

## *Papineau's (in)determinacy problem*

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### *1. Papineau's indeterminacy problem*

José Luis Bermúdez (2004) offers a short and powerful criticism of David Papineau's (2002) approach to the mental-physical relation. Papineau's approach can be put under the heading of standard a posteriori materialism, or, to use a terminology proposed by David Chalmers (1996, 2002), type B materialism<sup>1</sup>. This approach can be summarized, just as Bermudez does, by three propositions:

- (A) Phenomenal properties exist.
- (B) Any phenomenal property is identical to some material property.
- (C) Phenomenal concepts refer to material properties that are identical to phenomenal properties.

This approach has certainly been dominant in the last ten years or so, and has also received I think reasonable criticism. But Bermudez notes that Papineau's approach is different and even novel as compared with the standard one, because he also asserts a further proposition:

- (D) Phenomenal concepts are vague.

This point refers to what for Papineau is the vagueness of any specific phenomenal/material property identification, a phenomenon that creates problems for any potential science of consciousness. I'm not sure that 'vagueness' is a correct term to use here, this is why I will use the term 'indeterminacy' to refer to this phenomenon. And more precisely I will call this thesis 'the mental/material referential indeterminacy thesis', from which a mental/material identity (or identification) indeterminacy would follow, according to Papineau.

The problem identified by Bermudez is the following (p. 136-7):

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<sup>1</sup> As opposed to type A, or a priori materialism, represented by philosophers like David Lewis, David Armstrong, Daniel Dennett, Sidney Shoemaker, the late Frank Jackson, and the late Robert Kirk.

Papineau seems committed to

- (1) For any phenomenal property, there is a fact of the matter about whether it is or not the referent of a phenomenal concept.
- (2) For any material property, there is no fact of the matter about whether it is or not the referent of a phenomenal concept.

But if (1) and (2) are true then no mind-brain identity can be true. Consider a given candidate for identity,  $P = M$ , where the referent of ' $P$ ' is a phenomenal property picked out by a phenomenal concept, and the referent of ' $M$ ' is a material property picked out by a material concept. Anything that is true of a thing or a property according to one way of picking it out remains true of that thing or property according to any other way of picking it out. So, if it is true of a property that, qua phenomenal property, it is the referent of a phenomenal concept, and that phenomenal property is identical to a material property, then it will remain true of that property, qua material property, that it is the referent of a material concept. Since this does not hold in the case under discussion we cannot be dealing with a case of identity.

As I have said, I agree with Bermudez's diagnosis of the problem. But I would like to highlight one more problem for Papineau as regards the indeterminacy thesis. In order to proceed with my criticism, I have to first put forth some terminology and a brief analysis of property identities.

## ***2. Rigid Identity Designators (RIDs) and property identities***

I will first introduce the notion of a Rigid Identity Designator. It is a notion applicable to true identity statements (sentences) of the form ' $a = b$ '.

(RID) ' $a = b$ ' is a RID iff it is true and ' $a$ ' is rigid and ' $b$ ' is rigid.

A RID has the property that it is true in all possible worlds, i.e. it is necessary. It is easy to see why: since both terms flanking the identity sign are rigid, the identity is necessary.

Let us now turn to property identities. If  $F = G$ , then ' $F = G$ ' is necessary, because properties are necessary, so they exist in all possible worlds, therefore if the identity holds, it

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holds necessarily. This means that whenever we have a property identity, we also have a corresponding RID. This further means that *if it is a determinate matter that  $F = G$ , then it just has to be a determinate matter, for any  $H$ , that  $F = H$ , by the very logic of property identities, which says that they will be picked out by RIDs*. By being picked out by RIDs these identities are necessarily true, so there simply can't be any doubt as regards their truth-value.

### **3. Bermudez's "solution" and the additional (in)determinacy problem**

Bermudez reaches the conclusion that the only way out for Papineau is to accept a thesis like the following<sup>2</sup>:

(1\*\*) For no phenomenal property is there a fact of the matter that it is the property picked out by a given phenomenal concept.

But this, as Bermudez correctly notes, is in clear conflict with Papineau's quotation model for phenomenal concepts, namely a model according to which phenomenal concepts refer by quoting the property they refer to, which in other words means that there will be a tight relation between these concepts and the properties they pick out, so that (1\*\*) just can't be the case.

Bermudez's point is correct. However, what I would like to add to his point is that even if there were no conflict between (1\*\*) and other parts of Papineau's book, namely the part that discusses and proposes a model for phenomenal concepts, there would still be an endemic problem with (1\*\*) together with the general idea of indeterminacy as regards phenomenal/material identities (identifications).

My point is the following. As we saw, whichever specific property identity one considers, it follows from the logic of such identities that the identity statements that pick them out are determinately true, and so *a fortiori* these statements must have a determinate truth-value. Now Papineau proposes that we simply identify phenomenal properties as a group with material properties as a group, and at the same time that we accept that specific

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<sup>2</sup> Bermudez considers a milder thesis, (1\*), according to which there are some phenomenal properties such that whether or not they are the referents of a phenomenal concept is indeterminate, but this thesis will not do to save Papineau, for obvious reasons: it does not exclude the existence of at least one such property for which the indeterminacy thesis does not hold.

identities can't be established, as they are indeterminate. This is inconsistent: for any two candidates for property identity  $F$  and  $G$ , the corresponding RID, ' $F = G$ ', makes the identity a determinate matter. This means nothing else than that even supposing (1\*\*) does not create external problems for Papineau (conflict with other parts of his approach to the mind/body problem), we are still left with an internal problem, and a quite serious one, which can be formulated as follows. Suppose (1\*\*) is the case. Then the indeterminacy of specific phenomenal/material identities,  $P = M$ , is explained by the indeterminacy of ' $P$ ' picking out  $P$ . But if  $P = M$ , it is wholly determinate that ' $P = M$ ', because ' $P = M$ ' is then a RID. Therefore, Papineau has to abandon, as Bermudez rightly suggests, either the mental/material identity thesis or the mental/material referential indeterminacy thesis, even supposing that adopting (1\*\*) does not conflict with his quotational model for phenomenal concepts.

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### **References**

- Bermudez, J. L. 2004. Vagueness, phenomenal concepts, and mind-brain identity, *Analysis* 64.2, pp. 134-39.
- Chalmers, D. J. 1996. *The Conscious Mind. In Search of a Fundamental Theory*, Oxford: Oxford University Press.
- Chalmers, D. J. 2002. Consciousness and its place in nature. In Chalmers (ed.) *Consciousness and its Place in Nature* (Oxford University Press, 2002).
- Papineau, D. 2002. *Thinking about Consciousness*, Oxford: Oxford University Press.