suspect, if we possess a neuroscientific conceptual framework that is at last adequate to the intricate phenomena at issue.

I suggest then, that those of us who prize the flux and content of our subjective phenomenological experience need not view the advance of materialistic neuroscience with fear and foreboding. Quite the contrary. The genuine arrival of a materialist kinematics and dynamics for psychological states and cognitive processes will constitute not a gloom in which our inner life is suppressed or eclipsed, but rather a dawning, in which its marvelous intricacies are finally revealed—most notably, if we apply ourselves, in direct self-conscious introspection.

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BOOK REVIEWS


Frank Jackson’s admirable book forcefully argues that all visual experiences involve seeing sense data, that sense data are mental objects, and that seeing a material object consists in seeing a sense datum that, in a sense Jackson defines, “belongs to” that material object. These claims constitute, according to Jackson, the core of a representative theory of visual perception. Jackson argues in the course of chapter III that, like visual sense data, bodily sensations are mental objects; otherwise he confines his attention to visual perception. But his arguments would very likely adapt successfully to other sensory modalities.

Jackson’s conclusions will strike many readers as somewhat extravagant. Nonetheless, his arguments for these conclusions are invariably models of clarity, conciseness, and cogency. He builds his case for sense data and representationalism with meticulous care, and helpfully directs attention to the connections among the various steps in his over-all argument. Accordingly, I first describe the structure of that argument. I then turn to several steps that seem especially open to objection. Finally, I sketch a way one might enjoy the advantages of Jackson’s account while avoiding its more extravagant aspects.
In chapter I Jackson sets out to show that, whenever any object of visual perception exists, there exists an immediate object, and that these immediate objects are always colored shapes. An object of perception is \textit{immediate}, roughly, if we cannot analyze what it is to perceive that object in terms of perceiving some other object. This definition guarantees that no object of perception can exist unless some immediate object exists. So all Jackson must show is that, in visual perception, these immediate objects are always colored shapes (I.7/8).

Jackson begins by distinguishing cases in which it is obvious that some object of perception exists from cases in which it is not. Veridical and illusory perception plainly do involve such objects; whether visual hallucinations, such as afterimages, also do is controversial. Jackson then argues that all theories of perception agree that the immediate objects of veridical perception, defined as above, are colored shapes. For representationalism, direct realism, and idealism all insist on this, differing only “about the ontological status of the coloured expanse” (21), specifically, about whether it is a physical surface or something mental. Jackson concludes that we are warranted in claiming that the immediate objects in these two cases are colored shapes. By contrast, theories differ about whether any object of perception exists in cases of visual hallucination. But here Jackson plausibly argues that, if hallucinating does involve seeing some object, that object would have to be a colored shape. Moreover, there could be no object of visual hallucination that was not an immediate object (I.9). Veridical, illusory, and hallucinatory perception plainly exhaust the cases. Jackson concludes that, whenever some object of visual perception exists, the immediate object is a colored shape.

One might challenge Jackson’s assumption that representationalism, direct realism, and idealism cover the available range of serious theories. But even if they do, Jackson’s contention that all three theories imply that immediate objects are colored shapes is itself problematic. Direct realists use ‘colored shape’ to refer to physical surfaces, whereas representationalists and idealists apply the term instead to something mental. It therefore is questionable whether these theorists mean the same thing by ‘colored shape’. If not, their superficial agreement here relies on an equivocation. To avoid this conclusion, Jackson must insist that words for color and

*Such references are to sections of chapters: here, to ch. I, secs. 7 and 8; other parenthetical references are to pages of Jackson’s book.
for spatial properties mean the same thing, whether applied to mental or physical objects. Later (III.18-20) Jackson explicitly articulates and defends this "univocality thesis" (74), which plays a pivotal role throughout the book.

After chapter I, only two things remain to be shown before Jackson can conclude that all visual experiences involve seeing sense data. Again, the argument proceeds by distinguishing veridical and illusory vision from visual hallucination. Sense data, presumably because they are given to the senses, are traditionally taken to have just the properties they appear to have. Chapter I does show that both veridical and illusory visual perception have immediate objects that are colored shapes, but not also that those immediate objects have the colors and shapes they seem to have. Chapters II and IV argue this. By contrast, chapter I does show that if immediate objects of visual hallucination ever exist, those objects would have to have their apparent colors, but not that such objects actually exist. Chapter III attempts to show they do.

Jackson's fundamental strategy, in both cases, is to consider certain indisputably true statements and to argue that, if taken at face value, these statements imply the claim he seeks to establish. He then argues that no analysis of these statements is possible that allows us to avoid that result. His arguments for and against particular analyses are generally probing and illuminating, even when the over-all argument is not completely convincing.

Jackson's argument for objects of hallucinatory vision relies on statements about afterimages. Such statements ostensibly treat afterimages as objects; they purport to individuate afterimages, and attribute properties to them. Afterimages plainly are not physical objects. So, if they are objects at all, they must be mental objects (III.2). Jackson considers three ways one might seek to circumvent this result. We might, first, represent phrases that putatively designate afterimages as actually parts of larger, syntactically atomic predicates (III.6). The second way seeks, instead, to avoid the conclusion by characterizing afterimages as mental states rather than mental objects (III.5-9). The third, by analyzing perceptual statements adverbially, again avoids reference to mental objects (III.11-17). As Jackson notes, it is convenient to see the third strategy as a variant of the second, in which adverbially characterized mental events serve in place of mental states (63).

Jackson insists that, to achieve any "significant ontological reduction" (59), the second strategy must not countenance more than one mental state per person. We can identify, for reductive purposes, a single state with the person who is in the state, but Leib-
niz's law blocks this move if we have two or more distinct states (III.7/8). Similarly, Jackson in effect assumes, for the same reason, that the third strategy does not involve a plurality of mental states (III.11). Given this constraint, he argues convincingly that all three strategies make it impossible to capture various uncontroversial semantic connections that obtain among statements about afterimages. His most compelling argument shows that, so constrained, these strategies cannot distinguish having an afterimage that is red and green from having two afterimages, one red and the other green.

To show that immediate objects of veridical and illusory vision have the properties they seem to have, Jackson relies on statements about how things look. Such statements purport to talk about the looks things have; Jackson argues that we cannot both avoid commitment to the looks of things and save the semantic phenomena. Thus we cannot treat 'looks F' as syntactically atomic and still explain the semantic relation between looking F and being F (IV.3). We cannot analyze how things look in terms of our having beliefs about them (II.5–7) or in terms of their looking like other objects (II.4); Jackson invokes familiar and convincing arguments against analyzing the "phenomenal" sense of 'looks' by appeal to such "comparative" or "epistemic" senses.¹ Moreover, we can compare and distinguish visual images in qualitative terms that are independent of physical objects (IV.5, 8). Something's looking a particular way therefore implies the existence of its look. And evidently that look has the properties it seems to have. So, like the immediate objects of hallucination, those of veridical and illusory vision really are as they appear.

Since hallucinations are definitionally nonphysical, hallucinatory sense data are mental objects. But more is needed to show that the sense data of veridical and illusory perception are also mental. To help show this, chapter V argues that physical objects lack color. Our only reason for believing otherwise, Jackson urges, is that they cause in us perceptual experiences of color. But physical objects cause such experiences because of properties they have other than colors, and they would do so whether or not they were actually colored. For they cause these experiences solely by virtue of their molecular structure. And we cannot identify colors with such properties, because afterimages have color but lack those properties (127). So the belief that physical objects are colored is both unwar-

¹See, e.g., Roderick M. Chisholm, Perceiving: A Philosophical Study (Ithaca, N.Y.: Cornell, 1957), ch. 4.
ranted and idle (V.3-5). But the sense data in all visual perception are colored shapes. These sense data cannot, accordingly, be physical objects. They must, even in veridical and illusory perception, be mental objects.

As chapter VI convincingly argues, this conclusion does not jeopardize our knowledge of nonmental reality. We can obtain such knowledge by an inference to the best explanation of our mental sense data (VI.4-7), and the knowledge so obtained is no less secure than it would be according to a direct realist theory of perception (VI.8). In chapter VII, finally, Jackson defines what it is for a sense datum to "belong to" a physical object: The physical object must, first, cause the having of the sense datum; and, second, the spatial properties of the sense datum—its size and shape, and its distance and direction from the perceiver—must vary as functions of the corresponding spatial properties of the physical object, and so vary because of how the two are casually connected. Accordingly, Jackson concludes, we can analyze seeing a physical object as seeing a sense datum that belongs to that physical object (101; cf. VII.11).

II

Jackson's account commits him to a strikingly unintuitive conclusion, which he somewhat surprisingly embraces. When I see a physical object, it has a particular look. That look is a mental object whose properties are just as they appear. So, if what I see looks to be fifty feet away, a mental object exists that actually is fifty feet away (102/3). Indeed, if the sizes and shapes of afterimages are the same kinds of properties as those of physical objects, it is hard to see how they could help but have the same kind of external spatial location as well.

This consequence fits nicely with Jackson's definition of what it is for a sense datum to belong to a physical object. The sense datum must vary with the physical object not only with respect to size and shape, but also in regard to distance and direction from the perceiver. Jackson urges that it is no more problematic to locate perceptual mental objects outside the body in physical space than to assign pains the bodily locations they appear to have, and he has defended so locating pains earlier in the book (III.20). Indeed, no special problem arises about mental objects' existing outside the perceiver's body, since pains can be felt in phantom limbs (103). And, though Jackson does not so argue, if pains really are where they seem to be, then, at least in phantom-limb cases, neural events cause pains to occur instantaneously at some distance. If so, neural events could presumably also cause sense data to occur instantaneously fifty feet away. But these considerations will convince few
that perceptual images or other mental objects can exist outside the body.

Jackson argues that commitment to a plurality of mental states has no ontological advantage over countenancing mental objects. Since one is numerically distinct from one's states, "to have a sensation [e.g.,] will be, as on the act-object theory, to be related to something other than oneself" (60). So the choice between states and objects "appears to be verbal rather than ontological" (59). Here Jackson considers only the number of items countenanced, and not their nature. Describing an afterimage as a mental object suggests it has a fair measure of independence, substantially more than if it were just a state of the perceiver. Conceiving of afterimages as objects thus camouflages the bizarreness of Jackson's claim that afterimages exist at some distance from perceivers. By contrast, if afterimages are mental states, they would arguably have to exist wherever the perceiver does. If so, and if afterimages are mental states rather than objects, Jackson is wrong that when afterimages look to be outside the perceiver they actually are. Jackson has bypassed an important consequence of the choice between states and objects.

Jackson convincingly shows that an account that invokes states at all must invoke a plurality of states for each perceiver. But he nowhere considers construing this plurality as a single state, consisting in the sum of the constituent states. Indeed, his insistence that perceptual and bodily sensations have the same spatial properties as physical objects actually invites this move. Spatially contiguous physical objects, if causally related in suitable ways, will be parts of a larger physical object. So it is natural to take contiguous states of a single perceiver to be parts of a larger whole. And, if this larger whole is a unitary sensory state, we can according to Jackson identify it with the perceiver, thereby achieving a "significant ontological reduction" (59). Such unitary states are not mere reductive constructs, but have an intuitive basis in our conception of a sensory field. One's concurrent visual sensations are not independent objects, but together constitute the unified content of one's visual field.

The difficult problem of whether sensations of distinct modalities belong to the same sensory field is irrelevant here. For one thing, Jackson recognizes that my being warm and my being happy are each unitary states that in "a natural, if philosophically difficult, sense . . . are not things over and above and distinct from me." Our having distinct states does not here keep us from identifying them with the perceiver, since they are of different kinds (59).
Several unitary sensory states, each of a distinct modality, should similarly be nothing over and above the perceiver. But we could in any case simply identify all sensations that have the same location, whatever their modality, and rely on properties special to each modality to preserve necessary distinctions.

The composite character of those unitary states also occasions no difficulty. Being happy and being warm each consist of component states. One generally is happy about distinct things, and being warm implies that a preponderance of one's bodily parts are warm. Jackson seems to think some problem exists about mental states having parts at all (e.g., 62, 64/5), but he never specifies what it is. Intuitively, the contents of a sensory field are distinguishable parts of a unified whole. That unity permits ontological reduction; there being parts allows us to save the semantic phenomena.

Jackson's argument that physical objects lack color succeeds only if we cannot identify the colors of physical objects with their light-reflecting properties. Jackson insists that this identification fails, since afterimages have colors but cannot reflect light. Univocality is again pivotal for Jackson's argument, which evidently presupposes that the colors of afterimages and of physical objects are the same.

Jackson argues for univocality as the best explanation of the "striking fact" that words for colors and for spatial properties apply both to visual hallucinations and to physical objects (73). But he does not raise the possibility that these words might, in the two contexts, have distinct but systematically connected meanings. The only alternative he sees to univocality is that the terms in question are "radically ambiguous" (139). And then the dual use these terms have in many languages would be "a linguistic accident, a fantastic fluke" (73).

But these terms are neither univocal nor radically ambiguous. We use color words to classify physical objects. Physical objects presumably have properties that make this possible, and it is natural to take these properties to be the colors of the objects. But we also use color words to distinguish among visual sensations that, in standard circumstances, are caused by variously colored physical objects. This much hardly suggests that physical objects and visual sensations share a kind of property in virtue of which we classify both. The natural inference is rather that physical objects have properties in virtue of which we distinguish them, and that visual sensations have distinct properties that allow us to distinguish sensations that typically result from physical objects of various colors, thus making it possible for us to distinguish those physical objects.
We do not use ‘red’ to attribute the same property to a physical object and to a visual sensation; accordingly, ‘red’ means distinct things in the two contexts. But, because red sensations typically result from red physical objects, the two meanings are systematically connected. Parallel remarks apply to words for spatial properties.\(^2\)

Notoriously, we cannot spell out precisely the standard circumstances in which, e.g., a red physical object looks red. Intertransliteration is therefore impossible between statements about red physical objects and those about corresponding sensations (II.4, 76/7; also ch. II \textit{passim}). So, if ‘red’ means two distinct things in those two contexts, we shall be unable to analyze one meaning in terms of the other. But Jackson maintains that, when terms have distinct but related meanings, we must always be able to analyze one meaning in terms of the other (74, 76/7, IV.3, 109-112). And, if ‘red’ cannot have distinct but related meanings and cannot be radically ambiguous, it must be univocal.

But it places excessive strain on the traditional analytical apparatus Jackson adopts at the outset (2/3) to suppose that we can always reveal analytic connections among semantically related terms. Analogical extensions of terms, in particular, resist such treatment. It is natural to think of terms such as ‘burning’ or ‘dull’ as having been extended by analogy to apply to bodily sensations. The same is credible about the application of color words to visual sensations.

If, \textit{pace} Jackson, the colors of physical objects are distinct properties from those of visual experiences, pairs of properties for which we use the same terms will be intrinsically unrelated. The redness of visual sensations would thereby correspond to that of physical objects only contingently (cf. 139), as a result of the particular constitution of our perceptual apparatus. Jackson seems to assume, however, that meanings of terms always correspond to properties that the terms attribute (e.g., 73). If color terms ascribe unrelated properties to physical objects and to visual sensations, they would then have correspondingly unrelated meanings. Jack-

\(^2\)Berkeley clearly held that at least some terms for sensible qualities fail to apply to things univocally. Thus, ‘plane’ and ‘solid’ apply primarily, on his view, to the immediate objects of touch, and only derivatively to the objects of sight. Berkeley sometimes seems to claim that such terms are radically ambiguous, as when he writes that the visual and tactile objects to which we apply these terms are “of a nature intirly different.” But he also insists that planes and solids are both “equally suggested by the immediate objects of sight, [and] accordingly are themselves denominated plains and solids” \textit{[A New Theory of Vision}, sec. 158, in \textit{The Works of George Berkeley}, ed. A. A. Luce and T. E. Jessop (London: Thomas Nelson, 1948), vol. I; I am grateful to Robert Schwartz for this reference]. If so, the two applications of the terms, though based on distinct meanings, will nonetheless be systematically connected.
son's treatment of color and spatial terms avoids this consequence. Color terms apply only to sense data; thus no such term ascribes more than one property. And, since spatial terms ascribe the same properties to sense data as to physical objects, radical ambiguity is avoided there as well.

But connections between such pairs of properties need not hold singly, color by color and shape by shape; rather, one individual property can correspond to another by virtue of the position each has in two families of properties that are suitably connected as systematic wholes. Thus it is reasonable to regard the entire family of mental color properties, e.g., as corresponding, by virtue of relations among its members, to the family of physical colors. Intuitively, some such wholesale correspondence between mental and physical colors underwrites our systematic dual use of color terms. The relation between physical red and green, e.g., resembles the relation between the red and green of visual sensations. Parallel remarks again apply to words for spatial properties. Jackson seeks to achieve univocality by treating color and shape on different models. The present suggestion restores uniformity to our conceptions of color and shape by relinquishing an implausible univocality.

Jackson concedes that words like 'burning' do have distinct but related meanings as applied to physical objects and to bodily sensations (76). But he denies that the case of color words is similar. For "one does not know what is meant if someone says something is burning unless one knows whether the something is mental or physical." By contrast, "I know precisely what I mean by saying that I am seeing a bright yellow flash, even [if] I do not know whether the flash is a light flash or a hallucination" (76). But what I mean here presumably hinges on what I believe. If I think there is a physical flash of light, I may mean to say it is that which is yellow; if I am unsure, I will mean to describe only my visual sensation. If you do not know which I believe, you may well not know what I mean.

III

Seeing something, according to Jackson, involves the perceptual state of having a sense datum (167, 171), and having a sense datum is "be[ing] related to something other than oneself" (60). Jackson sensibly counts something as mental if it could not exist without sentient creatures' existing (3); if something is "in the mind," it is "incapable of independent existence" (80). Thus, although Jackson sees mental objects as distinct from, and often external to, sentient creatures, mental objects are also ontologically dependent on them. A satisfactory account of what it is for a sentient creature to have a
mental object must incorporate both aspects of the relation between physical and mental objects, according to Jackson. It is unclear that any credible account can do so. Nor does Jackson attempt such an account. Careful as he is to define what it is for a sense datum to belong to a physical object, he nowhere even hints at what it is for a sentient creature to have a sense datum.

These considerations recommend an account of perception that countenances sensory states, no matter what their number, and not mental objects. Mental states are preferable not, as Jackson suggests (III.5, 11), because they permit ontological reduction, but rather because states are manifestly dependent upon sentient creatures. Mental events would do equally well, since the dependence of events on objects is widely recognized. An adverbial account that invoked events would work as well as an account based on states.

But an account that invokes mental states or events will cause serious difficulties for univocality. If terms univocally apply to physical objects and mental states, such states would, e.g., be red and triangular. And it seems clear that states and events cannot be red or triangular in the very same way that physical objects are. Physical objects have color, size and shape because they have surfaces. Describing afterimages as mental objects muted the oddness of Jackson's assigning them spatial locations outside the perceiver. Similarly, talking about mental objects in general conceals the intuitive strangeness of supposing that sensory items could have the kind of properties that physical objects have.

This point can be put more abstractly. Mental objects, whatever their nature may turn out to be, would doubtless differ in important ways from ordinary physical objects. But mental states will differ in at least one crucial additional respect. States are, roughly, ways objects are, not objects. Objects can bear relations to other objects; but an object cannot be in an object, in the way it can be in a state. We characterize objects in part by reference to the states they are in. States are, in effect, properties of objects. Mental states are thus the wrong type of item to share any nontrivial properties with physical objects. Mental objects, by contrast, do not diverge in this way from physical objects. Jackson might well concur here; when adverbs modify other adverbs, he notes, they stand for properties different from those they stand for when they qualify verbs or adjectives (66, 68).

Jackson might reply that, though we do describe mental objects, such as afterimages, by saying that they are red and triangular, we do not so describe mental states, such as visual sensations or experiences. Rather, we describe visual experiences as being of some-
thing red and triangular, or of a red triangle. This usage, he might insist, reveals that perceptual states are covert relations perceivers bear to mental objects, in this case, to a red and triangular mental object.3

But the difference between our descriptions of afterimages and those of other visual experiences is not due to the ontological status of afterimages; these descriptions do not differ because afterimages are mental objects, whereas other visual sensations are mental states. Rather, when one has an afterimage, it is clear that one is not seeing a physical object. So we describe the afterimage using terms that we would have applied to a physical object, if we were seeing one. By contrast, when we take our visual sensations to result from some corresponding physical object, we signal our conviction that a physical object is involved by describing our experience as being of something red and triangular. The ‘of’ in such locutions makes tacit reference not to mental objects, but to physical objects. Accordingly, to direct attention to the intrinsic quality of the experience, rather than the presumed character of the physical object, we revert to describing the experience as simply red and triangular.

Issues of level apart, it may seem moot whether an account invokes mental objects or mental states. Every mental object will correspond to the state of having that object, and every state can be redescribed as a relation to an object. And, in both cases, terms that characterize physical objects will also apply, whether univocally or not, to mental items of some sort. A nonverbal difference that separates such accounts may be hard to find.4

But if the mental items one’s theory countenances are objects, one can represent them as having properties in common with physical objects. If the mental items are states or events, different properties must be involved. So, unless something other than univocality recommends mental objects, they will stand or fall with

3 Compare John R. Searle’s insistence that “[r]edness is not part of my visual experience . . . ; the experience is of something red, but is not itself a red experience” [Intentionality: An Essay in the Philosophy of Mind (New York: Cambridge, 1983), p. 131].

4 In his illuminating “Minds and Ideas in Berkeley” [American Philosophical Quarterly, vi, 5 (July 1969): 198–207] George Pitcher remarks on the difficulty of isolating a clear issue that divides act-object from adverbal theorists, whose accounts are cast in terms of mental states (p. 204). Pitcher proposes that we construe act-object theorists as allowing experiences to exist of which we are unaware, whereas adverbal theorists, he suggests, rule this out. Jackson does permit visual experiences of which we are unaware (24–26); but it is unclear why mental-state and adverbial theorists would not have the same reasons to do so as well.
univocality itself. Indeed, the intuitive independence mental objects have from perceivers parallels the external locations Jackson assigns them. These locations are the specifically spatial consequence, by way of univocality, of the ontological independence of mental objects.

Even Jackson seems at one point to see that univocality, and not the number of mental items, is what decides between mental states and objects. For in formulating his "univocality thesis" he writes that "[t]here is little philosophical bite to the bald assertion that there are mental objects," since that only amounts to asserting that a plurality of mental phenomena exist. "The bite comes with our claim that the mental objects really [i.e., univocally] are red, triangular, in the foot, or whatever" (73/4).

The univocality of color terms, as Jackson explains it, may not seem to amount to much. Though physical objects lack color, Jackson insists that statements like 'The tomato is red' are not on that account false. Rather, such statements attribute redness to sense data that "normally" belong to the physical object (128). Since 'red' applies only to sense data, intertranslation between statements about physical objects and sense data is not an issue. So 'red' is univocal by default. The property of sense data it stands for is a property physical objects cannot have (139). Jackson sees parallels with what holds when we speak of physical objects' causing things, or of sentences' being true (1.7/8). "[C]ausal links putatively between objects are analysable in terms of causal relations between events" (167) and, though sentences cannot literally be true (61), we can understand attributions of truth to them as indirect attributions of truth to propositions (16/7). Similarly, the bearers of color are sense data, and we can attribute color to physical objects only obliquely.

No such easy explanation of the univocality of spatial words, however, is available to Jackson. Color terms can apply obliquely to physical objects only because colored sense data belong to those objects. So Jackson must have some way, independent of colors, to specify this relation of belonging. To define that relation, Jackson needs a property that bridges the gap between sense data and physical objects. And only spatial terms are available. To explain belonging, Jackson must thus assume that physical objects and sense data both literally have the same spatial properties. Univocality here holds not by default, as with color terms, but because the univocality of color terms requires it.

Here too univocality is most troubling. Even if colors seem at
home in the mind, literal spatial extension does not. Moreover, it is
intuitively difficult to accept locating mental objects in space, at
places also occupied by physical objects, and outside perceivers' 
figures. Such locations are avoidable only by ad hoc adjustments on
univocality. And, though Jackson disagrees (80), many would in-
sist that an object's being in space along with physical objects im-
plies that its presence is detectable in at least some of the ways
physical objects are. These considerations doubtless explain why
some who concur with Jackson about univocality go on to locate
mental objects in a special "mysterious space" (103), a move which
Jackson rightly ridicules. 5

But one need not have extended mental objects, whether in phys-
ical or "mysterious" space, to correlate physical objects with visual
sensations in spatial terms. It will suffice if visual sensations
simply have a range of properties that resemble and differ from one
another in ways isomorphic to the resemblances and differences
among the strictly spatial properties of physical objects. For then
we can define a sensation as belonging to a particular physical ob-
ject just in case those properties of the sensation which correspond
to the physical spatial properties vary with the spatial properties of
that physical object.

Univocality will then fail. For these properties of sensations are
not literally spatial properties, but rather sensory analogues or
correlates of spatial properties. It is presumably in virtue of those
correlates that visual sensations fit together into a unified field and,
conversely, that one can think of the visual field as consisting of
parts. Parallel remarks apply to the other modalities.

We are now in a position to handle color. On Jackson's view, we
call a physical object red, by courtesy, if red sense data "normally"
(128) belong to it. On the present account, physical objects and
visual sensations each have distinct properties in virtue of which
we call them red, and the physical objects we count as red normally
cause the visual sensations we call red.

The tendency to see the colors and shapes of perceptible physical
objects as being the same as those of perceptual mental states is no

5 See, e.g., Bertrand Russell's distinction between public and private space in The

6 There exists some temptation to think that physical spatial relations obtain
among the contents of our visual field. If this were so, those contents would pre-
sumably have spatial locations and, hence, other physical spatial properties, in just
the way that physical objects do. But no temptation also exists to try to locate
the entire field this way. Indeed, so locating it seems impossible. This apparent impos-
sibility seems to demand an account based on analogues of spatial properties of
physical objects, rather than those properties themselves.
more than the error, which Descartes warned against, of supposing that nonmental objects are "similar to the ideas which [they] caused." Descartes held that this error stems from our ignorance about the nature of bodily objects. By contrast, the contemporary tendency to assimilate the two kinds of properties seems to result from our relative ignorance about the nature of mental states. We have such scant knowledge about mental states that we are tempted to model the properties of mental states on those of physical objects.

Jackson might complain here that the mental correlates of the present account stand in need of explanation. Thus his main objection about a related account is that it fails to provide "an alternative theory" (112), but only "draw[s] attention to the need for a [theory]" (111). By 'theory' Jackson here means an analysis of perceptual statements. But his analysis leaves at least as much unexplained as does the current account. Without knowing what it is for sentient beings to have sense data, e.g., it cannot be at all clear how physical objects cause sense data and, hence, why sense data belong to physical objects. And the present view faces no special difficulty about how we infer from mental properties to their physical counterparts. For whether the mental properties are mere correlates of or the same as the physical counterparts, we infer, as Jackson argues, to the best explanation of our sensory experiences. Since these issues do not favor either account over the other, Jackson's view has only univocality to recommend it. And, without univocality, we can avoid the perplexing extravagances of Jackson's ontology.

Despite the foregoing objections, Perception is a splendid book. It is rich in careful, illuminating argument, and abounds in detailed discussions that are subtle, precise, and penetrating. For example, the arguments for Jackson's analysis of seeing that something is so in terms of seeing objects (VII.4-7) are masterful. This book is certain to remain important for anybody interested in conceptual treatments of perception and mind.

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