

Papineau on the Vagueness of Phenomenal Concepts

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ABSTRACT

Papineau's argument in *Thinking About Consciousness* for the vagueness or indeterminacy of phenomenal concepts is discussed. Several problems with his argument are brought out, and it is concluded that his argument fails to establish his desired conclusion.

I

In *Thinking About Consciousness*, David Papineau (2002) argues that our phenomenal concepts are vague. His argument concerns concepts for specific phenomenal states like **seeing red** or **feeling anger**, but also the determinable concept of which those are determinates—the concept of a phenomenally conscious state in general, what he calls '**consciousness-as-such**' and I shall call simply '**conscious state**'.¹

Papineau's conclusion regarding the determinable concept is the more controversial of the two. That is because, intuitively, the concept **conscious state** is sharp, as Papineau acknowledged in an earlier work:

[W]hen we look into ourselves we seem to find a clear line. Pains, tickles, visual experiences and so on are conscious, while the processes which allow us to attach names to faces, or to resolve random dot stereograms are not. True, there are "half-conscious" experiences, such as the first moments of waking....But, on reflection, even these special experiences seem to qualify unequivocally as conscious, in the sense that they are like something, rather than nothing. (1993: 125)

In contrast, many determinate phenomenal concepts are intuitively vague. Most phenomenally complex states like a pain or an itch "build up" at the start and "taper off" at the end. Near those temporal boundaries there are numerous short-lived phenomenal states that are intuitively borderline pains or itches. To take another example, a visual experience of a color in the borderline region between red and orange is arguably a borderline experience of red. In spite of this difference in the prima facie plausibility of Papineau's two conclusions, I shall attempt to show that his argument establishes neither one.

One reason for my doing so is that I have argued elsewhere (Antony 2006a) that our concept **conscious state** is sharp rather than vague; consequently, if Papineau is right, I am not. A further reason is that Papineau is one of the few philosophers to have discussed in detail the question whether our concept(s) of consciousness is vague (another is Unger 1988). (Numerous philosophers have offered their opinions on the matter, however.) This is much to Papineau's credit, I believe, but it also inevitably

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¹ I use boldface type to name concepts, sometimes in the sense of an abstract object (sense, meaning, etc.) and sometimes in the sense of a mental representation. Where context does not fix my meaning, it should be assumed that I have abstract concepts in mind.

makes him a target for someone like myself who believes the matter is important and deserves close attention.

Papineau's introduces his argument while discussing Ned Block's (2002) "harder problem of consciousness"—an epistemological problem for materialists who like Papineau are phenomenal realists. Phenomenal realists posit phenomenal concepts through which we grasp phenomenal properties from a first-person perspective, and which have no a priori connections with any material (e.g., functional, neurophysiological) concepts. The problem arises because our methodology for determining which material properties are instantiated when and only when we are conscious fails to uniquely pick out a property from several co-instantiated candidates. The difficulty is accentuated with creatures who share only some of our material properties, for example robots that are functionally but not physically similar to us. According to Block, we lack any conception of a rational ground for deciding whether such systems are conscious. Nevertheless, Block believes there is often a fact of the matter whether they are.

Papineau's offers his thesis of the vagueness of phenomenal concepts as a solution to Block's harder problem:

I agree with Block that this indecision [as to whether non-human creatures are conscious] is a consequence of the inflationist [i.e., phenomenal realist] recognition of phenomenal concepts. However, I don't agree that this represents some kind of deficiency in inflationist materialism. In my view, it is indeed not always possible to answer such question as whether...robots...can feel phenomenal pain....One possibility [why that is so] is that questions about phenomenal consciousness always have definite answers, but epistemological obstacles bar our access to them....But...another possibility...is that our phenomenal concepts are *vague*. I shall be arguing for this analysis. (2002: 178)

In developing his argument, Papineau lists several material properties that are co-instantiated in humans when they are conscious. Though his lists differ for the determinate and determinable properties, that will not matter for our purposes. For the determinable property the list includes "dispositional Higher-Order judgeability, and the physical set-up which realizes such judgeability in humans, and attention or pre-attention, and indeed anything else which goes hand in hand with these properties in humans" (2002: 227). Such properties, either alone or in various combinations, can be considered as *candidates* for the material nature or essence of consciousness. And similarly for the more specific types of conscious states. Papineau contends that our phenomenal concepts are vague with respect to such candidates, that there is no fact of the matter whether our phenomenal concepts apply to them.

One might wonder in what sense exactly phenomenal concepts are meant to be vague, according to Papineau.² They differ from standard examples of vagueness in which individuals vary along a single dimension (e.g., color, number of hairs) until borderline cases are reached. For with Papineau's phenomenal concepts there is no such single dimension of change. With another type of vagueness, a series of individuals is imagined such that the number of parts, properties, etc. associated with a concept **F** is gradually reduced until borderline Fs are reached. This may better fit what Papineau has in mind, at least for the case of the determinable concept **conscious state**. Perhaps entities with all most of the features Papineau mentions are

² Cf. Bermudez 2004: 138, fn. 4

clearly conscious (e.g., adult humans), those with few or none clearly not conscious (e.g., rocks), and those in between borderline cases (e.g., robots, octopuses). In any event, my criticism of Papineau's argument will also apply to kinds of indeterminacy other than vagueness.³

Papineau addresses the charge that his response to Block's harder problem is ad hoc. He acknowledges that

the intuitively more natural view is surely that either doppelgangers or duplicates will have the relevant experiences, or they won't. In the absence of independent arguments for vagueness, it would seem that Block is justified in his claim that inflationists have saddled themselves with an inexplicable barrier to discovery (2002: 198).

However, Papineau takes himself to possess such an independent argument. He proposes that phenomenal concepts' semantic properties are determined by a naturalistic theory of content (TOC), such as a causal or teleological theory,⁴ and claims that such theories generate precisely the right results for the vagueness of phenomenal concepts. This is clearly a key premise in Papineau's argument.

II

Turning now to a more critical discussion of Papineau's argument, notice two ways in which the material candidates he considers differ from familiar borderline cases. First, few individuals who are fully competent with phenomenal concepts (e.g., most non-philosophers) are disposed to judge Papineau's candidates as borderline phenomenal properties. One reason for that is that few such individuals possess the concepts needed to *represent* the candidates (**higher-order judgeability**, etc.). With uncontroversially vague concepts, however, competent users *can* represent borderline cases: those fully competent with **red**, for example, can represent shades of color as being such that it is unclear whether they are red. Second, for those who possess the conceptual resources needed for representing Papineau's candidates, the uncertainty whether phenomenal concepts apply to the candidates is phenomenologically quite unlike that associated with vagueness: it is more like that which accompanies ignorance, or theoretical indecision—which of course can also occur with sharp concepts. As Papineau acknowledges, intuitively a silicon functional duplicate of a normal adult human must be either conscious or not, just that we do not know which. But indecision related to vagueness feels very different: we have no inclination to think that any 13 year-old must be either a child or not, just that we do not know which.

These points strongly suggest a picture according to which our intuitions about the applicability of our concepts to actual and possible cases, our expressed judgments

³ In personal communication, Papineau informs me that he now believes that the term 'referential indeterminacy' is preferable to 'vagueness' for expressing the feature of phenomenal concepts he wishes to highlight. However, because he has not yet offered a revised treatment of these issues, and because it is important to understand the problems with his thesis as it is presented in *Thinking About Consciousness*, I shall continue to construe his argument as defending the vagueness of phenomenal concepts. I shall also, however, attempt to show how the criticisms I offer apply to other types of indeterminacy (see especially notes 5 and 9). Whether Papineau's arguments can be reformulated in a way that avoids the arguments of this paper, we will have to wait to see.

⁴ For useful introductory discussions of causal and teleological theories, see (respectively) McGlaughlin and Rey 1998 and Neander 2004.

about such cases, and the associated phenomenologies, are largely determined—indeed caused by—the psychological natures of those concepts. On this picture, one’s concept is vague or indeterminate if and only if (normally) one has the appropriate intuitions, dispositions, and phenomenology regarding actual and possible cases.⁵ In contrast, Papineau’s picture makes the vagueness or indeterminacy of phenomenal concepts in a sense *external* to the psychological nature of such concepts (e.g., their internal structures and conceptual roles), in that the vagueness, sharpness, or (in)determinacy of one’s concept is entirely independent of the concept’s psychological nature. This is a highly idiosyncratic view; and it seems uncertain whether it can be made sense of. In any event, these reflections suggest that the candidates on Papineau’s lists may have nothing to do with our phenomenal concepts being vague or indeterminate, and so they favor Block’s epistemological interpretation.

It is at this point that Papineau invokes TOCs. He writes:

...any causal or teleosemantic account will leave it indeterminate exactly which of the correlated material candidates any given phenomenal concept refers to. For all the correlated material candidates will figure equivalently in the characteristic causes or biological functions of the relevant phenomenal judgments, and so causal or teleosemantic considerations will fail to pick out one mental candidate rather than another as the referent. (2002: 198)

But even if true, it is unclear why this should have any force. TOCs often have implications that conflict with our semantic intuitions, and that is usually taken as a reason to reject or modify the TOCs. Since the determinable phenomenal concept **conscious state** is intuitively sharp, as Papineau admits, if a TOC entails otherwise one might wonder why that is not a problem for the TOC. That aside, it is far from clear that causal or teleosemantic TOCs support the vagueness or indeterminacy of phenomenal concepts. The only evidence Papineau offers is the statement that “all the correlated material candidates will figure equivalently in the characteristic causes or biological functions of the relevant phenomenal judgments.” But surely that must be shown for each candidate on Papineau’s lists. And it must be shown that *only* the correlated material candidates so figure; and also that our sharp or otherwise determinate *non*-phenomenal concepts are not assigned a comparably large set of candidates. Since causal and teleological TOCs are notorious for generating too many semantic values, a skeptical attitude is justified until we see the details.

There is another reason for thinking that Papineau’s phenomenal concepts cannot be vague or indeterminate with respect to his list of candidates, or indeed any candidates. Above we drew attention to an odd feature of his brand of vagueness or indeterminacy for phenomenal concepts: that such concepts cause or generate in us no

⁵ For a case of indeterminacy that is not vagueness, suppose someone says “let’s drive over there,” pointing to hills in the distance with no more precise location in mind. Although the concept expressed by ‘there’ in that thought is vague (since the represented region lacks sharp boundaries), the concept also involves a further kind of indeterminacy, namely, with respect to the unspecified, precise locations falling clearly within the region. The idea, after all, is to drive to some *specific* location(s) within the region, not to the region as a whole. Alston (1964, p.85) calls this type of indeterminacy ‘lack of specificity’, offering as his example someone who says “We must take steps to meet this emergency” without referring to any specific steps. When one thinks non-specifically in this way, there are also characteristic dispositions, intuitions, and phenomenologies, just as with standard cases of vagueness. This shows that such indeterminacy must also be reflected in the psychological natures of the relevant concepts; and the same holds, I submit, for all non-controversial cases of indeterminate concepts.

intuitions, dispositions, or phenomenology appropriate to vagueness or indeterminacy. The point I wish to make now is that even if there were such intuitions, etc., it is unclear whether there is anything in the psychological nature of phenomenal concepts as described by Papineau *that could do the causing*. That nature presumably includes the concept's internal structure and conceptual role. But Papineau's phenomenal concepts have no significant structure. True, on his quotational model, phenomenal concepts consist of an operator of the form 'the experience:---', appended to an introspected or imagined experience. But, *prima facie* at least, that structure is far too simple to reflect the categorizing behaviors, intuitions, and phenomenology appropriate to vagueness.⁶ Nor do the concepts have a sufficiently rich conceptual role, since they refer directly and are associated with no further conceptual descriptions.⁷

The conclusion we are led to is that our current phenomenal concepts, at least if they are anything like Papineau describes, are not vague or indeterminate in the way he suggests. A corollary is that with respect to more specific or determinate phenomenal concepts (e.g., **pain, red**) that are vague, Papineau's theory of those concepts cannot be entirely correct since it does not account for their vagueness.⁸

Attention to a certain feature of Papineau's argument confirms that he was on the wrong track. Whatever else his "candidates" are, they are theoretical posits that he regards as contenders for the *truth* about consciousness. And it is only because they are such contenders that they appear on his lists. However, considerations about the true nature of consciousness are irrelevant to whether any of our *current* concepts of consciousness are vague or indeterminate. Taking an illustration involving vagueness, consider the concept **life**. Assuming life is as biology describes, the correct concept is vague (viruses, e.g., are plausible borderline cases). But that is irrelevant to whether **life** was vague at earlier points in its historical development. In fact it was sharp at many such points. Similarly with consciousness: if the psychological natures of any of our current concepts of consciousness are not characteristic of vague or indeterminate⁹ concepts, then nothing about what consciousness *really is* can change that. Papineau's focus on materialist posits that he believes are contenders for the truth about consciousness is thus irrelevant to his desired conclusion that our current phenomenal concepts are vague. His argument, it turns out, is a non sequitur.

⁶ On Papineau's theory the introspected or imagined experiences that fit into the frame 'the experience:---' can be complex, for example in virtue of the complexity of co-opted perceptual concepts (see, e.g., 2002: 110, 114 ff.). That may leave room for an account of the vagueness or indeterminacy of certain determinate phenomenal concepts (though I see no possibility for a comparable account regarding the determinate concept **conscious state**; see Antony 2006a for discussion.). The details, however, would have to be seen to determine whether there is a real possibility here. In any event, this is not a line Papineau pursues.

⁷ Recently, Papineau (2006) has abandoned his quotational model for a new theory according to which phenomenal concepts are individuated, in part, by conceptual roles. The roles Papineau specifies as crucial, however, are unrelated to vagueness or indeterminacy, and so can be of no help against the argument in the text. As far as I can tell, all other differences between his new and old theories are also irrelevant to the arguments of this paper.

⁸ But see note 6.

⁹ Kuhn (1964) describes differences between the Aristotelian concept of motion, which was (non-vaguely) indeterminate between instantaneous and average velocity, and the post-Galilean concept which is not. This shows that, for indeterminacy too, considerations about the true nature of a phenomenon (e.g., motion) are insufficient for determining whether a concept of that phenomenon at given points in its historical development is indeterminate.

III

What Papineau can claim is this: if the truth about consciousness is as he says, then any *future*, correct concept of consciousness will be vague or indeterminate. Unfortunately, however, that line is not open for phenomenal concepts—at least not Papineau’s version of them. For phenomenal concepts may be hard-wired, genetically determined so that change is impossible in response to mere theoretical pressures. And even if they could change, the fact that Papineau’s candidates are characterized in material terms means that any future concept into which our current concepts transform could not be phenomenal, since phenomenal concepts do not represent their referents as material. Consequently, no such future concepts could be both vague or indeterminate in the way Papineau suggests and phenomenal.

There remains the possibility of there being a future, correct *non*-phenomenal concept that is vague or indeterminate. But there is no argument for that conclusion to be extracted from Papineau’s discussion. His candidates are candidates largely because phenomenal concepts are assumed to have no a priori connections to material concepts. Since we are now considering the possibility of a future, *non*-phenomenal concept, however, it is hard to see what rationale there could be for thinking that such a concept would be indeterminate with respect to those same material candidates. But nor is there any hint of what other borderline cases or indeterminacies there might be. There is thus nothing in *Thinking About Consciousness* to support the idea of a future, correct, non-phenomenal concept that is vague (determinable or determinate) or indeterminate.

It might be thought that the following argument from *Philosophical Naturalism* could be adapted to show that a future, correct non-phenomenal concept of consciousness will be vague:

...any physicalist account of consciousness is likely to make consciousness depend...on the possession of some kind of structural complexity...Yet any kind of such complexity is likely to come in degrees.... So we should expect there to be borderline cases—such as the states of certain insects, say, or fishes, or cybernetic devices—where our physicalist account simply leaves it indeterminate whether these are conscious states or not. (Papineau 1993: 124)

Though I believe this argument is essentially correct, it is not quite any physicalist account of consciousness that entails borderline cases, but rather any physicalist account that posits sufficiently *complex* material properties, such as neurophysiological or functional properties.¹⁰ Call that *c-materialism*. Assuming *c*-materialism is true about consciousness, there may well be an argument that a future, correct, non-phenomenal concept of consciousness will be vague. Such an argument would apply to both determinable and determinate versions of the concept.

But such a conclusion can only be as strong as our reasons for thinking that *c*-materialism is true. To the best of my knowledge Papineau has nowhere argued for *c*-materialism (as opposed to materialism; see Ch. 1 of his 2002). It thus remains open

¹⁰ Papineau admits as much in a footnote, but dismisses without argument the possibility of a materialist theory that employs sharp concepts (1993: 124, fn. 19). For an in-depth discussion of how *c*-materialist theories of consciousness are related to the vagueness of **conscious state**, see Antony 2006b.

that some other version of materialism may be true from which neither the vagueness of **conscious state** nor that of more determinate concepts follows¹¹—a version that appeals to properties whose concepts are sharp, such as those of fundamental physics, for example. Moreover, in spite of existing arguments, we do not yet know whether materialism or dualism or something else is true of consciousness, so the correct concept **conscious state** could also turn out to be sharp for dualist or other reasons. Indeed, that our current concept **conscious state** *seems* sharp—as Papineau admits—provides some (defeasible) reason for thinking that c-materialism, which entails its vagueness, is false.

Taken as an argument for the vagueness of a future, correct, non-phenomenal concept of consciousness (determinable or determinate), therefore, the argument from *Philosophical Naturalism* is weak at best. However, if one already believes that a c-materialist theory of consciousness will be established, the argument shows how it may also be established that a correct, non-phenomenal concept of consciousness (determinable or determinate) is vague. Not so, however, for Papineau's phenomenal concepts.

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¹¹ This is not to say that the determinate concepts would not be vague, only that their vagueness would not be entailed by the materialist theory.