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BERKELEY AND EPISTEMOLOGY

Probably the most popular of Berkeley's arguments against the extramental existence of matter is the epistemological argument that we have no reason to believe in such a thing. For Berkeley himself this was by no means the most important argument. In fact, it is not fully developed in the *Three Dialogues*, but only in sections 18-20 of the *Principles*. The reason for the secondary role accorded this argument by Berkeley is indicated by the opening sentence of section 18: "But though it were possible that solid, figured, moveable substances may exist without the mind, yet how is it possible for us to know this?" Berkeley thinks he has proved that the extramental existence of such substances is not even possible. That proof engages his primary interest, and the argument of insufficient evidence comes in only to back it up, for readers who may not have been convinced by the impossibility proof. Nonetheless, Berkeley's epistemological argument is of great interest, both for its own sake and for what it can teach us about the relation between metaphysics and epistemology.

I will first discuss the argument(s) of *Principles*, 18-20, as an attack on what we may call "Evidential Realism." This discussion will lead to reflections on the epistemological situation of metaphysics. Then I will discuss the "Direct Realist" response to Berkeley's epistemological arguments, arguing that it is a weak response, and that there is little reason to prefer Direct Realism either to Idealism or to Evidential Realism.

I. BERKELEY'S ATTACK ON EVIDENTIAL REALISM

Berkeley sets up his argument with a disjunction. If it is possible for us to know that bodies exist outside the mind, then "either we must know it by sense, or by reason."[1] He proceeds to argue that it could not be known by sense, and concludes, "It remains therefore that if we have any knowledge at all of external things, it must be by reason."

This may seem a strange beginning to the argument. Surely any knowledge we might have of the existence of bodies would be founded in sense perception; why then would their existence, if known at all, not be known by sense? The answer to this question is that for Berkeley, "known by sense" means "immediately known by sense." That is explicit in the first Dialogue (*Works*, ii. 174f.), where Berkeley has Hylas say that "in truth

E. Sosa (ed.), Essays on the Philosophy of George Berkeley, 143–161.

the senses perceive nothing which they do not perceive immediately: for they make no inferences." This suggests the following as at least an approximate understanding of the distinction between sense and reason in *Principles*, 18. Immediate perception is perception not involving any inference. Sense is a faculty of immediate perception, and reason is a faculty of inferring. To deny that extramental bodies could be known "by sense" is not to deny that knowledge of them could be founded in sense perception. It is to deny that they could be immediately perceived in sensation; but that leaves open the possibility that knowledge of them might be indirectly (mediately) grounded in sense perception, by way of an inference. This interpretation is confirmed by the full statement of the conclusion of this introductory portion of Berkeley's argument, which is that "if we have any knowledge at all of external things, it must be by reason, *inferring* their existence from what is *immediately* perceived by sense" (emphasis mine).

What is Berkeley's reason, then, for maintaining that extramental bodies could not be perceived immediately by sense? His argument on this point is very short:

> As for our senses, by them we have the knowledge only of our sensations, ideas, or those things that are immediately perceived by sense, call them what you will: but they do not inform us that things exist without the mind, or unperceived, like to those which are perceived. This the materialists themselves acknowledge.

This is not even a very clear statement of the argument. We may wonder why "those things that are immediately perceived by sense" should not be called extramental bodies, if we may call them what we will. But that is merely a quibble. The gist of the argument is clear. Berkeley is saying that only sensations or ideas, or, more broadly, intramental entities are immediately perceived by sense. And the only justification he sees a need to give for this claim is that it is granted by his opponents.

This is, of course, precisely the claim that is *not* granted by Direct Realists, and we shall have to return to this step of the argument in the second part of the paper. But the claim was so widely accepted in Berkeley's time that it is not surprising that he devotes so little attention to its defense. The opponents he has in view are Evidential Realists, and his epistemological arguments are to be studied principally as an attack on Evidential Realism, a critique of the inference from sense data in the mind to bodies existing outside the mind.

He offers two such arguments, one in section 18 of the *Principles*, which seems to be taken up again in section 20, and one in section 19. In section 18 he argues that the inference from sense data to extramental bodies fails for want of a necessary connection. "But what reason can induce us to believe the existence of bodies without the mind, from what we

perceive, since the very patrons of matter themselves do not pretend, there is any necessary connection betwixt them and our ideas?" That there is no such necessary connection, Berkeley argues with considerations quarried from Descartes and Malebranche:

> I say it is granted on all hands (and what happens in dreams, phrensies, and the like, puts it beyond dispute) that it is possible we might be affected with all the ideas we have now, though no bodies existed without, resembling them. Hence it is evident the supposition of external bodies is not necessary for the producing our ideas: since it is granted they are produced sometimes, and might possibly be produced always in the same order we see them in at present, without their concurrence.

Here we might raise questions about the sense or senses of possibility at work in the argument, and about the relevance of dreams and phrensies to possible explanations of our ordinary sense experience, which (as Berkeley himself emphasizes) is rather different in content. But there is no need to dwell on these points. There are well known arguments – Descartes's omnipotent deceiver argument, for one – that support (convincingly, I think) the claim that the production of "all the ideas we have now" without the concurrence of extramental bodies is possible, in some sense not clearly too weak for Berkeley's intentions.

The argument of section 18 is a bad argument for a different reason. It depends on the assumption that the inference from ideas in the mind to bodies outside the mind must be rejected unless the extramental bodies are necessary for the production of the ideas. But this is an unreasonable requirement. In empirical reasoning we do not demand that the evidence be impossible if the hypothesis were false. It is enough that the evidence be less likely to occur if the hypothesis were false.

For instance, impressions in the earth, of a certain size, shape, and pattern, would normally be sufficient evidence for a confident belief that a woman had walked over the ground wearing high-heeled shoes. It would be possible, of course, for this evidence to occur though the belief were false. The apparent footprints might have been made by a chimpanzee wearing high-heeled shoes, by a child playing with its mother's clothes, by a man manipulating a pair of shoes from a helicopter, by a poltergeist, or by the miraculous intervention of God. But in the ordinary context we have in mind, all of these hypotheses are quite improbable. The hypothesis of a woman in high-heeled shoes provides the best explanation of the footprints. It is fair to say that it is unlikely that they would be there if the hypothesis were false.

The inference from the footprints to the woman in high-heeled shoes is thus an example of what is called "inference to the best explanation," and does not depend on a *necessary* connection between the evidence and the

hypothesis. This is typical of empirical reasoning. A formal expression of this pattern of thought is Bayes' Theorem in the calculus of probabilities:

$$P(h/e \ \& \ b) = P(h/b) \cdot \frac{P(e/h \ \& \ b)}{P(e/b)}$$

Here P(h/e & b) is the probability of the hypothesis h, given the evidence e and background information b; P(h/b) is the probability of h on b alone, "prior" to e; and the fraction, which measures the degree to which e inceases the probability of h, is the ratio of the probability of e, given h as well as b, to the probability of e on b alone. This widely accepted theorem, to which we will have occasion to return, thus says (among other things) that e increases the probability of h to the degree that e would be likelier to be true if h were true than otherwise.

Berkeley seems to acknowledge this point (though of course not in terms of Bayes' theorem) at the beginning of section 19 of the *Principles*, saying,

> But though we might possibly have all our sensations without [external bodies], yet perhaps it may be thought easier to conceive and explain the manner of their production, by supposing external bodies in their likeness rather than otherwise; and so it might be at least probable there are such things as bodies that excite their ideas in our minds.[2]

Responding to this suggestion, Berkeley develops a better argument against Evidential Realism than he had in section 18. His response is that the hypothesis of "external bodies" does not help to explain our sensations,

> . . . for though we give the materialists their external bodies, they by their own confession are never the nearer knowing how our ideas are produced: since they own themselves unable to comprehend in what manner body can act upon spirit, or how it is possible it should imprint any idea in the mind. Hence it is evident the production of ideas or sensations in our minds, can be no reason why we should suppose matter or corporeal substances, since that is acknowledged to remain equally inexplicable with, or without this supposition.

The material hypothesis, Berkeley claims, does not provide the best explanation of the evidence of our senses; indeed it provides no explanation at all because of the notorious difficulty of understanding how mind-body interaction can take place. The evidence of our senses does not increase the probability of the material hypothesis, because we would be no likelier to have that evidence with the external bodies than without them. In Bayesian terms, if h is the material hypothesis, and e is the evidence of our senses,

(Pe/h & b) is not greater than P(e/b).

In philosophical interest and power this is certainly an improvement on the argument of the previous section. It would be nice for us Berkeley fans to think that the bad argument of section 18 was just a dialectical warm-up for the argument of section 19. Unfortunately, section 20 seems to revert to the weaker argument. Berkeley's claim there is that it is "possible" for "an intelligence, without the help of external bodies, to be affected with the same train of sensations or ideas that you are, imprinted in the same order and with like vividness in his mind," and that the "one consideration" that such an intelligence would have "all the reason to believe the existence of corporeal substances, represented by his ideas, and exciting them in his mind, that you can possibly have for believing the same thing . . . is enough to make any reasonable person suspect the strength of whatever arguments he may think himself to have, for the existence of bodies without the mind." The rhetorical effect is smashing, but the substance of the argument is simply an appeal to the fact that it would be *possible* to have the evidence of our senses without any external bodies. In other words, it is the argument whose weakness we would like to think that Berkeley had seen.

Why does Berkeley revert to it? Section 19 is introduced as refuting the suggestion that the material hypothesis "might be at least probable," whereas section 18 is addressed to the question how it would be "possible for us to know" that external bodies exist. It may therefore be conjectured that Berkeley thinks the absence of necessary connection is sufficient to refute claims to *knowledge*, leaving only a much more tentative affirmation of matter to be dealt with in section 19. It is a difficulty for this interpretation, however, that sections 18 and 20 also attack the claim that we have "reason to believe" the material hypothesis. In any event, since an absolutely necessary connection is not required for any degree of certainty that could reasonably be expected on an issue of this sort, it is the argument of section 19 that deserves our attention.

How good is that argument? Surely, one may be inclined to object to Berkeley, there must be some explanation of our sensations – not merely of the fact that we have sensations at all, but especially of the fact that they recur in such patterns as to present us with a stable, orderly world of sensible things. For all its explanatory deficiencies, might not the hypothesis of external bodies be the best explanation available to us for this phenomenon? Can Berkeley provide a better explanation?

Berkeley thinks he can. He does not doubt for a minute that there must be an explanation of the evidence of our senses. He thinks the correct one is provided by a theistic hypothesis. God acts directly on our minds, affecting them with sensations. His goodness and wisdom lead him to give us sensations so patterned as to present us with an orderly world in which we can learn to make decisions that have predictable consequences, and thus to live meaningful lives.

God does this without the aid of external bodies. He has no need of them in causing sensations in us. Indeed the problem of mind-body interaction makes it difficult to see how they would help Him in the project. If we assume, with Berkeley, that theism will be accepted whether or not external bodies are postulated, it seems explanatorily otiose to postulate them. "It is to suppose," as Berkeley says, ". . . that God has created innumerable beings that are entirely useless, and serve to no manner of purpose" (*Principles*, 19). It is a familiar hypothesis that Berkeley came to this line of thought by reflecting on the explanatory uselessness of bodies in the philosophy of Malebranche, according to which our sensory experience is directly caused by God, but extramental bodies serve as "occasions" for God to cause us to have corresponding perceptions.

An occasionalist might think that Berkeley is too hasty in assuming that external bodies are "entirely useless" if God does not need or use them for their own sake. Perhaps indeed it is easier to understand why God would affect us with some of the experiences that we have (particularly some of the disagreeable ones) if He is trying to put us in touch with a extramental world that he values for its own sake. To this Berkeley would doubtless respond that the inertness and qualitative emptiness of matter (at least as it is conceived in modern scientific versions of the material hypothesis) make it impossible to understand why it would be valued for its own sake.

Still, it may be objected, Berkeley's theistic hypothesis can hardly duplicate the astonishing success which the material hypothesis, as developed by common sense and especially by science, has achieved in explaining the detail of our experience. Why do we have sensations as of human and animal bodies, automobiles and computers, functioning with intricate and impressive regularity, as they normally do, if there are not real (though usually unperceived) material structures operating in the ways postulated by science and common sense? In a recent extensive discussion of this objection to Berkeley, J L. Mackie suggests the correct reply to it. Berkeley's theistic hypothesis, according to Mackie, is "open to two different interpretations." On the first, there is no structure in God corresponding to the physical structures elaborated by science and common sense, or at least to the unperceived parts of them; there is only the divine action in causing those particular ideas that we actually perceive.

> According to the other interpretation, God's ideas are in themselves as rich and systematic as the physical world is on the materialist's view, and in the same sort of way. That is, God perceives a three-dimensional Euclidean world or, more probably [up-dating Berkeley a bit], a four-dimensional Einsteinian one, with micro-structure, with electric charges which figure somehow as perceptual objects for him, and so on. Everything that we take to be a correct description of the physical world,

> and every scientific advance, is either a correct description of some of God's ideas or at least a closer approximation to a correct description of them.[3]

On the first of these interpretations, Mackie argues, theistic immaterialism forfeits the explanatory advantages of the material hypothesis, but on the second it obtains at least some of them "by making God's ideas mirror so closely the world that seems to be revealed to common sense and to science."[4]

This seems right. While Berkeley would surely balk at the suggestion of divine perceptions of electric charges as such, his philosophy of science encourages us to regard successful scientific theories as discoveries of a real structure of ideas and intentions in the divine mind that causes what we perceive. Or at least we are to regard the structures postulated by the best of science as isomorphic with real structures in the divine thought and will. And if this isomorphism is incorporated in Berkeley's theistic hypothesis, it will offer an explanation of every detail of the experienced world for which physical science offers an explanation.

Mackie himself is not convinced by the reply that he proposes on Berkeley's behalf, finding "at least four serious difficulties for it." Only one of the four seems to me at all serious. On the theistic view it is "quite mysterious," in Mackie's opinion, why all the details of "the anatomy and physiology of sense perception" should be a part of the correct account of things, since they "are utterly irrelevant to the final stage [of the sensory process], for the sensation is now an idea put directly into our minds by God, and the apparent causal connections between the sensation and the various changes earlier in the sequence are illlusory."[5] There are certainly many questions to which Berkeley has no ready answer about why God would have set things up as he has; but I think it is clear in a general way what he would say to this "difficulty." It is a a special case of the objection he considers in *Principles*, 60-66, why God would affect us with ideas representing such intricate apparent physical causes. His answer, in effect, is that God does it in order to place us in an appropriate theater for the exercise of intelligence and purpose, in which we can acquire some rational and voluntary control over the ideas we will experience. And if that is God's purpose, He obviously has reason to make our sensations a term of some of the apparent, quasi-causal relations in the world of our experience – and hence as much reason for establishing the anatomy and physiology of sense perception as for any other feature of the physical order.

The other three difficulties proposed by Mackie seem to me even less compelling. (1) He argues that it will be hard for Berkeley to give a satisfactory account of human voluntary action without concluding that we can "bring about changes in God's ideas."[6] His claim that Berkeley "might be reluctant" to accept this consequence could be backed up by quoting Philonous's statement that "no external being can affect" God (*Works*, ii. 241).

But, as Mackie also acknowledges, Berkeley "could accept" it – at least in the sense that there is no need to saddle Berkeleian metaphysics with a commitment to divine impassibility. (2) Mackie claims that "our sensory data seem to reflect a fully determinate . . . physical world, . . . rather than an indeterminate or incomplete one, which would be at least possible if the corresponding reality consisted in God's having such and such ideas as intentional objects." But, as Mackie concedes, this is not a crucial objection "because the theist could hold that it is a characteristic perfection of God that *his* system of intentional objects is complete as well as consistent." (3) Finally Mackie holds that the detail represented by physical science is ascribed "with less intrinsic plausibility" to God than to a material universe, "just because such detail is not at home in an essentially mental world." Bearing in mind, however, that God's mind is not supposed to share the limits of our minds, I cannot see the slightest reason why such detail would be less at home in a mental than in a material world.

Perhaps the weightiest objection to Berkeley's strategy is simply that it may be thought no easier to understand *how* God produces sensations in our minds than to understand how external bodies would produce them. What mechanism does He use, or how does He operate if he needs no mechanism? Is it not as mysterious how one mind, such as God's, can act on another, such as ours, as how an extramental body can act on a mind? It is not easy to assess the force of this objection. Perhaps Berkeley would say that God's omnipotence is explanation enough of how His will produces its effects.

Rather than trying to obtain a definitive assessment on this point, I want to focus on the epistemological situation at which we have arrived. Our sensations may be regarded as constituting the total empirical evidence we have that is relevant to the nature of sensible things.[7] And we have at least three hypotheses to account for this evidence on the basis of views about what the existence of sensible things consists in: (h_1) the directly causal material hypothesis, according to which bodies that exist independently of being perceived cause our sensations directly, with or without God in the background; (h_2) the occasionalist hypothesis, according to which there are extramental bodies, but they are only occasions for God to cause our sensations; and (h_3) Berkeley's hypothesis, according to which God causes the sensations, with no extramental bodies in the offing. The issue is which of these hypotheses is most probable, given the evidence of our senses.

Let us think about this in relation to Bayes' Theorem:

$$P(h/e \ \& \ b) = P(h/b) \cdot \frac{P(e/h \ \& \ b)}{P(e/b)}$$

Here b represents any relevant background information, as before, and e represents our total body of evidence, our sensations. In this Bayesian context the question whether the evidence of our senses tells more strongly in

favor of one of the three hypotheses than the others amounts to the question which of the ratios

$$\frac{P(e/h_1 \ \& \ b)}{P(e/b)}, \quad \frac{P(e/h_2 \ \& \ b)}{P(e/b)}, \quad \text{and} \quad \frac{P(e/h_3 \ \& \ b)}{P(e/b)}$$

has the greatest value. Since we are assessing the hypotheses against the same evidence and background information, as is only fair, the three fractions have the same denominator, and the question reduces to which of the three probabilities $P(e/h_1 \ \& \ b)$, $P(e/h_2 \ \& \ b)$, and $P(e/h_3 \ \& \ b)$ is the greatest – or in other words, on which of the three hypotheses the evidence we have would be likeliest to occur. But since all three are hypotheses to the effect that the evidence we have is caused in a certain way,[8] all of them entail that the evidence e occurs. Hence all three probabilities have the value 1, and the three ratios do not differ in value. This means that our total empirical evidence e does not contribute more to the probability of one of these hypotheses than the others.

It follows that if one of the three hypotheses is more probable than the others, given the available empirical evidence and background information – in other words, if one of the probabilities $P(h_1/e \ \& \ b)$, $P(h_2/e \ \& \ b)$, and $P(h_3/e \ \& \ b)$ is greater than the others – it must be because the corresponding *prior* probability $P(h_1/b)$, $P(h_2/b)$, or $P(h_3/b)$, is greater than the others. This is the result to be expected from Bayes' Theorem, given that the hypotheses are constructed as claims that the evidence is caused in a certain way. The peculiarity of the present case to which I wish to call attention is that as e, the body of our sensations, comprises *all* our available relevant empirical evidence, our assignments of prior probabilities to the hypotheses cannot be based on empirical evidence. They can only be grounded in some sort of a priori judgement or intuition of the intrinsic attractiveness or plausibility of the hypotheses as theories. There is thus a clear sense in which it is not an empirical question which of these hypotheses is the most probable, all things considered.

The significance of this conclusion should not be exaggerated. It does not follow that the overall probability of the hypotheses is in no way affected by experience. Other aspects of the relation of experience to the assessment of plausibility of theories will be discussed in section II below. Here it should be pointed out that the non-empirical character of the question is a consequence of constructing the hypotheses as claims that the evidence is caused in a certain way. If we had e' as our evidence instead of e, the hypotheses would have been constructed as claims that e' was caused in a certain way; and that the difference might have affected their intrinsic or prior plausibility. For this reason the inference from e to any of these hypotheses will still be an *empirical* inference. The judgement that h is the best explanation of e will not be an empirical judgement. But the judgement that the best hypothesis is one that explains e, rather than some other set of facts, is empirical, because it is based on the empirical observation that e

is true.

Still it is significant that, given a body of evidence as the total available empirical evidence, the issue can be reduced to a form in which it is clear that one of the hypotheses that explain that evidence cannot be preferred to another except on the basis of an a priori judgement or intuition of their relative attractiveness. This results from the structure of Bayes' Theorem – and, less formally, of inference to the best explanation. For if empirical inference works, not by simple induction, but by leading us to accept the hypothesis that best explains the given evidence, the inference requires, in addition to the evidence, a judgement as to which hypothesis best explains the evidence. And it stands to reason that if we have a case in which the given evidence is the total available empirical evidence, this judgement cannot itself be inferred from empirical evidence.

This point is quite general, and applies to the assessment of scientific as well as metaphysical hypotheses. It is characteristic of metaphysical disputes, however, that it is usually very difficult, if not impossible, to see how to add to the body of available empirical evidence in such a way as to make a significant difference to the epistemological situation, and the disputants are therefore quickly forced to focus on issues that can be decided only by a priori judgements of theory-attractiveness. Empiricists have commonly had a strong aversion to relying on such judgments – at least when it is clearly seen that that is what is being done. This aversion has been a major motive for treating metaphysical hypotheses as "meaningless," and metaphysical issues as "pseudo-questions." That is a desperate expedient, and there is all the less reason to resort to it if we see that the very structure of empirical reasoning requires judgments of theory-attractiveness in addition to the evidence.

Berkeley, at any rate, had no empiricist qualms at this point. He certainly offers a priori arguments for the intrinsic superiority of idealism over the material hypothesis. We have already touched on some of these arguments, in which a prominent place is given to the claim that no intelligible hypothesis has been offered as to how extramental bodies would cause our sensations. I will not turn aside from the epistemological concerns of this paper, however, to say more about this part of Berkeley's case for idealism. Instead I will return to a point that was passed over quickly at the outset of his epistemological attack on the material hypothesis.

II. THE DIRECT REALIST OBJECTION

As was noted above, Berkeley begins this attack with a disjunction: if we know of the existence of bodies outside the mind, we must know it either immediately by sense, or indirectly by reason, inferring their existence from the immediate data of sense. He dismissed the first alternative with very little argument; and precisely that was his mistake, according to the

response to his epistemological reasoning that I think is most popular today. Many philosophers now maintain that we perceive extramental bodies immediately, and that we do not and need not infer their existence from our sensations, or more broadly, from our knowledge of our own sensory states.

More than one thing has been meant by the claim that we "immediately perceive" bodies existing outside the mind, and by the phrase "Direct Realism" that is used to refer to it. It is one thing to deny that sensations serve as evidence in the justification of beliefs about sensible things; another to deny that the way in which we conceive of sensible things is by having sensations or sensation-like images of them. These logically separable restrictions on the cognitive role of sensation are sometimes not distinguished as sharply as they should be – perhaps because we are mesmerized by pictorial conceptions vaguely associated with the terminology of "direct" or "immediate" perception. As the present paper is entirely concerned with the justification of belief, I will stipulate that by "Direct Realism" here I mean the thesis that in sense perception we form true beliefs in the existence of bodies outside the mind, which are justified without being inferred from or depending on any evidence whatever; and that sensations therefore do not serve as evidence for those beliefs. I do not mean to be implying anything one way or the other about the role of sensation in the formation of conceptions of sensible things, as opposed to beliefs about them.

This Direct Realist thesis seems initially plausible to common sense. If I perceive an object under favorable conditions – holding it in my hand, for example, and at the same time viewing it in good light – what need have I for reasoning or inference? Don't I just know directly that the object is there? And Direct Realists think that if they are right about this, it follows that all of Berkeley's argument against Evidential Realism is beside the point – except insofar as it can be used to educate us about the trouble we will get into if we are so foolish as to think of sensations as evidence. Further reflection, however, may lead common sense to be less satisfied with Direct Realism. Suppose that, standing in the doorway between the kitchen and the dining room, I see an aardvark in the dining room. I say to my wife, who is in the kitchen, "I think there's an aardvark rooting around under the dining room table."

"That's impossible," she says, "Why do you believe it?"

If I reply, "No reason. I don't need a reason," my answer will hardly be acceptable to common sense. The answer that common sense approves, and expects me to give in this situation, is , "Because I see the aardvark." Thus my perceptual experience seems to be not only accepted but demanded by common sense as *evidence* for my belief about the aardvark, contrary to the Direct Realist thesis.

A first reply that direct Realists may offer to this objection is that "Because I see the aardvark" is not synonymous with "Because I have visual aardvark sensations." Seeing an object, as Direct Realists are fond of emphasizing, is not just a matter of having sensations. It is largely a

matter of forming beliefs about the object in a certain way. The Direct Realist may be tempted to argue that since seeing an object is largely a matter of forming beliefs about the object, it would be viciously circular to regard the seeing as evidence for those beliefs. How can the fact that I am coming to believe that *p* be evidence for my belief that *p*?[9]

This argument must not be accepted, however. The fact that I am coming, or have come, to believe something *in a certain way* is often crucially important for the justification of belief. This is obviously true of testimony in a court of law. We take the fact that a witness believes she acquired a belief in a certain way (namely, by sense perception and memory) as one of the weightiest sorts of evidence for the truth of the belief. Similarly, if I see an aardvark, the fact that I am coming in a certain (sensory) way to believe there is an aardvark there is evidence for the truth of the belief.

Another response the Direct Realist may make is that while it is certainly true that my belief about the aardvark depends for its justification on the fact that I see the aardvark, it is also true, nonetheless, that my visual sensations need not function as a reason or evidence for me, and I do not need any reason or evidence for the belief. This contention may be defended by pointing out that young children and mentally retarded persons can be justified by their perceptual experience in believing things about bodies even though they have no thought of the justification of belief and could not articulate an appeal to their experience as evidence for their belief. The appeal to the evidence of sensation first comes in, on this view, when the belief is challenged or an epistemological issue is raised; and then the evidence is offered, not directly in support of the belief, but in support of the (epistemological) claim that the belief is justified.

There is something right about this response. The claim that sense experience can justify one in holding beliefs about bodies when one does not think about, or even understand, any evidential relation between the sensation and the belief, is plausible. But this provides the Direct Realist no aid or comfort in a dispute with Berkeley (or with an Evidential Realist). For in such a dispute an epistemological issue has been raised, the Direct Realist's views about bodies do confront a challenge from Berkeley or a skeptic or both, and it is assumed that all parties to the discussion are capable of understanding and articulating any evidential relationships that come under consideration. In this context it is impossible to maintain a sharp division between reasons for thinking a belief justified and reasons for accepting or continuing to accept it; and a lack of reasons (if one ought to have them) for thinking the belief justified is bound to cast doubt on the belief itself.

The clear facts of the matter are these: (1) My belief about the aardvark, in the case described, depends for its justification on my visual experience, though not on my understanding of that dependence. If I did not see the aardvark, I would not be justified in believing it was there. (2) All our beliefs about bodies depend ultimately for their justification on our

perceptual experience. They depend on it either directly, like my belief about the aardvark, or indirectly, by depending on other beliefs that depend on it directly. (3) An epistemological inquiry into the justification of our beliefs about bodies, if pursued with sufficient tenacity, is therefore bound to lead to perceptual experience as grounds for thinking such beliefs justified, and to the question whether our perceptual experience provides *good* grounds for thinking them justified.

This much the Direct Realist must acknowledge; and when it is acknowledged, little importance is left to the issue whether the perceptual experience is evidence for the beliefs about bodies or only for the claim that those beliefs are justified. Either way, a Realist must defend the claim that if we have certain perceptual experiences, then because we have them, we are justified in believing certain things about bodies. Whatever argument a Direct Realist can produce for this claim, an Evidential Realist can produce an analogous argument for the claim that the perceptual experience is good *evidence* for the beliefs about bodies. And it is hard to see why the Evidential Realist argument would be any more (or any less) vulnerable to skeptical or idealist attack than the analogous Direct Realist Argument.

Consider, for example, the simplest form of Direct Realist defense of the claim that beliefs about bodies are justified by virtue of their connection with perceptual experience – which is that beliefs about bodies that are "immediately" formed in sense perception are so evident to common sense as to need no further justification. As a response to Berkeley, this is very weak. It is not even relevant to the dispute with Berkeley unless the belief that bodies exist independently of being perceived is one of the beliefs that are held to be so evident in sense perception. So understood, this simple Direct Realist defense of belief in matter amounts to no more than saying that (when we have sense experience) it is obvious to common sense that Berkeley is wrong. This may not be a silly thing to say, but it is not much of an argument, and it would be silly to expect Berkeley to be much impressed by it.

Whatever value it may have, however, I see no reason why Evidential Realism could not equally well return a similar answer to Berkeley, saying that when we have sense experience it is so evident to common sense that our sensations are good evidence of the extramental existence of bodies that we need no further justification for so regarding them. In the Bayesian framework discussed in the previous section, the claim would presumably be that it is evident, without argument, that the material hypothesis is the best – antecedently the most probable – of the metaphysical theories that predict the sort of sense experience we have. This seems no worse, and no better, than the corresponding Direct Realist defense. Both, in effect, claim without argument that it is obvious that Berkeley is wrong.

I have long thought that for reasons of this sort, Direct Realism is a remarkably unpromising theory to have obtained the sponsorship of as many first-rate philosophers as it has. But recently I have begun to suspect

that this verdict is not entirely fair. Perhaps there is a way in which perceptual experience makes beliefs about bodies convincingly credible, to which the Direct Realist is trying to call our attention, but which is not clearly envisaged in the debate as I have traced it thus far.

In a well known passage of *The Varieties of Religious Experience*, William James says that "Mystical states, when well developed, usually are, and have the right to be, absolutely authoritative over the individuals to whom they come," but that "No authority emanates from them which should make it a duty for those who stand outside of them to accept their revelations uncritically."[10] To anyone other than the subject of such states, James suggests, the experience, or the report of it, is merely evidence, to be sifted in accordance with the usual canons of empirical reasoning, and may or may not be found in the end to provide some support, great or small, for a religious hypothesis. To the mystic who has the experience, however, its epistemological weight is much greater, on James' view; and that seems to me quite reasonable. We need not go so far as to say that mystical experiences ought to be "absolutely authoritative" for those who have them, if that involves accepting any belief "uncritically." But surely it is true that our own experiences have an epistemological value that other people's experiences do not have for us. This is generally recognized to be true of sense experience too. "Seeing is believing," we say.

We cannot get at the peculiar epistemological value of one's own experience simply by thinking of the fact that the experience has occurred as evidence for a hypothesis. For people who have not had the experience can believe as firmly as those who have that the experience has occurred, and can use this fact as evidence for the hypothesis in exactly the same way. What is special about one's own experience is not that one is uniquely able to rely on it as evidence, but that it uniquely affects one's inclinations to believe. It makes the hypothesis seem to one to be true, in a way that merely weighing the evidence of other people's experience does not. Doubting Thomas will not believe until he sees with his own eyes and feels with his own hands. He does not necessarily believe that his own senses are less likely than ten serious friends to deceive him. But sense experience has an impact on his belief that no amount of testimony could have, and we all accept this as reasonable, to some extent, as well as natural.

It will be of interest to inquire how this special epistemological value of one's own experience can be related to Bayes' Theorem:

$$P(h/e \ \& \ b) = P(h/b) \cdot \frac{P(e/h \ \& \ b)}{P(e/b)}$$

The crucial point is not that the evidence, e, that the subject of the experience has is different from the evidence that anybody else has. It is true that one normally knows things about one's own experiences that other people do not know; but even in cases where one's own experience has unique value in support of a hypothesis, the facts one knows about one's

own experience need not be better evidence for the hypothesis than the facts that other people know. It is rather that having the experience oneself rightly and properly affects the way in which one evaluates the evidence. It increases one's inclination to find the hypothesis a better explanation of the evidence one has than other hypotheses that predict the same evidence.

There is more than one way that this can work in a Bayesian framework. Most obviously, the experience may increase the value one is inclined to assign to P(h/b), the antecedent[1] probability of the hypothesis h. Having a mystical experience, for example, may naturally and rightly cause one to find a religious hypothesis antecedently more probable (that is, intrinsically more plausible) than one otherwise would. Alternatively, the experience may bring one to assign a lower value to P(e/b), and therefore a higher value to the ratio

$$\frac{P(e/h \ \& \ b)}{P(e/b)}$$

by decreasing the plausibility one finds in alternative hypotheses that predict the evidence e. Thus the experience of actually seeing an aardvark in one's dining room may well incline one to find less antecedent or intrinsic plausibility in hypotheses of hallucination or illusion than one would have found in them if one had merely imagined such an experience.

The suggestion that it is often *reasonable* to be influenced in this way by experiences may provoke some to object that the antecedent probability that it is reasonable to assign to any hypothesis is that which it objectively deserves, and that as we are speaking of a probability antecedent to the evidence of the experience in question, its objective value cannot be affected by whether one has had the experience oneself. This objection has a certain rationalistic appeal, but seems to me mistaken. It might be right if we were Olympian beings, capable at all times of a complete and well balanced appreciation of all factors in an epistemological situation. But we are not. In our actual cognitive condition our capacity for improving our intellectual performance depends heavily on our ability to draw from our experience, not only new facts to be treated as evidence, but also a new appreciation of the epistemological relevance and weight of whatever facts we know or might come to know.

If this is right, the following variant of Direct Realism deserves our attention. Perceptual experience, it may be claimed, is not only evidence for beliefs about the world; it also naturally and rightly affects our appreciation and weighing of all the factors in our epistemological situation. In particular, it naturally and rightly inclines us to assign a higher prior or intrinsic probability to the material hypothesis than to alternative hypotheses in which subjective sense experiences such as ours arise without the existence of extramental bodies. On this view, in short, the actual experience of sense perception makes the material hypothesis seem a better theory, and makes idealistic hypotheses seem worse theories, in relation to the same evidence,

than they would otherwise have seemed. It may also be claimed that the assignment of prior or intrinsic probabilities which we make under the influence of our sense experience needs no argument to justify it, but is an appropriate starting point in the formation of beliefs.

This is not, strictly speaking, a Direct Realist position, because it allows subjective sensory states to be counted as evidence for perceptual beliefs. What it takes from Direct Realism is the thesis (1) that sense perception contributes something more than evidence to the grounds of our belief, and (2) that this can be used to defend a Realistic view of matter. There is something right about this thesis. Perceptual experience does seem in some way to give intrinsic plausibility to Realism about matter, or to diminish the intrinsic plausibility of theories according to which our perceptual experience occurs without extramental bodies. Realism has a common sense appeal that presents itself as directly rooted in sense experience.

This does not seem to me to be a very powerful argument for Realism, however. Leaving aside many of Berkeley's criticisms of the tenability of the conception of extramental bodies, let us focus only on the question whether this intrinsic plausibility or common sense appeal that is given in perceptual experience carries over from what is often called "Naive realism" to the more "scientific" sorts of Realism that modern philosophers might accept. Surely the view of bodies to which sensation contributes the most initial intrinsic plausibility is not only that they exist independently of being perceived, but also that they have qualities whose nature is perspicuous to us in perception – for example, that they have surfaces that are unbrokenly solid and "covered" with colors that are just like visual appearances of color and are not merely powers to affect us with visual sensations. This is not necessarily a naive view. It was incorporated, for example, in the Aristotelian theory of perception. But it is a view that modern thought seems to have abandoned forever, and for weighty reasons, in giving up Aristotelian physics. This development of modern thought has a price, however, which is that any modern conception of the nature of bodies is going to seem somewhat strange to a common sense that is shaped by our natural reactions to sense experience.

Berkeley adroitly exploits this fact. His *Three Dialogues*, as I have pointed out, do not contain a fully explicit development of the epistemological argument against belief in matter; but one of the strongest impressions they have left with many readers is that they give powerful reasons to doubt that we could justify the belief in matter even if it is intelligible. One source of this impression, I think, is the way in which Hylas begins with a realism about the secondary qualities that does appeal to common sense, and then is forced out of it. By beginning in this way, rather than having Hylas start out with the views of Boyle or Locke on secondary qualities, Berkeley makes, very vividly, the point that common sense views of the nature of bodies that arise in sense perception, if construed as views about the nature of *extramental* bodies, are undermined by arguments and

developments of modern thought that few of us are prepared to reject. Other features of modern scientific thought tend in the same direction. Berkeley could have exploited in this context the corpuscularian idea that bodies, though seeming unbrokenly solid, are really discontinuous assemblies of particles separated by empty space. And relativistic physics, with its simultaneity cones and Riemannian space, departs even farther from common sense than any science that Berkeley knew.

Surely, it may be objected, the intrinsic plausibility that perceptual experience contributes to the view that in sensation we are in contact with a reality that exists independently of our perceiving it may remain even though the reliability of common sense views about its qualities is undermined. But Berkeley can agree with this. He no more doubts than his opponents do that there is an independently real cause of our sensations. The question at issue is about the qualities of that cause (cf. *Dialogues*, 239). Berkeley thinks the cause is God, and more particularly ideas and volitions in the divine mind.

I will admit, though Berkeley did not, that his account of the nature of the objects of perception is quite remote from common sense. But is it more remote than viable alternatives? Are ideas and volitions in the mind of God stranger than quarks and quanta? The claim that sense experience enables us to see without argument that modern scientific versions of the material hypothesis are intrinsically better theories, antecedently more probable, than idealistic alternatives has little to commend it. Neither side in this dispute is in a good position to appeal to the impression that perception gives us of sensible things.[1] [2]

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NOTES

1. Unless otherwise indicated, quotations from Berkeley in this and the next six paragraphs are from section 18 of Part I of the *Principles of Human Knowledge.*

2. Here, and in the next paragraph, quotations not otherwise identified are from *Principles*, 19.

3. J. L. Mackie, *The Miracle of Theism: Arguments for and against the Existence of God* (Oxford: Clarendon Press, 1982), p. 76. It is one of the merits of Mackie's book that he sees the essentially theistic character of Berkeley's alternative to the material hypothesis, and

treats it as generating a serious metaphysical argument for theism.

4. *Ibid.*, p. 77.

5. *Ibid.*, p. 77f.

6. All the quotations from Mackie in this paragraph are from pp. 78-80 of *The Miracle of Theism.*

7. This may be an oversimplification. Our total sensory experience certainly constitutes most of our empirical evidence relevant to the nature of sensible things. We have little, if any, relevant evidence that does not come to us through the senses. But perhaps we have some. For example, the problem of evil may suggest that non-sensory suffering is empirical evidence that is relevant to Berkeley's hypothesis, because relevant to its theistic component. It would take a long discussion to evaluate this suggestion, as we would have to consider, not only the issues of theodicy, but also how benevolent a deity is required for Berkeley's metaphysical, as distinct from his religious, aims. In any case, I think my basic epistemological point is untouched. The question, what hypotheses best explain, and hence are best supported by, the *totality* of our experience, is of inescapable importance for epistemology. And, as I shall argue, it is not an empirical question.

8. This is not the only way in which the hypotheses can be understood; but they certainly can appropriately be understood in this way, and doing so brings out the epistemological situation most sharply.

9. D. M. Armstrong begins to argue in this way in *Perception and the Physical World* (London: Routledge and Kegan Paul, 1961), pp. 132f. But in the end he seems to ackowledge the point I am about to make.

10. William James, *The Varieties of Religious Experience* (New York: The Modern Library, no date), p. 414.

11. "Antecedent" here must not be understood temporally, of course. It is also important to this line of thought that in saying that experiencing e may increase the value that one who has the experience is inclined to assign to P(h/b), I do not mean to imply that for such a person P(h/b) thereby becomes a probability "on" e, a probability conditional on e's occurrence. On the contrary, P(h/b) is still a probability independent of e, and in that sense antecedent to the evidence of e. We can think of it as expressing an answer to the ques-

tion, "Suppose there is a universe distinct from ours, about which you know only that b is true; you do *not* know whether e occurs in it; how likely is it that h is true in that universe?" What I am suggesting is that even though P(h/b) is in this way independent of e, the experience of e can appropriately lead us to assign it a higher value. On this view, there is more than one way in which experiencing e may lead us to assign a higher probability to a hypothesis h. It may lead us to believe that the condition laid down in the conditional probability P(h/e) is satisfied. This is the way in which we are most apt to think of the experience of e as increasing the probability of h – the way involved in taking e as *evidence* for h. But my suggestion is that experiencing e may also lead us to believe that the conditional probability P(h/e) is higher than we would otherwise have thought, because the experience affects us so that either the intrinsic plausibility of h (as reflected in P(h/b)), or its advantage in comparison with other possible explanations of e, now seems greater than we would otherwise have thought.

12. Versions of this paper have been presented to the Berkeley tercentenary conference at Newport, and to philosophical audiences at UCLA and Memphis State and Vanderbilt Universities. I am indebted to many (including a reader for the publisher) for helpful comments.