certainly are sensations with regard to which it is highly plausible to hold *either* (a) that the analysis into act of sensing and sensible sensed does not apply to them, or (b) that, if it does, then it is obvious that no such sensible could exist except as a sense-datum to a certain one person on a certain one occasion. Examples are sensations of smell, auditory sensations, and visual after-sensations. But in the case of none of *these* sensations would it be at all plausible to maintain that the sensibilia sensed are in any way parts of the bodies ostensibly perceived, or of any other bodies. On the other hand, there are sensibilia, viz., those which a person senses when he ostensibly sees or touches a body, which *are* taken by the percipient to be parts of the surface of the body seen or touched. But in the case of none of *these*

sensibilia is it all obvious that the supposition that they might exist unsensed is intrinsically absurd. It can be made to seem absurd only by assuming, contrary to what common sense takes for granted, that they can have no qualities beside those which the person who senses them at any moment then senses them as having. This amounts to assuming that it is absurd to suppose that one and the same sensible could be sometimes a purely visual sense-datum, sometimes a purely tactual sense-datum, and sometimes both a visual and a tactual sense-datum. I have tried to show that Berkeley's argument in the *New Theory of Vision* to show that this is absurd is quite inconclusive. But it would not help his case even if it were conclusive. For, just in proportion as we assimilate these sensibilia to visual images or the sense-data of visual after-sensations, so does it become increasingly un-plausible to identify any *body* with any one of these sensibilia or any collection of them.

I conclude, then, that the argument is a failure. But I am sure that, like the ontological argument, it is a most interesting and important failure and far more valuable philosophically than most successes. Moreover, there are other arguments, based on certain specific features of ostensible sense-perception and on its physical and physiological conditions, which claim to show that the sensible which a person senses, when he ostensibly sees or touches a body, cannot in fact be a part of the surface of that or any other body, and probably exists only in so far as it is a sense-datum to that person on that occasion. I find the cumulative effect of these arguments very convincing, and the attempted rebuttals very weak, though I admit that the arguments are neither severally nor collectively coercive.

2.2. *Supplementary Arguments.* Berkeley uses two supplementary arguments against the existence of material substance. One occurs in Sections 16 and 17 of the *Principles of Human Knowledge*, and the other in Sections 18, 19, and 20. I will now take these in turn.

(A) The first of these arguments is an attack on the notion of material substance as a substratum in which extension and other qualities inhere. Berkeley brings much the same objection as Locke did when he said that the notion of substance is the no-

tion of 'a something I know not what' which supports qualities. This line of argument is logically independent of the '*esse*' = '*percipi*' principle, and it might consistently be used by a person who rejected that principle.

Now Locke saw that, if there is anything in this objection, it applies equally to mental and to material substance. If there is a difficulty in the notion of a substratum in which sensible qualities inhere and physical events occur, surely there will be exactly the same difficulty in the notion of a substratum in which mental qualities inhere and mental events occur. Locke's conclusion is simply that we have a very inadequate notion of substance. But Berkeley rejects the possibility of *material* substance on the ground of these difficulties, while he is perfectly convinced that each person's mind is a *mental* substance. The question arises whether this is a consistent position to hold.

Berkeley was well aware that he might be twitted with inconsistency on this point. In Dialogue III of the *Dialogues between Hylas and Philonous* he makes Hylas argue as follows: "It seems to me that . . . in consequence of your own principles it should follow that *you* are only a system of floating ideas, without any substance to support them. . . . As there is no more meaning in 'spiritual substance' than in 'material substance', the one is to be exploded as well as the other." To this he makes Philonous answer as follows: ". . . I know or am conscious of my own being, and that *I myself* am not my ideas, but somewhat else, a thinking active principle that perceives, knows, wills, and operates about ideas. . . . Further I know what I mean when I affirm that there is a spiritual substance or support of ideas, i.e., that a spirit knows and perceives ideas". Hylas professes himself satisfied with this answer, but ought we to be?

We must remember that Berkeley means by 'ideas' sensibilia and mental images, and by 'knowing or perceiving ideas' sensing sensibilia and imaging images. Also he holds that it is nonsense to talk of a sensible which is not a sense-datum to some one particular person on some one particular occasion and that the same holds *mutatis mutandis* for images.

We must distinguish two parts in Hylas' contention. (1) That Berkeley is committed to holding that a person's mind is nothing

but a system of interrelated ideas, i.e., sensed sensibilia and imaged images. (2) That on Berkeley's principles there is no more meaning in the phrase 'spiritual substance' than in the phrase 'material substance'. It is really only the second contention which directly concerns us at present.

Now the first part of Philonous' answer is addressed only to the first part of Hylas' contention. He argues that that which *senses* sensibilia and which *images* mental images, which exercises volition, and so on, cannot just be a system of sensed sensibilia and imaged images, however interrelated. That may very well be true. It amounts, in fact, to saying that the notion of a mental substance is the notion of something which wills, senses, images, and so on, which has a certain characteristic kind of unity at each moment, a certain kind of identity throughout time, and so forth. But the question remains whether to talk of that which performs these acts and *has* these properties, as distinct from the acts which it performs and the properties which it has, is not to talk of a 'something we know not what'.

I suppose that Philonous must be addressing himself to this question when he says: "Further I know what I mean when I affirm that there is a spiritual substance or support of ideas . . ." I think that Berkeley must mean that each of us is acquainted with his self as substratum, as well as with his own mental acts and with the sensibilia which he senses and the images which he images, and so each of us knows by acquaintance the relation of the former to the latter. He is presumably contrasting this with the fact that no one has ever pretended to be acquainted with the substratum of a material thing, as distinct from the qualities that it has and the events and processes which go on in it. So no one can pretend to know by acquaintance the relation of the former to the latter in *that* case. If this is Berkeley's position, I think it is *self-consistent*. Whether the positive part of it is tenable is another question. It would of course have been denied by Hume, for what that is worth. But it would no less have been denied by Kant and by James and by Stout, who were not professional sceptics and were explicitly reflecting on the question.

(B) Berkeley's second supplementary argument is directed to

prove that, even if *per impossibile* there were bodies existing independently of being perceived, it would be impossible for anyone to know of the existence of any such body directly or to prove it demonstratively or even to establish it as a probable hypothesis.

I do not think that anyone would claim, with regard to any body which he was *not* ostensibly perceiving at the time, to know *directly* that it exists. So I think we may fairly discuss the question under the following two headings. (1) The case of a person who is ostensibly perceiving a certain body and who claims, with respect to it, that he knows directly or by demonstration or has good reasons for believing that it exists independently of being perceived. (2) The case of a person who claims, with respect to a body which he is *not* at the time ostensibly perceiving, that he knows by demonstration or has good reasons for believing that it exists independently of being perceived. Now I do not think that anyone would make the latter claim except on one or other of the following two bases: (i) Testimony from another person that he is perceiving or has perceived the body in question. (ii) A causal argument to the existence of the body in question from certain observed features in some body which he is perceiving or has perceived or which some other person testifies to perceiving or having perceived. Suppose that no one ever knows directly or by demonstration or has good reasons for believing, with regard to any body which *he is ostensibly perceiving*, that it exists independently of being perceived. Then *a fortiori* no one would know or have good reasons for believing this with regard to any body which he is *not* ostensibly perceiving. So we may confine our discussion to Berkeley's attempt to establish the *former* negative proposition.

In order to do so profitably it is desirable to begin by drawing some distinctions which Berkeley does not explicitly recognize. I shall use the word 'know' in such a way that what is known is always a *fact* and not a particular existent. On this understanding we can distinguish *prima facie* at least the following kinds of knowing. (1) Knowing a fact about a presented particular by inspecting it and noting the characteristics which it presents itself as having. In this way a person knows, with regard to the sensible which is presented to him when he looks at a

penny in ordinary daylight, that it is brown and approximately circular. And he does *not* know at the time in this way that it is cold or that it is hard or that it is smooth. This may be called 'knowledge by acquaintance'; (2) Knowing a general fact by reflecting on the nature of certain terms and intuiting that terms of that nature *must be* or *cannot be* interrelated in a certain manner. In that way, e.g., a person knows that anything that had shape would have extension. He does *not* know in that way that triangles on the same base with their vertices on a line parallel to that base must be equal in area. This may be called 'knowledge by *internal evidence*'. (3) Knowing a fact by seeing that it is a logical consequence of another fact or of a conjunction of several other facts which one knows. This may be called 'knowledge by *demonstrative inference*'. (4) Knowing, by means of an experience which does *not* itself consist in knowing a fact and seeing its logical implications, a fact which is other than the fact that that experience is occurring and is of such and such a kind. A plausible example would be memory-knowledge by means of a present image that one has had a certain experience in the past. This may be called 'knowledge by *non-logical mediation*'. We can group together knowledge by acquaintance and knowledge by internal evidence under the head of 'unmediated knowledge'; and we can group together knowledge by demonstrative inference and knowledge by non-logical mediation under the head of 'mediated knowledge'.

In the case of *grounded belief* we can draw a *prima facie* distinction analogous to that which we have drawn between the two kinds of mediated knowledge. A person's justification for believing a proposition with a certain degree of conviction may be that he sees it to be more or less probable relative to some fact which he knows or to some other proposition which he strongly believes. This might be called 'belief grounded on *probable inference*'. But there seems *prima facie* to be another possibility. Might not a person in some cases be justified in believing a proposition with a certain degree of conviction, merely because he was having an experience of a certain kind, which did *not* consist in knowing a fact or believing another proposition and seeing that the proposition in question is more or less probable

relative to this known fact or believed proposition? This might be called 'belief grounded on *non-logical mediation*'. Memory would again provide a plausible example. It might be said that the presence in a person's mind of a certain kind of image in a certain kind of context not only causes but also *justifies* a more or less strong conviction that he has had a certain experience in the past, even though it may not enable him to *know* that he has done so.

It should be noted that there is an ambiguity in the words 'immediate' or 'direct', as commonly used in connexion with knowledge or belief. What I have called 'knowledge by non-logical mediation' would sometimes be asserted to be 'immediate' or 'direct', because it is *not mediated by inference*; and it would sometimes be *denied* to be 'immediate' or 'direct', because it is *mediated by something*.

We can now deal fairly briefly with Berkeley's present contention. (1) On his principles it is quite obvious that a person who is ostensibly perceiving a body cannot know, with regard to the sensible which he is then sensing, that it could exist independently of being sensed. For anything that can be *known* must be a *fact*, and Berkeley claims to have shown that no sensible could possibly exist except as a sense-datum for some one person on some one occasion.

(2) Suppose that Berkeley were mistaken on this point. Suppose that in fact a sensible which a certain person senses on a certain occasion can and does exist also when neither he nor anyone else is sensing it. Even so, it is plain that merely to sense a certain sensible on a certain occasion does not give to a person *knowledge by acquaintance* that it existed before he began to sense it or that it will exist after he shall have ceased to sense it. The only knowledge by acquaintance that it supplies is knowledge that the sensible *now* exists and that it *now* has at least those qualities which it is sensed as having.

Still less does merely sensing a certain sensible on a certain occasion supply *knowledge by acquaintance* that it is part of a more extensive and persistent particular, having other parts and other qualities which are not at the moment being presented to one's senses, and possessing also various dispositional properties.

(3) Berkeley argues that one could never infer demonstratively, from the mere fact that one is ostensibly perceiving a body answering to such and such a description, that there now is or ever has been or will be a body answering to that description, or indeed any body at all. His argument may be put as follows. If such a demonstrative inference were valid, its conclusion would always have to be true whenever its premiss, viz., that one is ostensibly perceiving a body answering to such and such a description, is true. But it is notorious that there are cases, e.g., dreams and waking hallucinations, where the premiss is true and the conclusion would be false.

This contention seems to me to be true but trivial. If the premiss of the supposed demonstrative inference is assumed to be rigidly confined to the fact that a person is having such and such an ostensible perception at a certain moment, Berkeley's objection is valid. But why should it be so confined? Why should not the minimal premiss include facts about the antecedents, the sequels, and the context of the ostensible perception? After all, there are certain tests by which we claim to distinguish dreams and waking hallucinations from normal waking ostensible perceptions, and Berkeley must be assuming the validity of these tests. He ought therefore to have considered carefully whether an ostensible perception *which passes all these tests* could be delusive in principle, even if it might be more or less so in points of detail.

Nevertheless, I entirely agree with Berkeley's conclusion. I do not see how the existence of any particular body, or of bodies in general, could possibly be *demonstrated* from any premiss, however extended, about the occurrence, the characteristics, and the interrelations of ostensible perceptions. Plainly some *universal* premiss would be needed in addition. Now I cannot imagine what this could be and I cannot believe that we could plausibly claim to know it.

Would the case be improved, if we were to substitute what I have called 'non-logically mediated knowledge' for knowledge by demonstrative inference? The allegation would be as follows. Whenever a person has an ostensible perception, occurring in a certain kind of sequence of ostensible perceptions and in a cer-

tain kind of experiential context, he thereby *knows without inference* that he is in the presence of a *body*, answering more or less closely to the description which he would naturally give of what he is ostensibly perceiving. I think that this is less vulnerable to criticism than the former contention. But it may be invulnerable only in so far as it remains too vague and general for the critic to come to grips with. If he were to insist on our specifying the kind of sequence and the kind of experiential context, we might have a difficulty in doing so, and he might be able to point out plausible counter-instances to every attempt that we might make.

(4) In considering whether one could justify a belief in the existence of bodies as a probable inference, Berkeley assumes that the argument would have to be from ostensible perceptions as mental events to bodies and events in bodies as their probable causes. He accepts as self-evident the principle that every event must have an efficient cause. Two of his objections rest on propositions about causation.

(i) He held it to be self-evident that the only possible efficient causes are *minds* and that they can produce effects only by *volition*. If that be so, even if there were bodies they could cause nothing, and therefore no inference to them by way of the principle of universal causation could be valid. I do not propose to discuss this argument here.

(ii) Even if it be admitted that events in bodies could be efficient causes of events of *some* kind, viz., in other bodies, it is generally admitted that the causation of a mental event, e.g., a sensation, by a bodily event, e.g., the vibration of a particle in a person's brain, is completely unintelligible. But any causal argument, from the occurrence and interrelations of ostensible perceptions of bodies to the existence of bodies, would presuppose this kind of causal transaction. Berkeley evidently regards this as a serious objection. But it is not clear to me that it would be so, even if we granted the premiss that there is some special difficulty in the notion of a physico-psychical transaction. The objection would no doubt be fatal, if the alleged difficulty were supposed to show that the notion of such a transaction is *self-contradictory* and therefore that no such transaction is possible. But it seems to me that the utmost that could be granted is that

no law of physico-psychical causation can have any trace of self-evidence, while some laws of physico-physical causation (e.g., the modification of motion by impact) might plausibly be alleged to be self-evident.

Berkeley's remaining argument may be put as follows. Even if there could be bodies, and even if events in bodies could cause mental events, still it must be admitted that we *could* have had exactly the same ostensible perceptions as we now have, even though no bodies had existed. Now, if that had been the case, we should have had precisely the same grounds for the causal inference from ostensible perceptions of bodies to the existence of bodies as we now have. And by *hypothesis* the inference would have been mistaken. So it might be mistaken if we were to make it now.

This assertion is doubtless true. But it is surely irrelevant here. For we are no longer considering the contention that the existence of bodies could be *demonstrated* from the fact that we have such and such ostensible perceptions of bodies and that they occur in such and such sequences and experiential contexts. What we are considering now is the contention that, relative to that fact, the proposition that there are bodies is highly probable, and therefore that we are justified in believing it fairly strongly. Whether that be so in fact, Berkeley's objection that nevertheless the belief may be mistaken is surely completely irrelevant.

But no doubt there are serious difficulties in the contention. One is the question: Whence did we get the notion of bodies, if the only particular existents which we are ever acquainted with are such that no one of them could conceivably exist except as a sense-datum for a certain one person on a certain one occasion? Another is this: Ability to explain known facts can make a hypothesis probable only if the hypothesis has some finite degree of probability antecedently to the facts to be explained. But what is *meant* by the probability of the existence of bodies antecedently to the fact that we ostensibly perceive bodies and that our ostensible perceptions occur in certain sequences and experiential contexts? And, if this notion be intelligible, what ground is there for assigning a finite value to this antecedent probability?

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Finally we must consider a possibility which Berkeley did not envisage, viz., the possibility of what I have called 'belief grounded on non-logical mediation'. Might it not be claimed that whenever a person has an ostensible perception, occurring in a certain kind of sequence of ostensible perceptions and in a certain kind of experiential context, he not only *does believe*, but is thereby *justified in believing* with considerable confidence, that he is in presence of a *body*, answering more or less closely to the description which he would naturally give of what he is ostensibly perceiving? Obviously this is even less vulnerable to criticism than the stronger claim to knowledge by non-logical mediation, which we have already considered. Moreover, since no question of *premisses*, and therefore no question of *causal* premisses, would arise, it is not open to objections based upon difficulties in the notion of causation in general or in the notion of mental events being caused by bodily events. I do not think it can be refuted, but I do not know how it could be recommended to anyone who was disinclined to accept it.

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