

QUALIA AND THE ARGUMENT FROM ILLUSION:
A DEFENCE OF FIGMENT

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ABSTRACT: This paper attempts to resurrect two discredited ideas in the philosophy of mind. The first is the idea that perceptual illusion might have something metaphysically significant to tell us about the nature of phenomenal consciousness. The second is the idea that the colours and other qualities that ‘fill’ our sensory fields are occurrent properties (rather than, say, representations of properties) which are nevertheless to be distinguished from the ‘objective’ properties of things in the external world. I argue that theories of consciousness must recognise the existence of what Dennett mockingly labels ‘figment,’ but that this result—though metaphysically and epistemologically significant—is not incompatible with either physicalism or naturalized semantics.

QUALIA AND THE ARGUMENT FROM ILLUSION:
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Here are two ideas, once influential in the philosophy of mind, which are now widely considered discredited. The first is the idea that perceptual illusion might have something metaphysically significant to tell us about the nature of phenomenal consciousness. Even philosophers, such as Frank Jackson, who might at one time have been expected to support such considerations, pour scorn on “the notorious arguments from illusion, variation, perceptual relativity, and so on and so forth. ... [L]et me say straight away that I think these arguments prove nothing” (Jackson 1977, 107). The second is the idea that the colours and other qualities that ‘fill’ our sensory fields are occurrent properties (rather than, say, representations of properties) which are nevertheless to be distinguished from the ‘objective’ properties of things in the external world. As Daniel Dennett puts it, mockingly, “if there is no inner *figment* that could be coloured in some special, subjective, in-the-mind, phenomenal sense, colours seem to disappear altogether! *Something* has to be the colours we know and love, the colours we mix and match. Where oh where can they be?” (Dennett 1991, 370–371). He suggest that nowadays, “[w]e know better: there is no such stuff as figment” (Dennett 1991, 346).

Historically, of course, these two ideas were once closely connected: arguments from illusion were used to try and establish the existence of mental entities—in their most recent incarnation, known as *sense-data*—which were to be the objects that instantiated the figment-like mental properties known as *qualia*. The second half of

the twentieth century saw devastating attacks—from the likes of Ryle, Sellars, Austin and Wittgenstein—both on the notion of sense-data and on the soundness of extant versions of the argument from illusion. This not only cast arguments from illusion into deep disfavour, but also led to the widely held assumption that there are no good *philosophical* reasons—no good reasons that go beyond the mere first-personal delivery of introspection—to believe in qualia (construed, full-bloodedly, as being figment-like). Thus, even David Chalmers confesses that, although “I find myself absorbed in an orange sensation and *something is going on* ... [t]here is something that needs explaining, even after I have explained the processes of discrimination and action: there is the *experience*. [Nevertheless] ... I cannot *prove* that there is a further problem, precisely because I cannot prove that consciousness exists” (Chalmers 1996, xii).

In this paper, I set out to prove that consciousness exists. Furthermore, I attempt to do so by resuscitating a version of the argument from illusion that avoids the objections to which earlier formulations have succumbed, and that also avoids the ontological profligacy of sense-datum theory. In fact, I claim that the variety of ‘figment’ that this argument resurrects—though, as Chalmers complains, something that has yet to be accounted for by the deflationist accounts of contemporary physicalists—is nevertheless compatible with physicalism. This version of the argument from illusion shows, I will suggest, that phenomenal properties—qualia—actually do exist (*contra* qualia eliminativists, like Daniel Dennett, Anthony Everett and Georges Rey), have a certain qualitative character (*contra* qualia deflationists like Austen Clark, William Lycan and Gilbert Harman) and furthermore are most plausibly properties of the brain (*contra* qualia externalists, like Fred Dretske, Gregory

McCulloch and Michael Tye). That is, I will argue that brains have phenomenal properties (and that consequently no account of mentality will be complete unless it includes an account of these properties).

I shall proceed by first describing a very thin-blooded account of the *meaning* of ‘qualia,’ so that it will be clear what is being argued about. This account is not supposed to be a theory of qualia: it is just intended to pick out what we need a theory *of*. I intend it to be as thoroughly theory-neutral as possible; even Dennett, a famous qualia eliminativist, ought to recognize the coherence of this usage—as I shall show, he uses it himself. I will then use this definition of ‘quale’ in a revised version of the argument from illusion which demonstrates that at least some qualia must be properties of brain states (and which can plausibly be extended, though with somewhat less certainty, to all qualia). In the following section I draw on this result to suggest the barest outlines of a more full-blooded metaphysical and epistemological account of qualia, and finally I will have something to say about why the kind of argument from illusion I present might not have been given much weight in recent philosophy of mind.

I.

Even a cursory scan of the literature suggests that the philosophical term-of-art ‘quale’ is, at least on the face of it, not a particularly clear or concrete one. Some writers deny that it has any meaning at all; others hold that it has a determinate meaning but fails to pick out anything real in the world. Even those who assert that qualia exist often seem to be making that claim about very different entities or properties. Some philosophers treat qualia as irreducibly mental properties, for

example; others do not. Similarly, for some qualia are, if anything, necessarily subjective, while others agree qualia exist but deny there are *any* properties which are necessarily subjective.

Nevertheless, there is an overlapping common core to all definitions and correct usages of ‘qualia’—there is something that virtually everybody means when they use this word, some public rule for its minimally correct application. What I want to do first is to give myself license to use this utterly minimal notion without committing myself, in advance of argument, to any of the metaphysical and epistemological baggage that may or may not go along with it (including, of course, the claim that such properties actually exist). I want to be able to talk about qualia, at this stage of the argument, in such a way that no one, no matter what their philosophical school, will feel compelled to object to the usage. My aim here is to present something like a “topic-neutral” account of qualia: the meaning of the word does not pick out qualia by all their attributes, and so is consistent with various different theories of those attributes.¹

So, at their most banal, what are qualia? They are, on the way of talking I wish to adopt, simply *properties² apprehended from the first-person perspective*. Paradigm examples of

¹ See Smart (1959).

² Why properties? Why not, say, states, processes, events or relations? The main reason for this stipulation is simply that this is by far the most common usage among those who set out to define qualia. (For representative examples, see almost any dictionary or encyclopaedia of philosophy, such as Robert Audi’s definition in the *Cambridge Dictionary of Philosophy*, Ned Block’s in the *Blackwell Companion to Philosophy*, or Janet Levin’s in the *Routledge Encyclopedia of Philosophy*.) This assumption does have implications for my argument, but I take it that it is

qualia include the taste of milk, as it is encountered by a drinker; the colour of a sunset, from the perspective of a particular viewer; a pain, from the point of view of its unfortunate subject; the feeling of sand between the toes. Qualia are just properties specified in a particularly *perspectival* way. There is thus, trivially, always ‘something it is like’ to have qualia—in some attenuated sense at least—but this is simply because qualia are minimally defined with reference to some perspective or other. This way of talking thus meshes neatly with the typical association of qualia exclusively with perceptual or introspective states, and forms a clear and unmysterious contrast with such plain old, non-perspectival properties as being a cube, being made of carbon, or having a dial currently reading 37 kph. However drawing this contrast does not, in itself, commit us to the existence of two ontologically distinct classes of properties; indeed, it is natural to think, perhaps one and the same property token might sometimes be a quale and sometimes not. *Being a cube* is not in itself a quale, but a token of that very property, when apprehended by some observer, perhaps is a quale. That is, on the usage I am adopting here, it is not *the apprehending of* the cube (the colour, the taste, etc.) which is the quale, nor a property of that apprehending, but the *property apprehended*.

Thus far, I take it, my semantic stipulations concerning ‘qualia’ should be able to command universal agreement. For example, even Daniel Dennett begins his famous eliminativist manifesto “Quining Qualia” (Dennett 1988, 42–77) with the words:

‘Qualia’ is an unfamiliar term for something that could not be more familiar

uncontroversial that there *are* such properties as those picked out by my definition, whether or not it is agreed that they are best called ‘qualia,’ and so the assumption does not

to each of us: the *ways things seem to us*. ... Look at a glass of milk at sunset; *the way it looks to you*—the particular, personal, subjective visual quality of the glass of milk is the *quale* of your visual experience at the moment. The *way the milk tastes to you then* is another gustatory *quale*, and *how it sounds to you* as you swallow is an auditory *quale*. These various ‘properties of conscious experience’ are prime examples of *qualia*. (Dennett 1988, 42)

It’s true that he then goes on to say he will argue that “there are no such properties as qualia” (Dennett 1988, 42), but what he means by this, he immediately explains, is that the properties “in virtue of which [states of consciousness] have the experiential content that they do” are “so unlike the properties traditionally imputed to consciousness that it would be grossly misleading to call any of them the long-sought qualia” (Dennett 1988, 43). That is, Dennett does not deny that there are such things as the way milk tastes to you or looks to you—who does?²—rather, it turns out, he denies that the way milk tastes to you is ineffable, intrinsic, private and directly apprehensible in consciousness (Dennett 1988, 47). He does not deny that colours and tastes are somehow presented to consciousness—by contrast, he points to those properties, calls them “qualia,” and then denies a particular *theory* about these colours and tastes.

It bears emphasizing that, if this topic-neutral account of the meaning of ‘qualia’ is adopted, it is *not* part of the *meaning* of the term that qualia are particularly ‘mental,’ or ‘internal,’ or ‘subjective’ properties, let alone ineffable, intrinsic, private and directly apprehensible. Qualia are colours *as they are presented to us in visual sensation*,

illegitimately beg the question.

tastes *as we experience them*, sounds *as we hear them*, and so on; but this is not (at least not yet) to say that all these properties do not actually inhere in the objects that appear to have them. By “phenomenal redness” we mean the colour red as it appears to us in visual sensation, but we need not mean that phenomenal redness can *only* be apprehended from the first person perspective; in particular, phenomenal redness might—as far as the meanings of the words are concerned—be identical with actual redness: with a surface reflectance property of certain objects, for example.

One of the reasons to avoid making it an analytic truth that qualia are ‘mental’ properties is to avoid any appearance of circularity in the argument to come. The second is that not all who use the term (and, let us assume, use it correctly) treat qualia as being ‘mental.’ For example Fred Dretske begins his discussion of qualia (1995, 73), by writing (in accordance with our definition) that “it seems safe enough to begin by saying that the qualia in sense modality M (for S) are the ways objects phenomenally appear or seem to S in M”: but he goes on to claim that only representations are mental (Dretske 1995, xiii) and that qualia are not representations or properties of representations, but are “those properties that ... an object is sensuously represented ... as having” (Dretske 1995, 73). On Dretske’s account, qualia—such as colours—are typically properties of external objects in the physical world: strawberries are visually represented as being red, but it is not *representations* which are red but strawberries themselves.³

³ If you want to understand the quale experienced by a dogfish sensing an electric field, Dretske claims, the property you want to look at is the property of being an electric field: “there is no more to experiencing an electric field of type T than there is to being an electric field of type T ... T is the quale of this experience. If Mary knows what a field of type T is,

To sum up the story so far, the word ‘qualia’ picks out phenomenal properties—properties encountered from a first-person perspective. Defined in this minimal, theory-neutral way, qualia clearly exist—we do have first person access to colours, sounds, shapes and so on—but use of the term does not entail that these properties are distinct from the physical, non-perspectival properties of external objects of perception. I shall now argue, however, that *in fact* qualia—as so defined—are *not* properties of external objects of perception but instead are mental properties.

II.

Arguments from illusion—more accurately known as arguments from perceptual relativity⁴—are based upon the claim that perceptual experiences can vary in ways that the external perceived objects do not. There are a variety of forms this premise can take. A common one relies on the claim that perceptual experiences vary *between individuals* when they are looking at or otherwise perceiving the same object.⁵ It is also possible to make a very similar argument using *intra-personal* differences in experience over time when it is plausible to assert that the external object itself has not changed in the relevant respects (for example, changes to the size and shape of objects when the observer’s perspective is quickly varied). Alternatively one can appeal to the sensory experiences of *non-normal* perceivers when they observe material objects,

she knows all there is to know about the quality of experiences of this type” (Dretske 1995, 85).

⁴ See, e.g., Hirst 1959 and Cornman 1971.

⁵ See, for example, Moore 1953, 30ff..

such as the perceptual experiences of the colour-blind or drug-influenced; or the premise can rely upon such common *perceptual illusions* as straight sticks appearing bent when refracted by water, or distant green hills seeming purple. Finally there is another possible premise, somewhat less widely noticed in the literature, which relies on the possibility that other *species*, such as flies, bats and Martians, might have very different perceptual experiences when observing the same external objects.⁶

In the past, the conclusion drawn from this premise was often that object-like *sensations* must exist, as mind-dependent phenomenal individuals, distinct from the external objects which must then be only indirectly perceived. However, I want to present the argument in a rather different form: I will argue that *qualia*—phenomenal properties, as we have just defined them—must be tokened distinctly from the actual, objective properties of the external objects of perception. Phenomenal redness—the redness we ‘experience in our visual field’—is a distinct property from actual redness.

The traditional premise, therefore, should be construed as making the following claim: sometimes, external objects of perception present two different, *incompatible* qualia to two different perceivers at the same time, or to one perceiver over time. That is, for example, a ripe strawberry may have the phenomenal property of being

⁶ William Seager (1991, 150–151, 208)—drawing on the University of Toronto doctoral work of Evan Thompson—notes that pigeon colour vision is subserved by four or five types of colour receptor, as contrasted with the three of human colour vision. Since we know that people lacking colour receptors see no hues, that people lacking one see only two fundamental hues, and that normal humans see three, this implies that pigeons see extra hues compared to humans. (Pigeons don’t have all the advantages, though: they have only 37 taste buds, compared to a human’s 9,000.)

red all over to a normal observer, but look completely dark grey to a colour-blind perceiver just inches to the left; yet, one wants to say, the strawberry itself cannot be both completely red and completely grey. The chemical phenol-thio-urea tastes extremely bitter to most people, but as tasteless as water to about a quarter of the population: can the substance itself be *both* bitter and tasteless? A quarter lying on a desk may look elliptical from several feet to the side but appears circular when viewed from directly above, yet coins do not have two different shapes at the same time.

The intermediate conclusion I wish to draw from these familiar examples, of course, is that at least one quale in each of these cases—the greyness, the tastelessness, the ellipticality—is not a property of the perceived objects. It is important to be clear about what is meant by this. In the strawberry case, the fruit looks a different colour to the two different perceivers: that is, there are two different qualia being instantiated, in exactly the sense of ‘qualia’ which we pinned down above—there are two occurrent incompatible first-person perspectival properties. For one person, the strawberry presents the phenomenal property of redness; for the other, it presents the phenomenal property of greyness. Even if one of these two properties—phenomenal redness, say—inhered in the strawberry, they could not *both* inhere in the strawberry. Its surface could not plausibly both be ‘covered in’ phenomenal redness and phenomenal grey.

The argument so far is straightforwardly valid. Since properties F and G are incompatible, x is not both F and G ; therefore at least one of the observers must be perceptually experiencing a phenomenal property which is not a property of x . It might, however, be objected that properties F and G in examples like these need *not*

in fact be incompatible, and so the argument is not sound—*both* F and G might be properties of x . But this would be a distinctly implausible claim. It is perhaps logically possible that all of x that is visible to Jack is grey and that all of x that is visible to Jill is red, but under certain circumstances, such as where Jack and Jill are standing close together (but, perhaps, Jack is colour-blind), this seems very hard to take seriously. Under these and other similar circumstances, it would lead to wildly creative consequences for the geometry of material objects which seem utterly counter-intuitive: what kind of shape could present one wholly red side and one wholly grey side to two observers who stand on the same side of the thing and each reasonably believe they see, say, all of the southern exposure of a sphere?

But perhaps what someone who argues phenomenal redness and greyness are not incompatible means is that the properties of being red and grey are *relational* or *dispositional* or *causal* properties, and that the external perceptual object is both wholly red and wholly grey because it can cause the former sensation in some people and the latter in others.⁷ We might say, then, that it has the power of causing both red sensations and grey sensations, or that it can enter into both the relation of appearing red and that of appearing grey. Note, first, that this sort of account is only superficially similar to the familiar relational accounts of secondary qualities, such that we might say an object is red if it presents that appearance to a ‘normal’ observer under ‘normal’ conditions. If the apparent familiarity of this doctrine is attractive, then that is misleading. The point of the move we are discussing here is to

⁷ This kind of account usually assumes colour (etc.) is a secondary quality, but (with some adjustments) it need not do so. Frank Jackson (1996), for example, defends an account of

allow us to say that the object in question is *both* wholly red *and* wholly grey (and, say, wholly ultraviolet, since that's how it appears to bees, and wholly Octarine⁸ since that's how it would appear to certain possible non-Earthly species, and so on for all possible cases). So an appeal to normal conditions is totally irrelevant in considering the actual, 'objective' colour properties of this strawberry. At best we can elect, chauvinistically, to call objects like the fruit "red," while recognizing all along that it is also, *and just as 'objectively,'* grey, ultraviolet, Octarine, and so on. In other words, the issue that confronts us here is not when and how to privilege one appearance over all the others, but whether it is possible for us to say that *all the appearances the object presents are equally veridical.*

Secondly, and perhaps more importantly, the objection tacitly concedes the very point I am trying to make. Even if we were to accept the proposal and multiply the number of properties possessed by objects according to the number of different ways they may appear to different observers, what we would mean by this is that they could bring about different qualia in different perceivers.⁹ But qualia are the ways objects appear to us: the *phenomenal* redness of a child's ball is not its disposition to affect us in certain ways (though that may or may not be what the *colour red* is)—it is what we might call the manifest or occurrent visual property of redness, from the first-person perspective. What is at issue is whether this manifest property is *the same property* as any of the physical, non-perspectival properties of the ball, and in

colour as a primary quality—as the categorical basis of its disposition to look coloured.

⁸ An imaginary colour from Terry Pratchett's *Discworld* novels.

⁹ Just what this might mean—how could qualia be properties *of (parts of) perceivers?*—will emerge momentarily.

particular the physical property of being coloured red. The claim currently being argued for is precisely that physical objects can bring about multiple phenomenal property-tokens relative to different observers, or under different occasions of observation, and that not all of these phenomenal properties can be identified with physical properties of the object. Once again, unless we are prepared to say that the object's surface really is wholly 'covered in' grey *and* wholly saturated in redness, the argument still stands. This is not, of course, to deny that physical objects have dispositional powers to cause perceivers of a certain type to undergo a certain sort of perceptual experience; rather, it is to argue that the multitude of phenomenal properties thus conjured cannot each be *identified* with that dispositional power.

So, at least sometimes, phenomenal properties *F* and *G* are incompatible, and hence, on those occasions, at least one of them cannot be a property of the external perceived object in question. Perhaps this conclusion seems metaphysically mild, perhaps even boringly familiar; but—as a venerable tradition in philosophy once recognized—this is not so. For it follows from this sub-conclusion that we are left with a property token that is metaphysically adrift and which, somehow or other, will require a home. There are two additional premises at work here. First, the occurrence of qualia involves—still in an utterly banal way—the tokening or instantiation of some perspectival property: for there to be some way that milk tastes to you, for example, there must be a tokening of the perspectival property taste-of-milk. This is not of course to assume that taste-of-milk is mysteriously non-physical, intrinsically subjective, and so on: it is simply to acknowledge that, since qualia are (by definition) properties apprehended from the first-person perspective, the occurrence of qualia consists in the occurrence of properties (rather than, say, the mere 'seeming' of the

occurrence of a property).

The second premise is the truism that there are no unowned property tokens—every property instantiation inheres in some individual. For every property token, there is something of which it is a property.

From all of this, it follows directly that at least some qualia are properties of an individual *other than* external perceptual objects: cases of misperception involve phenomenal property tokens which cannot be properties of the objects of perception, and so must be properties of something else. There must be *something* which is phenomenally grey when the colour-blind perceiver looks at a ripe strawberry ... and it isn't the strawberry. Once again, it is important to be quite clear about what is being argued for. This argument from perceiver relativity does *not* establish that, if something looks red but is not, there must be something *else* which is red. Rather, it establishes that there must be something else which is *phenomenally* red—something else in which inheres the quale of redness.¹⁰ But this is a sufficiently radical claim; the property we are talking about may not be 'real redness,' but it is *that property* we experience when we look at red, or putatively red, things. There is something, this stage of the argument claims, which has *that very colour property* which is tokened when we look at red things. In general, at least some of the property tokenings that we apprehend from the first person perspective have turned out not to be property tokens that are instantiated by the normal, external objects of perception, and so must be property tokens that are instantiated by some other class

¹⁰ That is, it also establishes that tokens of phenomenal redness need not also be tokens of 'real' redness.

of individuals.

Once more, this sequence of steps of the argument is valid. If both properties *F* and *G* are tokened, but at most one of them inheres in the external object of perception, and if all property tokens must inhere in *some* individual, then at least one of *F* and *G* must inhere in some *other* individual. Is it sound? I take it that the doctrine that all property tokens are properties of some individual is relatively unassailable,¹¹ but what about the claim that conscious perception involves the tokening of qualia—of phenomenal properties? If you and I both look at a strawberry, and I am colour-blind, *must* we admit that two phenomenal properties are tokened in the world, phenomenal redness and phenomenal greyness? Could we somehow say that *F* and *G* are *not* both property tokens—that, perhaps, only one of them is?

III.

David Armstrong once made what appears to be a claim of just this sort. He stated that it is *not* the case “that when something physical looks green to somebody, but is not green, or where somebody images something green, then the sensory quality of

¹¹ I believe that, at least in the literature on perception and experience, this tack has never really been tried. (As Frank Jackson once put it, “it is ... quite clear that it is essential to the notion of a property that it cannot be instantiated in the absence of a bearer” (1977, 54).) Elizabeth Wolgast (1962) did argue that the best response to the argument from illusion is to insist that qualities *can* exist without belonging to things. However, by this it turns out that she means only they are merely “appearances” rather than “qualities possessed by things”—that is, they are not properties of external perceived objects.

greenness is present” (Armstrong and Malcolm 1984, 171), and by this he apparently meant, not just that there is nothing *green* present (which is obviously true), but that there is nothing *phenomenally* green present—no green quale. Notice that this is not just an attack upon some particular theory of qualia, as is Dennett’s eliminativism; rather, at least if it strikes against our thesis here, it is an attack upon the very existence of experienced colours (tastes, and smells) when they do not correspond to the actual colours (tastes and smells) of perceived objects in the world.

In the passage from which this quotation is taken Armstrong, as far as I can tell, offers relatively little defence of this claim. However, he does suggest that his major motivation for this stance is that allowing we can experience “greenness,” when *ex hypothesi* there are no green objects there, casts us behind the veil of appearance.

Once one has gone this far, it proves difficult to maintain that *anything* except mental things are green. The greenness of vine-leaves is dismissed as a mere *façon de parler*. Vine-leaves are ‘green’ because they have the power to create in us mental phenomena which have the actual quality of greenness.¹²

Similarly, in *A Materialist Theory of the Mind*, (Armstrong 1968, 1993, 271 ff.) Armstrong refuses to accept that phenomenal properties can be properties of the brain since then we would be “forced to accept a Representative theory of perception, with all its difficulties, unless, indeed, we accept the still more desperate doctrine of Phenomenalism” (Armstrong 1968, 1993, 272).

However, worries of Armstrong’s type are ungrounded, at least as they apply to

¹² Armstrong and Malcolm 1984, 171. Frank Jackson calls this “the most widely canvassed objection to Representationalism, that it makes the external world it posits unknowable”

this version of the argument from perceptual relativity. First, it is perfectly possible to avoid—and I have tried to do so—the conclusion that greenness is a mental property and not a property of external objects. That is, after all, the *point* of distinguishing between phenomenal greenness—which it turns out is, at least sometimes, mental—and the “actual quality of” greenness, which continues to be whatever property it is—standardly, perhaps, some dispositional property of perceived objects. So really business continues as usual: apples, vine leaves and parrots are ‘really green,’ and some sensory experiences are phenomenally green—they ‘feel’ green. There is no tension between this argument and colour realism.

Second, this version of the argument from perceiver relativity does not commit us to the claim that we *infer* our perceptual knowledge of the external world from our apprehension of our own qualia. It demonstrates only that our sensation of the external world involves qualia, and that these qualia are (at least sometimes) not properties of the objects perceived. It is not intended to be an indirect act-object theory of perception, and tells no story at all about *intentional* content. It is certainly *possible* to tell a story about the content of our sensory states that makes no mention at all of their phenomenal properties, but instead relies upon, say, their teleological or causal properties.¹⁵ That qualia must be, say, neural properties surely does not *automatically* falsify these theories—it merely tells us more about the character of our mental representations. Thus, the assertion that qualia are properties of the brain does not entail that the existence or nature of the external world is merely inferred.

(1977, 141).

¹⁵ See Dretske (1981, 1988), Fodor (1987, 1990), Millikan (1984) and Papineau (1993) for

Moreover, a position like the one I attribute to the Armstrong of 1984 (and which may be also attributable to Fred Dretske (1995), J.J.C. Smart (1959) and, in some moods, Daniel Dennett (1994)) is untenable. Presumably the claim would be something like this. Normally, when we look at something green the property we see—the phenomenal greenness—is a property of the object itself: that is, we are presented with a property from the first person perspective of perception, and that property is none other than greenness itself. Vine leaves and their ilk are phenomenally green, but nothing ‘in the head’ is. However, sometimes when we think we see something green, such as when we hallucinate the vision of an oasis, we are in fact mistaken—there is really nothing green around. In these cases, then, since phenomenal greenness is identical with actual greenness, *nothing* is phenomenally green: that is, there is no green quale in even the anodyne sense defined above—we are not presented with greenness from the first person perspective. We may well come to believe that some putative external object is green,¹⁴ but this belief involves no qualia, no phenomenal greenness.

It would follow from this position, absurdly, that while perception involves qualia—that is, simply, the first person apprehension of property tokens—misperception¹⁵ does not. Suppose I look at a green lawn under normal viewing

some central examples of such theories, and Cummins (1989) for a good general discussion.

¹⁴ “I think we should grasp the nettle, and simply deny that, because we know very well what the real properties of things are, despite their sensible appearance, this implies that we are not also under illusion at the same time. It is simply that the former belief is dominant over the latter. We are deceived, although we are not deceived” (Armstrong 1955, 99).

¹⁵ We should recall at this point that “misperception” can reasonably be taken to involve, not

conditions; the Armstrongian would say, reasonably enough, that I experience a green quale—that I see phenomenal greenness. Suppose, however, that I now put on some red tinted lenses, and that this (as one would say) makes the lawn look magenta. The lawn is not magenta, it is green; the glasses are not magenta, they are red; and for the Armstrongian the lawn and glasses are the *only* objects in the vicinity which have relevant phenomenal properties—they are the only things possessing what Armstrong calls “sensory qualities.” Therefore, the Armstrongian must conclude, there is no phenomenal magenta instantiated at all. Certainly, I *believe* the lawn looks magenta—perhaps my sensory state has the *content* that the lawn is magenta—but this is not the point. What’s relevant is that the *colour* magenta is nowhere to be found; indeed, presumably, since I am not seeing green (or red) either, there would be no phenomenal colour experience at all, no qualia. I suggest this is a *reductio*.

Apart from the intrinsic implausibility to this claim itself, it leads on into an, if possible, even less pleasant dilemma: either “qualia,” in the sense it is being used in the models of Armstrong and Dretske, have nothing to do with what mental life *feels like*—in which case we are still owed an explanation of the subjective, phenomenal qualities of consciousness, and are back where we started—or, by contrast with veridical perception, *there is nothing it feels like to misperceive*. That is, on the Armstrongian account, when we undergo veridical perception, visual qualia are present and there is ‘something it is like’ to have that experience; when we

just cases of delusion, but *all* the possible cases of perceptual relativity outlined above—arguably, that is, most of (if not all) our perceptual experience.

misperceive, there are no visual qualia and so presumably there is nothing it is like to undergo the state—in the relevant sense, veridical perception would be conscious, and misperception would not. In short, either the absence of qualia makes a difference to perceptual experience, or it does not, and either way the result is deeply unpalatable.

So, at least sometimes, phenomenal properties inhere in objects other than the external objects of perception of which they appear to be properties. What objects *do* they belong to then? Unless we want to return to substance dualism, the answer is clear. The only other plausible physical property-holder available, once perceived objects external to the human sensory system are ruled out, are states *of* that system—that is to say, most plausibly, states of the brain.¹⁶ It is hardly worth taking seriously the notion that phenomenal colours, tastes and pains might be properties of some physical object *other* than external objects of perception or brains—such as afferent nerve endings, for example, or volumes of thin air, or *unperceived* objects. It is true that the ‘substance physicalist’ can recognize properties of individuals which are not physically constituted, such as numbers, centres of gravity, or inexistent intentional objects, but again these are not the sort of objects which can plausibly be said to be phenomenally coloured, smelly or painful.

¹⁶ By “brain state” I mean the fundamental, intrinsic properties of a spatio-temporal region of the brain (e.g., a particular area of visual cortex V4, during those times when such-and-such bio-chemical processes are going on), that form the basis of its other properties. However, we should think of brain states as only determining all their *physical* properties, as otherwise the logical supervenience of qualia follows trivially from this argument, which would be too strong a conclusion.

Although one cannot specify *a priori* just which neural states involve qualia—this is an empirical matter—we can be a little more careful in our talk of ‘brain states.’ I think of a state¹⁷ as a set of things having properties at times. States have properties, but generally the sort of properties had by states differ from the sort had by things. For example, a person painted purple sitting in a chair is a state. That it occurs at a particular time is a property of the state, but being purple is a property of the *person* and not of the state. Qualia are of the latter category of property, rather than the former: thus, strictly speaking, qualia should be said to be among the properties of the individuals involved in brain states (i.e. chunks of the brain), rather than of the states themselves.

My claim that qualia must be properties of brains, then, relies upon the notion that the only plausible phenomenal-property–holding entities around are external objects and brains, and that the impulse to hypothesise *extra* individuals to form a basis for qualia—such as, on certain interpretations, “images” or “sense-data”—is one to be resisted. For example, one might loosely say that qualia are “properties of consciousness” (or images, etc.), but one should not mean by this that consciousness is a *thing* which has properties; images do not “have” phenomenal greenness in the same way that apples have the property of greenness. Rather phenomenal consciousness is a process *made up of* qualia (at least in part), and just as apples are green, *brain states* are *phenomenally* green. When someone perceives a wet dog, what that person experiences is shape qualia, colour qualia, smell qualia, etc., combined in a certain way. Once all these phenomenal properties have been enumerated, there is

¹⁷ And perhaps also an event—see e.g. Kim 1976.

nothing else: there is not, *in addition*, some wet dog image—to take away the qualia tokens *just is* to take away the phenomenal consciousness.

Perhaps, though, one might still want to insist that it is nevertheless *not* the *brain* in which qualia inhere. For example, one might object, when I hallucinate a black dog it is not the brain which is black but *the (hallucinatory) dog*. Generally, it does not seem to be true that predicates used in articulating the contents of phenomenal thought are predicates which are true of or instantiated by parts of the brain—rather, they are true of the entities thought *about*. Further, the dog I hallucinate, one might say, is not itself a property-token: rather, it has the ontological status of something that *has* properties (in this case, blackness). To put it another way, to describe the phenomenal features of the hallucination one typically uses nouns (such as “dog”), and nouns usually denote *individuals* (rather than properties), hence potential property-holders.

This may well seem a plausible and perhaps even familiar response, but I think any air of plausibility is misleading—or perhaps better, misdirected: the points made are plausibly true of descriptions of the *content* of hallucinations, but cannot possibly be true of the qualia themselves. Suppose you hallucinate a black dog. There is no dog and nothing relevant that is black—we want to avoid any theory (like a simple-minded sense-datum theory) which hypothesises something black or some kind of intermediate dog-substitute. That is, in short, there is nothing around that has the property of blackness. On the other hand, there are certainly a bunch of quale-tokens being instantiated, including phenomenal blackness: there is nothing black, but there *is* the appearance of blackness. Of what are *these* property tokens properties? Well they, also, cannot be properties of the hallucinatory dog, again

because the dog is *hallucinatory*—it does not exist. They therefore must be properties of something else ... and here we are back where we started. Qualia, in sum, cannot be properties of hallucinatory dogs because hallucinatory dogs do not exist.

On the other hand, the *content* of my hallucination is, let us suppose, that there is a black dog. Furthermore, by “dog” presumably we mean what we always mean and, in particular, we mean something which has properties. It is to this (non-existent) dog that I (falsely) attribute the property of actual blackness: the predicate “is black” in this account of the *content* of the hallucination, picks out, *not* a property of my brain, but a putative property of dogs. It may be at least roughly true to say that “the content of my hallucination is a dog,” and that “the colour of that dog is black.” But it does not follow that the *content* of my hallucination is black (phenomenally or otherwise); that *would*, I think, be a category mistake—contents, unlike dogs, are just not the kind of thing that can be coloured. Instead we must insist that properly speaking the (falsidical) content of my hallucination is *that* some dog is black.

The conclusion of this argument from perceiver relativity, then, is that qualia—by which we mean phenomenal properties, the properties with which we are acquainted in the first person perspective—are (at least sometimes) properties of the brain.

IV.

It may perhaps seem at this point that I am belabouring the obvious. And in a way I am. After all, I have set out to prove that phenomenal consciousness exists and is produced by the brain, and that, in many circles, is a conclusion that is as familiar and unsurprising as anything could be. Yet, as it is formulated here, it is a conclusion that is apparently either denied or ignored by a great deal—perhaps even the majority—

of work in contemporary philosophy of mind: by thinkers as diverse as Daniel Dennett, Michael Tye, William Lycan, David Armstrong, Paul and Patricia Churchland, and David Rosenthal. The following sentiment is representative of the ‘standard view’:

The materialist line rejects any presentation of phenomenal colour. Here the perception is just a ‘physically acceptable’ state of the brain to which first-person concepts are applied in introspection. Nothing is red—objectively, phenomenally, or otherwise. The brain isn’t red, and the introspective concepts neither are, nor need otherwise introduce, phenomenal red. Just as tokens of the English predicate ‘red’ can represent objects as red without themselves being, or otherwise needing to present, red, tokens of the mentalese predicate ‘RED’ can represent red-perceptions as red-perceptions without themselves being, or otherwise needing to represent, phenomenal red. (Raffman 1995, 298)

What I take myself to have shown, however, is that qualia are (often) non-identical with the properties of external objects of perception that they purport to ‘represent,’ and these ‘internal’ qualia are the very properties that are presented to us from the first person perspective: they are the colours, smells, sounds, tastes and tickles that occupy our sensory fields. The ‘redness’ we experience when we look at a strawberry—*that* property—is what is now being attributed to brain parts. Not merely the capacity to discriminate redness from greenness, not just some representation that redness is the case, or simply a state with the content that some intentional object is red, but *phenomenal redness*. To paraphrase Dennett, it is the colours as we know and love them, the colours we mix and match—in his

memorable terminology, *figment*—that are the subject of my conclusion.

To make this position more concrete, let me illustrate it with a sketch of the ontology of the perception of a wet dog. First, there exists an everyday, physical, drenched canine with the real properties of being hairy, brown, smelly, and so on. Second, there is what we might loosely call a causal chain from the dog to the central nervous system of the perceiver. Third there is some sequence of states of the central nervous system—possibly highly dispersed and chronologically asynchronous—which make up the relevant perceptual processing. Fourth, there are the various simple and complex *properties* associated with these states, including their location, size, electrical charge, mass, input-output characteristics, and so on. And among these properties, the argument from illusion presented here seems to show, are *phenomenal* properties—qualia. That is, certain of these brain states involve the property of being phenomenally brown, phenomenally wet-feeling, phenomenally smelly, and so on. Hence any self-respecting theory of mentality needs to treat these phenomenal properties as a central part of the domain it sets out to explain.

So I think this is a significant result. Perhaps contrary to first appearances, however, this conclusion, in itself, has little impact upon the solution to the problem of mind-brain relation. Qualia, as they are identified here, *might* be irreducibly *mental* properties of brains, and so property dualism or some form of double-aspect theory might be true and materialism false. On the other hand, they might *not* be non-physical. One cannot simply *point* to phenomenal consciousness and treat this as an argument that qualia couldn't possibly be physical (and, I take it, no prominent contemporary dualist does so); hence, to establish the existence of full-blooded phenomenal consciousness is not to establish dualism. For example, in defining

qualia as phenomenal, first-personally perspectival properties, we were careful not to assume that qualia are *only* accessible subjectively, from the first-person. It could still be, for all this argument has shown, that qualia are identical with, or reducible to in some as yet unforeseen way, or metaphysically supervenient on, complexes of standardly ‘physical’ properties of the brain like its chemical composition or electromagnetic oscillation. Alternatively, they could be identical with some set of third-person observable properties that have yet to be identified such as perhaps, along the lines of the theory of Penrose and Hameroff,¹⁸ the microtubular collapse of quantum gravitational ‘bubbles.’¹⁹

Nevertheless, it does seem to me that to take seriously the view that qualia are properties of neural states is to make some fairly substantial theoretical commitments which are relevant to the success or failure of physicalist accounts of consciousness. Clearly, parts of the brain are not actually forest green or excruciatingly loud²⁰—and of course nothing in the argument presented here has suggested they are—and so therefore we simply cannot think of *phenomenal* properties on the model of the ‘objective,’ external properties they are, so to speak, ‘normally’ correlated with. To be phenomenally coloured, whatever it is, is not to be disposed to cause a certain kind of perceptual response in a certain kind of perceiver. Similarly, it will not do to conflate the tokening of phenomenal properties

¹⁸ See for example, Hameroff and Penrose, 1996.

¹⁹ Either of these two options would be perhaps best thought of along the lines of the *dual-access theory* formulated by Herbert Feigl (1958), somewhat diluted descendents of which appear in Loar 1990 and Perry 2001.

²⁰ Neural states do not reflect photons or disturb air molecules in the appropriate way.

with the tokening of *thoughts about* phenomenal properties. Instead, we must think of qualia as being such that to token phenomenal property *F* just is to *be the phenomenal sensation of F*. To put it another way, to have a brain in which a green quale is being tokened is to undergo the conscious sensation of greenness; to be phenomenally green is not to look green but to *feel* green. Conscious experiences are phenomenally conscious not in virtue of being ‘internally scanned’ or thought about, but simply in virtue of the fact that one is the subject of them. But what does *this* mean? How is this datum to be accommodated by, say, a functionalist or physicalist account of consciousness? Why do some brain states, and not others, feel like something for their owners? This is—to say the least—far from clear and, as Chalmers correctly points out, it is *this* which is the tough theoretical nut to crack; it is this which is the ‘hard problem of consciousness.’ As John Perry puts it:

One may say that it is somewhat amazing and mysterious that it can be like something to be in a state. That is correct, but however amazing it may be, it is true. We gain nothing by pushing the mystery somewhere else in the mind. The states of our body, often carrying information about the external world, put our brains in states it is like something to be in. Amazing, but true. The mystery of sentience does not come when we perceive those states, or think about them, or know them; it comes when we are in them. (2001, 46)

That qualia are *felt* properties also has epistemological implications. Phenomenal greenness is a state of the brain that *feels* a certain way—it is conscious in a certain manner. That is, it seems, for qualia to exist is for them to be experienced—their *esse est sentire*, as it were. On the other hand, as we have seen, we are under no a priori constraint to identify perceptual, intentional, *content* with qualia (and arguably there

are good philosophical reasons not to): thus I might conceivably be in a mental state indicating that some object is green yet experience phenomenal greyness (because I am colour blind), or no qualia at all (because the perception was subliminal). Further, *beliefs about* our own qualia are presumably to be distinguished from the mere having of those qualia—at least under all the standard (propositional, sentential or dispositional) metaphysics of belief. I might, at least logically possibly, token a phenomenal property in my brain but fail to stand in any mental relation to a proposition describing that quale, or fail to token a sentence in the Language of Thought about that quale, or fail to have any disposition to assent to claims that I just did—or even am now—experiencing that quale, and so on.

Thus, different sorts of ‘knowledge claim’ in this domain may come apart: to pick an extreme example, I might simultaneously perceive that something is green, undergo a red quale-token, and have no belief at all about my own qualia. Any adequate account of the epistemology of consciousness will thus have to be capable of handling this kind of complexity. For example, in my view, it is most likely that our sensory apprehension of qualia *is* in fact ‘direct’ and ‘certain’ in many of the interesting senses of those contested terms; but that our beliefs about our own qualia are only misleadingly called ‘direct.’ Our beliefs about our own qualia are not *necessarily* certain, but I would suggest that a range of those beliefs are contingently quite highly certain, partly because of the constraining effect of our experiential apprehension of our own qualia. It would be a peculiar thing to feel a phenomenally red quale, to have the relevant concepts, and yet to believe that one is experiencing a green quale!

V.

Before concluding, I would like to briefly consider the following question, which may be pressing itself on the attention of my reader: if the argument I have made here is sound, and if it is at least as interesting as I have suggested, why do so many philosophers tacitly deny or ignore its conclusion? If figment is demonstrably a property of neural states, why do so few contemporary accounts of mentality take this into account? A partial answer is that qualia, though not a counter-example to physicalism, do make life much more difficult for the physicalist—especially for the physicalist who wants to propose a complete theory of the mind right now, in the current state of scientific knowledge. David Armstrong honestly professed his anxiety back in 1968 that, in admitting qualia to the brain, “we are back to that bifurcation of mental and physical reality which it is the object of a physicalist doctrine of man to overcome. . . . To accept the view that the secondary qualities are irreducible *qualia* of mental items would be to abandon the whole programme of this work” (1968, 1993, 272). But we have seen that this worry, at least with respect to the argument from perceiver relativity presented here, is without basis. True, making brain states phenomenal is still *consistent* with property dualism—qualia do not entail physicalism . . . but who would have ever thought they do or should? On the other hand, we have seen that qualia (as defined here) do not necessarily entail the *falsity* of physicalism. Notice that Armstrong’s objection is to *irreducible* qualia that are properties of *mental items*: the qualia whose existence we have defended here are neither necessarily irreducible, nor are they properties of particularly ‘mental’ entities—they are properties of brain states, as Armstrong himself would wish.

Nevertheless, it remains true that phenomenal properties make life harder for the

physicalist. The physicalist is faced with explaining how certain physical states, with certain properties, can *feel* a certain way—can be an experience of phenomenal green or phenomenal pain. We should not (or at least not yet) imagine this is impossible, but it is certainly much harder than explaining how certain physical states can cause particular behaviours, or even how they can be linked to the world in certain intentional ways. But scientists and philosophers cannot just pretend the problem does not exist, if it really does, no matter how much easier it would make their theorizing.

Another reason for the lack of contemporary influence of considerations from perceiver relativity may be that the arguments from illusion and hallucination used in the first half of this century (and before) were, by the 1960s, generally considered bankrupt. To quote J.L. Austin for example: “What is wrong, what is even faintly surprising, in the idea of a stick’s being straight but looking bent sometimes? Does anyone suppose that if something is straight, then it jolly well has to *look* straight at all times and in all circumstances? Obviously no one seriously supposes this. So what mess are we supposed to get into here, what is the difficulty?” (1962, 29) Even sense-datum theorists of this period, such as Frank Jackson, often cast scorn upon “the notorious arguments from illusion, variation, perceptual relativity, and so on and so forth. ... [L]et me say straight away that I think these arguments prove nothing. ... I believe that the current opposition to sense-data derives in large measure from their unfortunate historical association with these arguments.” (1977, 107)

I will not dispute that the arguments used to deflate the argument from illusion, by J.L. Austin, James Cornman and others, showed that the arguments used at that time were bogus. However, I do not think those considerations strike against the

form of the argument presented here.

First, I have not argued for the existence of phenomenal individuals, intermediate between us and the world. It was common to argue, like R.J. Hirst, that:

...[C]ommon sense need not admit such data as existents, and can say that they are merely experiences of the percipient; and it is the postulation of *existents* of such a type, unsensed and without corroborative evidence when unsensed, that is epistemologically objectionable. (Hirst 1959, 65)

I agree completely.

Second, I have not made the notorious mistake of arguing from the claim that something *looks* red to the claim that something must *be* red. Cornman (1971, 199 ff.) is a good example of this line of attack on the sense-datum theorists (though he was far from alone in it).²¹ His particular counterexample is the property of ghostliness: that something looks ghostly, he says, does not mean that there are ghosts. But this is not the form of the premise I rely upon: my far more innocuous premise is something like “if something looks *P*, then *something* looks *P*,” or more informatively, “if the property of looking *P* is being manifest, then the property of looking *P* must inhere in something.” Here is the appropriate account of ghostliness, for example: Suppose that stunted tree over there in the mist appears ghostly; then it is certainly true to say that *the tree itself* is what looks ghostly. However, it is *not* true that the tree itself is coloured a pale grey, or that it has a hazy outline ... it is not true, in this

²¹ See J.L. Austin (1962, if a barn looks like a church, then does one see a church?); Roderick Chisholm (1966, if a man looks tubercular, does it follow that what I see is tubercular?); and H.P. Grice (1961, if some food looks indigestible, then am I looking at an indigestible sense-datum?).

sense, that it actually *is* ghostly (i.e. resembling an apparition). Nor is it true to say that these are properties of nothing at all. They are properties of, so to speak, the *appearance* of the tree—they make up the experience which is the visual image of the ghostly tree, and inhere in some individual distinct from the tree (a particular state of the brain).

Third, the form of the argument presented here does not rely upon the notion of indistinguishability (or, incidentally, that of ‘direct’—and so infallible—perception). I have not argued that because we cannot tell the difference between illusory and veridical perceptions there must be no intrinsic difference. Jonathan Dancy (1995) correctly attacks this argument by simply pointing out that it is far from conclusive: mere introspective identity does not entail that the two states could not be radically different in nature.

It is still possible to suppose that the two states do differ ... fundamentally, despite their phenomenal similarities; the argument from illusion merely acts as a reminder that there is at best something awkward about this, and that it would be more attractive to avoid it. But the appeal to introspection is not generally allowed to be conclusive elsewhere, and there seems to be nothing special about the present case to warrant any more respectful attitude to introspection here. So the awkwardness is to be admitted, without being allowed to be decisive. (Dancy 1995, 422)

Once again, I agree with the objection in general terms, but hold that it has no impact upon the argument presented here. Instead of relying upon the principle of first-person indiscernibility, I rely upon the much more solid assumption that there are no unowned property tokens.

VI.

My conclusion, then, is that brains have phenomenal properties—that qualia are properties of brain states. Some brain states are phenomenally red, others are phenomenally painful, and so on. I have suggested that some interesting and substantial consequences follow from this claim, but that the falsity of physicalism is not among them.²²

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