2

Anti-Realism

Berkeley's response to the Inconsistent Triad identified in ch. 1 is to reject

(I) Physical objects are mind-independent.

In ch. 3 below I develop my own version of what I regard as his most powerful argument for this rejection of (I) as an argument against Locke's indirect realism. In the context of the early modern approach to perception, then, on which our most basic experiential condition consists in our acquaintance with mind-dependent direct objects, indirect realism is unstable according to this Berkeleyian argument and some form of anti-realism is inevitable. A central component of the view that I present over the course of the book is that a line of thought that has certain fundamental features in common with Berkeley's objection to Locke also threatens a great deal of contemporary work on perception.[1] My most important proposal is that this is only ultimately avoided by the position that I develop on my own account in chs. 5-7. The topic of the present chapter, though, is the rejection of (I).

Notoriously, Berkeley combines this denial of the existence of mind-independent matter with the insistence that most of what common sense claims about physical

[1] See especially ch. 4 below.

objects is perfectly true (1975a, 1975b).[2] As I explain (§ 2.1), he suggests two broad strategies for this reconciliation, one of which importantly subdivides. Thus I distinguish three Berkeleyian metaphysical views, and explain how the real distinctions between them are ultimately semantic rather than ontological.

Important recent work by David Lewis provides a framework for articulating three far more modern-looking metaphysical options, between which I argue that the real distinctions are again semantic rather than ontological (§ 2.2). This highlights a striking isomorphism between the two trios of views.

All six views share a fundamental assumption that the explanatory grounds of the actual and counterfactual nature of our experiences of physical objects are distinct from any direct objects of those experiences, in the technical sense that I introduced in ch. 1 as part of my explication of the early modern empiricist approach to the identification and fundamental categorization of conscious experience in general. Let me explain this idea a little here. It should come into increasing focus as my discussion proceeds throughout the book.

According to the early modern empiricists, the most basic characterization of perceptual experience is to be given by citing and/or describing certain direct objects with which the subject is acquainted in such experience. When a person perceives a specific physical object of a certain kind there is also an explanation to be given of why he is having an experience of just the kind that he is having, and of what various

[2] My discussion of Berkeley throughout draws most heavily on these two primary texts. I make no further specific reference to them, and make only sparing reference to the secondary literature where necessary.

other possible experiences of that same physical object would be like from different points of view and in different circumstances of perception.

Examples of phenomena to be explained here would be the following. The fact that a coin looks circular from head on; and the fact that it would look increasingly elliptical as one's angle of view increases away from head on; the fact that a given jumper looks red outdoors; and the fact that it looked mauve in the store; and so on.

All six of the views that I am concerned with in this chapter distinguish the fundamental explanatory grounds in terms of which such explanations are to be given, on the one hand, from any direct objects with respect to which those experiences themselves may be characterized according to the early modern approach, on the other. As a result, I argue, they all struggle seriously to sustain our intuitive commitment to empirical realism, the thesis that physical objects are both presented to us in perceptual experience and have a nature that is entirely independent of how they do or might appear to anyone (§ 2.3).

I conclude (§ 2.4) by proposing the denial of this shared assumption as the fundamental starting point for any stable and fully satisfying defence of empirical realism. The ultimate explanation of the actual and counterfactual nature of my experience when perceiving a specific physical object of a given kind is that very object, which also constitutes the direct object with which I am acquainted in each of

the various experiences that I may have of it.[3] This sets my agenda for the remainder of the book.

Recall that I identify physical objects, in the first instance, by extension, as things like stones, tables, trees, people and other animals: the persisting macroscopic constituents of the world in which we live. Physical object language is the language in which we speak and write about physical objects. For the entities of a given kind to be mind-independent is for them to have a nature that is entirely independent of how they do or might appear to anyone. Otherwise they are mind-dependent.

On the early modern empiricist approach that I take as my starting point here, the nature of conscious experience is to be elucidated by reference to certain entities that are set before the mind in such experience. Thus the most fundamental characterization of a specific perceptual experience is to be given by citing, and/or describing, specific such entities: the experience in question is one of acquaintance with just those things. I call those entities, if any, which provide the most fundamental characterization of the nature of perceptual experience in this way its direct objects. These identify any given perceptual experience as the specific modification of consciousness that it is.

Of course there are many who reject altogether the idea that the most fundamental characterization of perceptual experience is to be given relationally by reference to direct objects of this kind. Ch. 4 below comprises a sustained critical discussion of what I regard as the most significant modern approach to the issues here along

[3] See Fine (1994) for the idea of the nature of a given object as the explanatory ground of various modal truths.

precisely these lines. For the purposes of the present chapter, though, I assume the early modern empiricist approach for the following four reasons. First, Berkeley himself clearly makes this assumption, and the options for his own metaphysical system are quite clear in this context. Second, the modern metaphysical views with which I am concerned here are to my mind also most clearly defined and distinguished in the context of this assumption, although their actual proponents may more or less explicitly distance themselves from it. Third, the assumption facilitates and clarifies my general assessment and articulation of the prospects and preconditions for empirical realism in the present chapter. Fourth, the early modern relational approach to the fundamental characterization of perceptual experience by reference to its direct objects is I believe ultimately correct, although not of course in the form adopted by its early modern proponents themselves, governed as this is by the conviction that the direct objects of perception are bound to be mind-dependent. This is perhaps the most important contention of the book as a whole.

2.1 Berkeley's Options

Berkeley begins Part I of the Principles (1975b) with an explicit endorsement of the widely held assumption at the time that the direct objects of perception are mind-dependent. This is the conclusion of the arguments from illusion and hallucination that I set out in ch. 1, and forms claim (III) of the Inconsistent Triad.

In what follows he is scrupulously attentive to the fact that physical objects, such as stones, tables, trees, people and other animals, are in some way presented to us in perception in a sense in which it follows that perception constitutes a source

knowledge of what physical objects are: perception provides our indispensable initial identification of the domain that constitutes the subject matter for any subsequent theoretical investigation into their fundamental natures. He concludes that physical objects must be appropriately related to the direct objects of perception. Berkeley's many, varied and powerful arguments against Locke's materialism aim to establish that physical objects are therefore likewise mind-dependent. Given crucial constraints upon the appropriate relations that physical objects must bear to the mind-dependent direct objects of perception, any conviction that such objects have mind-independent material natures cannot, he argues, be sustained.[4] Nevertheless, as I say, he insists that much of our commonsense conception of the physical world is correct. This much I take for granted as familiar background concerning Berkeley.

He has two broad strategies for developing the overall position.[5]

Idealism, (I), identifies physical objects with mereological sums of mind-dependent direct objects of perception.[6] Here there are two varieties. G-idealism, (GI), identifies physical objects with mereological sums of mind-dependent direct objects of God's experience.[7] H-idealism, (HI), identifies physical objects with mereological sums of mind-dependent direct objects of humans' experience.[8]

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[4] My extended discussion in ch. 3 of the difficulties faced by philosophers responding to my opening Inconsistent Triad by rejecting (2) in a way that introduces strong structural similarities with Locke's indirect realism effectively articulates and develops this Berkeleyian objection.

[5] I first encountered this basic distinction in Foster (1985). I have also been helped in my understanding of Berkeley's options by Stoneham (2002).

[6] This is Foster's (1985) 'mentalistic realism'.

[7] Strictly speaking, this is not perceptual experience, since God is active in its production rather than passive in its reception. Furthermore, the most plausible reading of Berkeley's gestures in this direction identifies each physical object with a single such 'idea' in God's mind, or perhaps even with a single element of one overall

Phenomenalism, (P), systematically analyses whole sentences of physical object language in terms of sentences concerning various patterns amongst the actual and possible mind-dependent direct objects of perception, without asserting numerical identities between particular physical objects and anything mind-dependent. Strictly speaking, and notwithstanding the surface structure of the sentences of physical object language, we do not make genuine (objectual) reference to physical objects at all. Rather, truth-conditions are given for whole physical object language sentences by truth-functional constructions of sentences concerning the actual and counterfactual course of human experience.[9]

One way to articulate the basic contrast between the idealist and phenomenalist strategies is as a disagreement about what constitute the semantic primitives of physical object language.[10] These are the basic units of the language to which semantic assignments are made, on the basis of which assignments truth conditions may systematically be determined for all the well-formed sentences of the language. According to (I), the semantic primitives of physical object language include referring expressions and predicates; according to (P), they include instead whole atomic sentences.

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idea which is the whole physical world. Thus, according to (GI), physical objects are (mereological parts of) mind-dependent objects of God's active-creative experience.

[8] See Stoneham (2002, ch. 8) on this distinction between (GI) and (HI). I agree with Stoneham that (HI) is the most straightforward and philosophically defensible version of Berkeley's mentalism.

[9] This is Foster's 'mentalistic reductionism'.

[10] The remainder of the present section elaborates my earlier claim that the real distinctions between all three Berkeleyian views are ultimately semantic rather than ontological.

Thus, according to (I), referring expressions of physical object language, such as 'that table', are assigned mereological sums of mind-dependent objects as their reference: (sums of) ideas in God's mind, according to (GI), and sums of direct objects of human perception, according to (HI). Satisfaction clauses for predicates are not straightforward; but the basic idea would be that a physical object language predicate such as 'x is brown', is satisfied by an object iff that object has enough (of the right kind of) brown-type mind-dependent direct objects of experience as parts.[11]

According to (P), on the other hand, truth conditions will be given directly for whole atomic sentences of physical object language roughly along the following lines.

'That table is brown' is true iff my current perceptual experience has a brown-table-type direct object, and I would have experiences with brown-table-type direct objects in certain different circumstances, and your perceptual experience would have a brown-table-type direct object if you were in my study, and…[12]

The truth-functors of physical object language are given standard treatment on both accounts. Notice, though, that physical object language quantification is objectual according to (I), whereas it is substitutional, according to (P).

[11] Note, as I mentioned in ch. 1 n. 12 above, that on all three of Berkeley's accounts predicates apply to physical objects themselves only derivatively. Their primary application is to mind-dependent direct objects of experience.

[12] This account is very rough indeed, and it may be a serious objection to (P) that it cannot ultimately be made completely satisfactory without some kind of circularity. For clauses are required to allow for the fact that there may be misleading perceptions of brown tables in unusual lighting conditions, say, and also for the fact that brown tables might have been different colours in some different circumstances. These possibilities raise many difficult issues that I pass over here for current purposes.

On both Berkeleyian strategies – indeed, on all three of the Berkeleyian metaphysical options that I have distinguished – the actual and counterfactual nature of all human perception is ultimately explained by God's free volitional strategy: the very volitional strategy by which He effectively creates the physical world itself.[13] The only cognitive access that we have to this explanatory volitional strategy is essentially indirect, though, as the strategy that results in just these patterns in perceptual experience. Crucially, for my purposes, this explanatory ground of the actual and counterfactual nature of our experience of physical objects – God's will – is quite distinct from any direct object of that experience, by reference to which the fundamental characterization of the experience itself is to be given.

All three Berkeleyian metaphysical views share a single fundamental ontology. God's free creative volitional strategy constitutes the fundamental explanatory ground of the actual and counterfactual nature of human perceptual experience of physical objects, which consists in subjects' actual and counterfactual relations of acquaintance with mind-dependent direct objects. This is all that there most fundamentally is: minds and their ideas. The metaphysical distinctions between the views are due ultimately to their different semantics for physical object language.

First, according to (GI), everyday terms for particular physical objects, such as 'that book' and 'my laptop', are to be construed as genuinely referring expressions, whose referents are particular direct objects of God's creative volitional experience. Second, according to (HI), such everyday terms for particular physical objects are again to be

[13] Although this is of course crucial to Berkeley's metaphysics, I outline and discuss below variants of all three positions on which the explanatory ground of our perceptions is supposed to be quite different.

construed as genuinely referring expressions. Their referents in this case are mereological sums over time and over various human subjects of certain mind-dependent direct objects of perceptual experience. Third, according to (P), everyday terms for particular physical objects are not to be construed as genuinely referring expressions at all. Rather, whole sentences containing such terms are to be given truth conditions by logical constructions of sentences referring to human beings and the mind-dependent direct objects of their actual and possible perceptual experiences.

Thus, although the metaphysics of physical objects is quite different on each of the three Berkeleyian options that I have been discussing, these differences are the product of a single underlying ontological picture and a range of alternatives concerning the semantics of ordinary physical object language.[14]

2.2 Three More Modern Metaphysical Views

The central argument of David Lewis' influential paper 'Ramseyan Humility' (2009) provides a framework for articulating three far more modern-looking metaphysical options. I begin with the argument and move on to the options.

[14] Again many issues are raised here that I pass over for current purposes. One concerns the way in which proponents of the three Berkeleyian metaphysical views interpret and answer the question 'are there physical objects?'. On one natural reading, the answer is 'yes' according to (GI) and (HI), and 'no' according to (P). The first two affirmative answers assume the existence of mereological sums, though, which is not obviously uncontroversial. Furthermore, (P) might argue for its own affirmative answer as follows. There are physical objects because 'physical objects exist' is true. This consists in the truth of such sentences as 'that table exists', which is in turn secured by the truth of such things as 'that table is brown'. For an excellent collection of essays addressing this kind of issue, see Chalmers, Manley and Wasserman (2009). I do not take a stand here. My point is simply that a shared fundamental ontology of minds and their ideas conjoined with different physical object language semantics yields different metaphysical views.

According to Lewis, the 'final theory' to which scientific research ideally tends ought to deliver a complete inventory of the fundamental intrinsic properties that play an active role in the actual workings of nature.[15] Call the true and complete such final theory T. This contains a good deal of our old, O-language, which is available and interpreted independently of T, and which suffices to express all possible observations. T also contains its own theoretical T-terms. These are implicitly defined by their role in the overall theory and name the fundamental properties in question. Furthermore, Lewis assumes that none of these causally basic intrinsic properties are named in O-language, "except as occupants of roles; in which case T will name them over again, and will say that the property named by so-and-so T-term is the occupant of such-and-such role" (Lewis, 2009, p. 000 (3)).

Suppose that $T(t_1 \ldots t_n)$ is the simplest form of T, where $t_1, \ldots t_n$ are the T-terms, thereby implicitly defined in terms of the O-language that constitutes the remainder of this expression for T. The Ramsey sentence of T is $\exists x_1 \ldots \exists x_n T(x_1 \quad x_n)$. This logically implies all and only the O-language sentences that are theorems of T. Call this Ramsey sentence R. Since O-language alone suffices to express all possible observations, every possible observable prediction of T is equally a prediction of R. Thus any evidence for T is equally evidence for R: evidence for T cannot go beyond evidence merely for R.

[15] There are substantive and controversial issues concerning the correct precise characterization of intrinsic properties. See, e.g. Lewis (1983a, 1983b), Sider (1993, 2001), Langton and Lewis (1998, 2001), Yablo (1999), Hawthorne (2001), Marshall and Parsons (2001), Weatherson (2001). It is unnecessary for my purposes in what follows to engage with these debates in detail. The provisional characterization of intrinsic properties as those that an object has of itself, independently of any other thing, those it would retain, or retain the lack of, if it were the only thing that existed, should suffice.

Now, it is extremely likely that, if there are any, then there will be more than one fundamental property in at least the most basic ontological categories: monadic properties, dyadic relations, and so on. That is to say, if there are any monadic fundamental properties, then there are very likely to be more than one. Similarly for dyadic relations, and so on. Suppose that $<a_1 \ldots a_n>$ is the n-tuple that actually realizes T; and suppose that $<b_1 \ldots b_n>$ is any n-tuple which results from permuting some of the pairs $<a_i, a_j>$ in which a_i and a_j are of the same ontological category. In other words, supposing that a_p and a_q are both monadic fundamental properties in the n-tuple $<a_1 \ldots a_p \ldots a_q \ldots a_n>$ that actually realizes T, let $<b_1 \ldots b_n>$ be the n-tuple $<a_1 \ldots a_q \ldots a_p \ldots a_n>$. Combinatorilaism is the thesis that possibility is preserved under permutation or replacement of co-categorial items. So, on the assumption of <u>combinatorialism</u>, $<b_1 \ldots b_n>$ is a <u>possible</u> realization of T. <u>Quidditism</u> is the thesis that possibilities which differ simply by the permutation or replacement of properties are genuinely <u>distinct</u>. So, on the additional assumption of quiditism, $<b_1 \ldots b_n>$ is a <u>distinct</u> possible realization of T from the actual realization $<a_1 \ldots a_n>$. Furthermore, since any evidence for T is evidence for R, and R is true in both the actual case, in which $<a_1 \ldots a_n>$ realizes T, and in the distinct possible case in which $<b_1 \ldots b_n>$ realizes T, then no possible evidence can tell us that $<a_1 \ldots a_n>$ is the actual realization of T, as opposed to $<b_1 \ldots b_n>$.[16]

> Though our theory T has a unique actual realization, … it has multiple possible realizations. … no possible observation can tell us which one is actual, because whichever one is actual the Ramsey sentence will be true. There is indeed a true

[16] Combinatorialism and quiditism are both substantive assumptions that may be questioned. I abstain from such questions here.

> contingent proposition about which of the possible realizations is actual, but we can never gain evidence for this proposition, and so can never know it. … Humility follows. (Lewis, 2009, p. 000 (5))

The Humility Thesis (HT) that follows, according to Lewis, is the thesis that we are irremediably ignorant of the fundamental properties of the world: we cannot possibly know the intrinsic nature of physical reality itself. Provided only that a fundamental property is not a categorial singleton – that is to say that there are others of the same category[17] – then we can never have any evidence that it – as opposed to any of these others – is the actual realizer of the theoretical role definitive of its name. We know that there is a property, so-named, that does just that; but we cannot possibly know which it is, what the intrinsic nature of the property so-named actually is. Since all intrinsic properties supervene upon these fundamental properties, we are in this sense irremediably ignorant of the intrinsic nature of mind-independent reality itself.

From this point forward I go beyond anything that Lewis actually says in order to explore a possible account of how perception fits into the picture that is at least suggested to me by his discussion. My purpose is to clarify further what is at stake in philosophical debates concerning empirical realism.

According to Lewis, independently interpreted O-language suffices to express all possible observations, and certainly, therefore, the way things appear to subjects in perception. According to the early modern approach to perception, the most fundamental characterization of any specific perceptual experience is to be given by

[17] Later in the paper Lewis introduces additional assumptions that enable him to extend the argument to all fundamental properties; but it is unnecessary for my purposes to get involved with the additional complications.

citing, and/or describing its mind-dependent direct objects. The way things appear to subjects in perception is precisely a matter of the intrinsic natures of the relevant mind-dependent objects of acquaintance. Putting the two ideas together suggests that O-language suffices to characterize the natures of the mind-dependent direct objects of all perception. Lewis also explicitly assumes that no fundamental properties are named in O-language, except as the occupants of roles, presumably such as the role of being systematically causally explanatory of such and such observations. Thus, the intrinsically unknowable fundamental explanatory grounds of the actual and counterfactual nature of our perceptual experience of physical objects are quite distinct from any direct objects of perception themselves that provide the most fundamental relational characterization of such experience.[18]

According to this composite picture, perception consists in our acquaintance with certain mind-dependent direct objects whose nature determines the way things appear to us. The actual and counterfactual course of such perceptual experience, like everything else, is ultimately to be explained by the fundamental nature of mind-independent physical reality of which we are irremediably ignorant. This single underlying ontology once again offers three possible metaphysical options for physical objects depending crucially upon the semantics for physical object language that are imposed upon it.

[18] Lewis' discussion of qualia (2009, § 8) resists the idea that we have knowledge of which properties even these are simply in virtue of our experiential acquaintance with them. We know them instead only as the occupants of psychological roles that "confer on us abilities to recognize and imagine what we have previously experienced" (p. 000 (14)). For my own illustrative purposes in what follows I impose upon his position the early modern construal of perception by postulating mind-dependent direct objects with their own natures as the experiential foundation of all possible observation expressed in O-language. It may well be that Lewis' own position here is closer to the Content View (CV), discussed below in ch. 4.

First, according to Scientific Realism, (SR), physical objects, like stones tables, trees, people and other animals are mereological sums, over space and time, of the constituents of an intrinsically unknowable mind-independent reality, which is the subject matter of fundamental physics, and which constitutes the explanatory ground of all human perceptual experience. Such experience, in turn, constitutes the various ways that physical objects appear to us. According to (SR), then, everyday terms for physical objects, such as 'that book' and 'my laptop', are to be construed as genuinely referring expressions, whose referents are mereological fusions of intrinsically unknowable mind-independent fundamental physical constituents.

According to Modern Transcendental Idealism, (MTI), physical objects are mereological sums of the mind-dependent direct objects of various humans' perceptual experiences over time. The actual and counterfactual nature of these experiences is explanatorily grounded in the intrinsically unknowable mind-independent reality that is the subject matter of fundamental physics. Although this position is idealist about physical objects themselves, the stones tables, trees, people and other animals that we all know and love, it insists, in opposition to Berkeley's appeal to the volitional strategy of God's infinite mind, that the explanatory ground of the nature of human experience is mind-independent, although intrinsically irremediably unknowable. It is not a view that is often endorsed explicitly today; but I do believe that some temptation towards it is evident in much modern metaphysics, given the alternatives available once (HT) is in place alongside the early modern approach to perceptual experience. I give an example of this temptation in Lewis below. According to (MTI), then, everyday terms for particular physical objects are

again to be construed as genuinely referring expressions. Their referents in this case are mereological fusions of mind-dependent direct objects of human perceptual experience.

According to Reductionism, (R), there are, strictly speaking, no persisting physical objects, such as stones tables, trees, people and other animals. Sentences 'about' such things are reducible to sentences about the actual and counterfactual order and nature of various humans' perceptual experiences over time, where the truth of these sentences is in turn grounded in the way things are in the intrinsically unknowable mind-independent reality which is the subject matter of fundamental physics. According to (R), then, everyday terms for particular physical objects are not to be construed as genuinely referring expressions at all. Rather, whole sentences containing such terms are to be given truth conditions by logical constructions of sentences referring to the fundamental constituents of physical reality that are explanatory of certain characteristic patterns in the mind-dependent direct objects of human beings' actual and possible perceptual experiences.

Lewis himself presents (HT) as a thesis concerning our epistemological relation with the fundamental constituents of physical objects themselves, such as stones tables, trees, people and other animals. This identifies his metaphysical position as a version of (SR), which is surely his official view.

Consider his argument for a perdurance account of the persistence of such physical objects, though (Lewis, 1998).

> The principal and decisive objection against endurance, as an account of the persistence of ordinary things such as people or puddles, is the problem of temporary intrinsics. Persisting things change their intrinsic properties. For instance, shape: when I sit, I have a bent shape; when I stand, I have a straightened shape. Both shapes are temporary intrinsic properties; I have them only some of the time. How is such change possible? I know of only three solutions. (Lewis, 1998, p. 205)

Lewis' argument is that two of these 'solutions' are untenable. The first denies that shapes are intrinsic properties of physical objects. "They are disguised relations, which an enduring thing may bear to times" (p. 205). Lewis objects that this is "simply incredible, if we are speaking of the persistence of ordinary things. … If we know what shape is, we know that it is a property, not a relation" (p. 205, my emphasis). The second 'solution' is to claim that "the only intrinsic properties of a thing are those it has at the present moment. Other times are like false stories" (p. 205). Lewis objects here that this "rejects persistence altogether. … In saying that there are no other times, as opposed to false representations thereof, it goes against what we all believe" (p. 206). The third possibility, which must therefore be the correct solution, is to invoke perdurance as an account of the persistence of physical objects: "different temporary intrinsics … belong to different … temporal parts" (p. 206).

The crucial premise for my purposes is that bent and straightened, the very properties that we know on the basis of everyday observation, are different intrinsic shape properties of ordinary physical objects, or at least of their distinct perceptible temporal parts. This is surely incompatible with (SR), though. For, recall that, according to (SR), all the properties of physical objects that we know on the basis of

perception are relational: they are their dispositions to produce various experiences in us, which present us merely with their appearances. For all intrinsic properties of physical objects supervene upon their fundamental nature of which we are irremediably ignorant. It is therefore such appearances that change from bent to straight as we perceive shape to change when Lewis stands up. That is to say, insofar as bent and straightened are construed as intrinsic properties that we know on the basis of perception, they must be construed by the proponent of (HT) as intrinsic properties of mind-dependent direct objects of experience: as the early modern conception of experience contends, the way things appear to subjects in perception is precisely a matter of the intrinsic natures of the relevant mind-dependent objects of acquaintance. Thus, identifying physical objects with those objects of which the shapes that we perceive to change in this way are intrinsic properties, assimilates the position to a version of (MTI), as opposed (SR).[19]

Perhaps Lewis' reply would be that the properties which shape terms like 'bent' and 'straightened' actually name are instead certain intrinsic properties of intrinsically unknowable physical objects, as these are understood according to (SR), of which the so-called 'bentness' and 'straightenedness' that we perceive are the mere appearances to us. Intrinsic shape, on this view, is that determinable property which causally grounds the change in appearance that we experience when Lewis stands up, whatever property that may be. Strictly speaking though, we have no conclusive reason to regard standing as a change in that intrinsic property of physical objects on this construal. More importantly, this response is inconsistent with the Lewis' firm

[19] The assimilation is not irresistible; but intended rather as illustrative. See my extended discussion of the scientific implementation of my Explanatory Proposal, (EP), in ch. 7 below for critical consideration of what is effectively an attempt to resist it.

implication, in rejecting the first purported solution to the problem of temporary intrinsics above, that we do "know what shape is" (p. 205). For the consequence of Lewis' envisaged reply would be precisely that we do not: we know only the appearance that it produces in us, which we are misleadingly inclined to call by the same name.

Put succinctly, the problem for the Lewisian position under consideration is that (SR) entails that every property of physical objects that we know on the basis of perception is relational, a matter of their disposition to produce certain mind-dependent objects of acquaintance whose intrinsic nature constitutes the way things appear to us in perception; yet the argument for a perdurance account of the persistence of physical objects requires that some of their properties that we know on the basis of perception should be intrinsic, and that this should itself be perceptually evident to us.

In any case, my point at this stage is not so much to accuse Lewis himself of inconsistency, but rather to illustrate the temptation, even amongst explicit proponents of (SR), towards the idea that physical objects such as stones tables, trees, people and other animals, are presented to us in perception, in a sense that most naturally suggests (MTI) rather than (SR). The idea is that physical objects themselves are the objects that we all know and love, as it were, in the sense that we know at least some of their intrinsic properties on the basis of our perception of them. Given (HT), this is inconsistent with the (SR) identification of physical objects with mereological fusions of intrinsically unknowable fundamental physical constituents. We must think of physical objects instead along the lines of (MTI), as mereological sums of the mind-dependent direct objects of various humans' perceptual experiences over time, where

the nature of these experiences is explanatorily grounded in the intrinsically unknowable mind-independent reality that is the subject matter of fundamental physics.[20]

All three modern metaphysical views endorse (HT). They all construe fundamental physics as a merely relational identification of the intrinsically unknowable mind-independent reality that constitutes the fundamental explanatory ground of the nature of our actual and counterfactual perceptual experience of physical objects. According to Berkeley, on the other hand, scientific investigation provides an increasingly general, detailed and accurate characterization of the content of God's intention in creating the observable physical world as He does, which is nevertheless bound to concern itself only with His means rather than His ultimate end. So fundamental physics is to be construed as a merely relational identification of the intrinsically unknowable volitional strategy of God that constitutes the fundamental explanatory ground of the nature of actual and counterfactual perceptual experience of physical objects. By mapping the modern metaphysician's intrinsically unknowable mind-independent reality onto Berkeley's intrinsically unknowable divine intention we therefore have the following general isomorphism between Berkeleyian and more modern metaphysics.

[20] The idea that physical object are presented to us in perception in this sense is also crucial to Berkeley's (1975a, 1975b) argument against Locke's (1975) materialism. Like Lewis, Locke wishes to secure some perceptual acquaintance with the intrinsic properties of physical objects, through his thesis that our ideas of primary qualities at least resemble those qualities in the objects themselves. Just as this is strictly incompatible with Lewis' official (SR), Berkeley argues that it is inconsistent with Locke's distinction between the mind-dependent ideas that are the direct objects of our perceptions and the purportedly mind-independent physical objects themselves that are supposed to be their causes. See ch. 3 for further development of this argument.

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(GI) ≡ (SR)

(HI) ≡ (MTI)

(P) ≡ (R)

All six accounts as I construe them here endorse the early modern empiricist thesis that the most fundamental characterization of perceptual experience is in terms of the subject's relation of acquaintance with certain specific mind-dependent direct objects whose intrinsic nature constitutes the way that things appear in perception. On the Berkeleyian left hand sides of the three isomorphisms set out above, the fundamental explanatory ground of the actual and counterfactual nature of such perceptual experience is God's volitional strategy. On the more modern right hand sides this explanatory ground is the fundamental nature of mind-independent physical reality. On both sides we are irremediably ignorant of the intrinsic nature of this explanatory ground that is knowable only relationally in terms ultimately of its observable effects.

According to (GI), physical objects are particular direct objects of God's creative volitional experience. According to (SR), they are mereological sums of the constituents of fundamental mind-independent reality. Correlating these two intrinsically unknowable explanatory grounds across the Berkeleyian-modern divide yields the first isomorphism above. Both (HI) and (MTI) offer the same account of physical objects as mereological sums of mind-dependent direct objects of human perceptual experience. Correlating their two quite different intrinsically unknowable fundamental explanatory grounds of such experience yields the second isomorphism

above. Similarly, (P) and (R) offer the same account of the semantics of physical object language, on which sentences superficially 'about' physical objects are reducible to sentences about the actual and counterfactual order and nature of various humans' perceptual experiences over time. Again correlating their different intrinsically unknowable explanatory grounds of such experience yields the third isomorphism above.

2.3 Empirical realism

Intuitively, none of the six views that I have been discussing sustain empirical realism, the thesis that physical objects are both the very things that are presented to us in perception and have a nature that is entirely independent of how they do or might appear to anyone. In the context of the early modern empiricist assumption, operative throughout this chapter, that the correct way to construe perceptual experience in general is in terms of a relation of acquaintance with certain specific direct objects whose nature constitutes the way things appear in perception, it is natural to identify the objects that are presented in experience in this sense precisely with such direct objects of experience. Let us say that a domain of objects is primary-empirical, then, if its elements are either identical to or mereologically composed of direct objects of human perceptual experience in the early modern sense. Thus the shortcomings of the six views under consideration may be expressed as follows.

(GI) Physical objects are neither primary-empirical nor mind-independent. They are the direct objects of God's active-creative experience. These are explicitly mind-dependent in nature. They may still be presented to us in some sense in

perception, since the direct objects of our own perceptual experiences may resemble those of God's creative experience, which are the physical objects themselves. For they are both fundamentally the same kind of entity: mind-dependent direct objects of experience. Still, since such mind-dependent entities are mind-specific in the sense that no mind-dependent direct object of one subject's experience is identical to any direct object of a distinct subject's experience, no physical object itself is primary-empirical.

(SR) Physical objects are mind-independent, since their fundamental physical parts are mind-independent; but they are not primary-empirical. For physical objects on this view are not identical to or mereologically composed of the mind-dependent direct objects of acquaintance whose nature constitutes the way things appear in perception. It may be claimed that mind-independent physical objects are nevertheless still presented to us in perception, in virtue of their resemblance, in respect of the primary qualities at least, with the mind-dependent direct objects of our perceptual experiences. I argue in ch. 3 below, though, that Berkeley (1975a, 1975b) is absolutely right in his objection to Locke (1975), that this resemblance thesis cannot be sustained in this context. Very crudely, as Berkeley puts it: "an idea [or mind-dependent direct object of experience] can be like nothing but an idea" (1975b, § 8). A closely related alternative suggestion would be that mind-independent physical objects are presented to us in perception, according to (SR), in spite of their not being primary-empirical, in virtue of the fact that perception acquaints us with the natures of the particular mind-dependent direct object of experience to which such objects are disposed to give rise in subjects like us in the circumstances in question. This is the position into which Berkeley's argument forces Locke as I develop this

dialectic in ch. 3. I argue that it is incompatible with the principle that their subjective presentation in perception provides us with a genuine conception of what mind-independent physical objects actually are. This principle may be rejected; but I suggest that there are serious costs of doing so.

(HI)/(MTI) Physical objects are primary-empirical, since they are composed of direct objects of human perceptual experience; but physical objects are not mind-independent: they are simply mereological sums of these mind-dependent parts.

(P)/(R) There are no physical objects. Physical object language sentences are analysed in terms of sentences concerning what is primary-empirical, whose truth values are in turn explanatorily grounded in the intrinsically unknowable reality relationally described by the fundamental physics. According to (P), what is primary-empirical may resemble key components of this reality (the direct objects of God's active-creative experience); but the reality is itself mind-dependent. According to (R), this reality is mind-independent; but any claims of its resemblance with anything primary-empirical are, for that very reason, as with (SR), untenable.

In any case, nothing is both primary-empirical and mind-independent. Furthermore, it is a consequence of my anti-Lockean argument in ch. 3 that nothing mind-independent may on any of these views be construed as presented in perception in some less direct way by appeal to the notion of resemblance.

The underlying isomorphism between Berkeleyian and modern metaphysical views, and the semantic, rather than ultimately metaphysical, conception of the variation

amongst the views within each of these two ranges of options, strongly suggest a diagnosis for this universal failure. All six views insist upon a strict distinction and independence between the explanatory grounds of the actual and counterfactual nature of our perceptual experience of physical objects, on the one hand, and the direct objects of those experiences that provide their most fundamental relational characterization according to the early modern approach, on the other. It is this distinction that I claim constitutes a fundamental obstacle to any adequate defence of empirical realism.

2.4 Conclusion

If my diagnosis is correct, then a crucial necessary condition for sustaining empirical realism is the identification of the explanatory grounds of the actual and counterfactual nature of human perceptual experiences of physical objects with their direct objects, in my sense, namely those objects with which the subject is acquainted in perception and that therefore provide the most fundamental characterization of the nature of the experiences themselves. Thus, the core of empirical realism is the idea that physical objects are the enduring explanatory grounds of the actual and counterfactual nature of our perceptual experiences of those very things, which are also the direct objects of such experiences. They are therefore, I shall argue, both independent of our, or anyone else's, thoughts or experiences of them, and also the very things that are presented to us in our perceptual experience of the world around us. My agenda for the remainder of the book is an extended elaboration, further motivation and defence of this identification.