

Max Black's Objection to Mind-Body Identity, the Knowledge Argument and the Metaphenomenal Move¹

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In his famous article advocating mind-body identity, J.J.C. Smart (1959) considered an objection (Objection 3) that he says he thought was first put to him by Max Black. He says "...it is the most subtle of any of those I have considered, and the one which I am least confident of having satisfactorily met". This argument, the "Property Dualism Argument," as it is often called, turns on much the same issue as Frank Jackson's (1982, 1986) "Knowledge Argument", or so I will argue. This paper is aimed at elaborating and refuting the Property Dualism Argument—or rather a family of Property Dualism Arguments-- and drawing some connections to the Knowledge Argument.² I will also be examining John Perry's (2001) book which discusses both Max Black's argument and the Knowledge Argument, and some arguments drawn from Stephen White's (1983) paper on the topic and some arguments inspired by unpublished papers by White.

I will say a bit about what the Property Dualism Argument is and compare it with the Knowledge Argument. Then I will discuss Perry's view of both problems. Next, I will introduce an ambiguity in the notion of mode of presentation and use that to give a more precise statement of the Property Dualism Argument. That is the first half of the paper. In the second half, I will use this long setup to rebut the Property Dualism Argument and mention some related arguments.

(I) What is the Property Dualism Argument?

Smart said "...suppose we identify the Morning Star with the Evening Star. Then there must be some properties which logically imply that of being the Morning Star, and quite distinct properties which entail that of being the Evening

¹ I want to thank the following persons for commenting on a distant ancestor of this paper: Paul Horwich, Brian Loar, David Pitt, Stephen Schiffer, Susanna Siegel, Stephen White and Dean Zimmerman

² Stephen White (1983, forthcoming_{a,b}) has done more than anyone to elucidate the Property Dualism Argument. John Perry's (2001) book argues that the machinery he uses against modal arguments for dualism and Jackson's Knowledge Argument also answers Max Black and vanquishes the Property Dualism Argument. Christopher Hill (1991, 1997), Joseph Levine (2001) and Colin McGinn (2001) have also put forward versions of the argument. Brian Loar's (1990 and 1997) papers are also immersed in the territory of the argument, although not explicitly about it. Schaffer (1963) discusses the argument but in somewhat different terms than those used more recently. I will focus on a version of the Property Dualism Argument similar to the arguments given by Smart (though see footnote 4), White and Perry, and I will contrast my refutation with Perry's.

Star.” And he goes on to apply this moral to mind-body identity, concluding that “there must be some properties (for example, that of being a yellow flash) which are logically distinct from those in the physicalist story.” (148) He later characterizes the objection to physicalism as “the objection that a sensation can be identified with a brain process only if it has some phenomenal property ... whereby one-half of the identification may be, so to speak, pinned down...” (149), the suggestion apparently being that the problem of physicalism will arise for that phenomenal property even if the original mind-body identity is true. This concern motivated the “dual-aspect” theory, in which mental events are held to be identical to physical events even though those mental events are alleged to have irreducible mental properties. (See also Schaffer, 1963.) Smart did not adequately distinguish between token events (e.g., this pain) and types of events (e.g. pain itself), or between token events and properties such as the property of being a pain or the property of being in pain, the former being a property of pains and the latter being a property of persons. (For purposes of this paper, I will take types of events to be properties—either of the two just mentioned will do.) But later commentators have seen that the issue arises even if one starts with a mind-body property identity, even if the mind-body identity theory that is being challenged says that the property of being in pain (for example) is identical to a physical property. For the issue arises as to how that property is “pinned down”, to use Smart’s phrase. If the mind body identity says that phenomenal property $Q = \text{brain property } B_{52}$, then the question raised by the argument is: is the property by which Q is “pinned down” non-physical or is something non-physical required by the way it is pinned down?³

John Perry (2001) states the argument as follows: “...even if we identify experiences with brain states, there is still the question of what makes the brain state an experience, and the experience it is; it seems like that must be an additional property the brain state has...There must be a property that serves as our mode of presentation of the experience as an experience...” (p.101). Later in discussing Jackson’s Knowledge Argument, Perry considers the future neuroscientist, Mary, who is raised in a black and white room (which Perry calls the Jackson Room) and learns all that anyone can learn about the scientific nature of the experience of red without ever seeing anything red. While in the room, Mary uses the term ‘ Q_R ’ for the sensation of red, a sensation whose neurological character she knows but has never herself had. Perry says: “If told the knowledge argument, Black “might say, ‘But then isn’t there something about Q_R that Mary didn’t learn in the Jackson room, that explains the difference between ‘ Q_R is Q_R ’ which she already knew in the Jackson room, and (5) [Perry’s (5) is: Q_R is this subjective character], which she didn’t?’ There must be a new mode of presentation of that state to which ‘ Q_R ’ refers, which is to say some additional and *apparently non-physical* aspect of that state, that she

³ White (1983, forthcoming_{a,b}) runs the Property Dualism Argument against both token and type mind-body identities, but I am ignoring the issue of token identity.

learned about only when she exited the room, that explains why (5) is *new* knowledge.” (p. 101)⁴

On one way of understanding Perry, he uses ‘mode of presentation’ here to denote a property of the referent that is presented rather than the representation that refers to the referent or one or another of that representation’s semantic, linguistic or cognitive features, and he sees Black’s problem as arising from the question of the physicality of the mode of presentation in that sense of the term. Smart speaks in the same spirit of a property that pins down one half of the identification. ‘Mode of presentation’ is often used to refer to the representation or something cognitive, semantic or linguistic about it, but on this idea of the Property Dualism Argument, it is used to refer to a property of the referent.

The idea of the Property Dualism Argument, and, I will argue, the Knowledge Argument, is that the mind-body identity approach to phenomenality fails in regard to phenomenality that is involved in a mode of presentation of a phenomenal state. However, don’t expect a full statement of the Property Dualism Argument until nearly the halfway point. The next items on the agenda are connections to the Knowledge Argument and then Perry’s solutions.

Consider a specific type of phenomenal feel, Q, e.g. the feel of the pain I am having right now. (If pain just is a type of feel, then Q is just pain.) Q is a property. As mentioned earlier, we could think of it either as a property of a person or as a property of a token pain. The physicalist says, let us suppose, that Q = cortico-thalamic oscillation of such and such a kind. (I will drop the last six words.) This is an a posteriori claim. Thus the identity depends on the expressions on either side of the ‘=’ expressing distinct concepts, for if the concepts were the same, it is said, the identity would be a priori.

⁴ Part of what Smart says is hard to interpret. I left out a crucial phrase in the Smart quotation that seems confused to me. What I left out is the underlined phrase in the following: “the objection that a sensation can be identified with a brain process only if it has some phenomenal property, not possessed by brain processes, whereby one-half of the identification may be, so to speak, pinned down...” The underlined phrase is puzzling since Smart gives every indication of thinking that the threat from Max Black’s objection is from a dual aspect theory that says that token pains are token brain states, but that the token pains have irreducible *phenomenal properties*. The dualism is supposed to derive from the non-physicality of the phenomenal property, not a failure of the phenomenal property to apply to the brain processes. Perry explicitly avoids Smart’s error when he says: “...even if we identify experiences with brain states, there is still the question of what makes the brain state an experience, and the experience it is; it seems like that must be an additional property the brain state has...”

'Q' in my terminology is very different from 'Q_R' in Perry's terminology since 'Q_R' is a term that Mary understands in the black and white room. 'Q' by contrast is meant (by me even if not by Perry and Smart) as the verbal expression of a *phenomenal* concept. A phenomenal concept of the experience of red is what Mary lacked in the black and white room and what she gained when she went outside of it. (She also lacked a phenomenal concept of the color red, but I will not depend on that.) Why do I insist that 'Q' express a phenomenal concept? Because the mind-body identity claim under consideration must be one in which the phenomenal property is referred to *under a phenomenal concept of it* for the Property Dualism Argument to *even get off the ground*. (I will argue that the Knowledge Argument also depends on the use of a phenomenal concept in my sense.) Suppose that in the original identity claim we allowed *any old concept* of Q-- e.g. "the property whose onset of instantiation here was at 5 PM" or "the property whose instantiation causes the noise "ouch"". There is no special problem having to do with phenomenality for the physicalist about the cognitive significance of such properties or how such properties could pick out their referents. The modes of presentation of these properties raise no issues of the metaphysical status of phenomenality. If the original paradigm of mind-body identity were "the property whose onset of instantiation here was at 5 PM = cortico-thalamic oscillation", the property in virtue of which the left-hand term presents the referent (the mode of presentation of the left hand side in this sense of 'mode of presentation') would not be a special candidate for non-physicality. It would be the property of being instantiated here starting at 5 PM. The Property Dualism Argument depends on an identity in which a *phenomenal concept* is involved on the mental side. To allow a non-phenomenal concept is to discuss an argument that has only a superficial resemblance to the Property Dualism Argument.

What is a phenomenal concept in my sense? A phenomenal concept is or involves a phenomenal way of thinking. But what is that? A phenomenal way of thinking involves an instantiation of a phenomenal property in an occurrent experiential state, perception or image. So, in the exercise of a phenomenal concept, the subject actually has to have an experience. The idea is that this token event or state is used in the concept to pick out a phenomenal property (a type). Of course, one does not *have* to have an experience of red in order to think about an experience of red. There are many ways to think about the experience of red, many concepts of it, including some that could be called phenomenal, though not by me, which do not involve anything experiential in the concept itself. However the concept of it that I am focusing on with the phrase 'phenomenal concept' is a way of thinking that involves an experience. This picture of phenomenal concepts has its origins in Loar (1990/97); a version that is closer to what I have in mind is described briefly in Block (2002) and accounts that share the structure I am talking about appear in Chalmers (2003), Papineau (2002), and in an unpublished paper by Kati Balog. Of course, one can be looser and more relaxed about the requirement of an occurrent phenomenal state than I

am, allowing, for example, as phenomenal concepts, concepts that bring in occurrent phenomenal elements only dispositionally.

Perry (2001, 2004_{a,b}) uses a more relaxed notion of phenomenal concept, in which a phenomenal concept is a kind of mental folder that contains what he calls a "Humean idea" of the experience. He says (2004_b, p 221):

Thinking of having the experience of some kind in this way is not having the experience, but it is in some uncanny way like it. Usually the same kinds of emotions attach to the thinking as to the having, although in a milder form. It is usually pleasant to anticipate or imagine having pleasant experiences, and unpleasant to anticipate or imagine having unpleasant ones, for example.

Perry's notion of a phenomenal concept is vague on the crucial point. Sure, thinking of having the experience is not just having the experience. Dogs can have experiences but maybe they can't think about them. The question is: does a phenomenal concept in Perry's sense *involve* an experience? I don't know about Perry's notion, but a phenomenal concept in my sense does involve an experience. Of course, the experience involved need not be an *additional* experience, that is, additional to the referent. A single experience can be both the object of thought and part of the way of thinking about that object. This is the insight I mentioned earlier common to Loar's treatment, Chalmers', Papineau's, Balog's and mine. I think it is undeniable that there are some concepts like this. Whether phenomenal concepts are like this depends on what one means by 'phenomenal concept'. It is not a matter of fact but of stipulation, however the stipulation is motivated by what is behind the plausibility of the two arguments under consideration. I have nothing against Perry's notion of a phenomenal concept and he gives no argument against what I am calling a phenomenal concept: the issue between us is whether his phenomenal concepts are genuinely phenomenal by the standard needed to give the Knowledge Argument and the Property Dualism Argument a chance.

In sum, the Property Dualism Argument is motivated by the idea that in one way of stating or thinking a mind-body identity claim, you thereby bring in unreduced phenomenality via a phenomenal mode of presentation. If one's idea of a phenomenal concept is a *topic neutral* concept, one will have missed the real motivation for the Max Black argument and what turns out to be the crucial step in the dialectic about Mary.

It is time to turn to my claim that the Property Dualism Argument hinges on the same idea—and the same requirement of a phenomenal concept in my sense-- as the Knowledge Argument. Mary is reared in a colorless environment but learns all there is to know about the physical and functional nature of color and color vision. Yet she acquires new knowledge when she leaves the room for the first time and sees colored objects. Jackson concludes that there are facts about what it is like to see red that go beyond the physical and functional facts.

From the outset, the following line of response has persuaded many critics.⁵ Mary knew about the subjective experience of red via an objective concept from neuroscience. On leaving the room, she acquires a subjective concept of the same subjective experience. In learning what it is like to see red, she does not learn about a new property. She knew about that property in the room under an objective concept of it and what she learns is a new concept of that very property. One can acquire new knowledge about old properties by acquiring new concepts of them. I may know that there is water in the lake and learn that there is H₂O in the lake. In so doing, I do not learn of any new property instantiated. I acquire new knowledge that is based on a new concept of the property that I already knew to be instantiated in the lake. When Mary acquires the new subjective concept that enables her to have new knowledge, the new knowledge acquired does not show that there are any properties beyond the physical properties. Of course it does require that there are concepts that are not physicalistic concepts, but that is not a form of dualism but only garden variety conceptual pluralism: concepts of physics are also distinct from concepts of, say, economics and concepts of biology.

A natural rejoinder from the dualist is this. How does Mary “pin down” (to use Smart’s phrase) that old property? Or, to use an equally obscure phrase, what is Mary’s mode of presentation of that old property? When she acquires a subjective concept of the property that she used to have only an objective concept of, *a new unreduced subjective property* is required to “pin down” the old objective property. *This is the key stage in the dialectic about Mary, and this stage of the dialectic brings in the same considerations that are at play in the Property Dualism Argument.* Just to have a name for it, let us call this idea that the phenomenal concept that Mary acquires itself contains or else requires unreduced phenomenality the “metaphenomenal” move in the dialectic.⁶

The issue is sometimes put in terms of a distinction between two kinds of propositions. (See van Gulick, 1993, 2005.) Coarse grained propositions can be taken to be sets of possible worlds. The proposition (in this sense) that Harry Houdini escaped is the same coarse grained proposition as the proposition that Erich Weiss escaped, in that the possible worlds in which Harry Houdini escaped are the same as the worlds in which Erich Weiss escaped, because Harry Houdini is Erich Weiss. Fine grained propositions include “modes of

⁵ The articles by Paul Churchland, Brian Loar, William Lycan and Robert van Gulick in Block, Flanagan and Güzeldere, (1997) all take something like this line as do Horgan (1984) and Sturgeon (1994).

⁶ I have the sense from a remark in Jackson (2004) that he might agree with this. As Jackson notes, the issue should not be put in terms of whether there is a new fact involved in Mary’s acquiring the subjective concept of the experience. When Mary closes her books and steps across the threshold, everything she does constitutes a new fact that was not described in her books.

presentation". In saying Harry Houdini escaped, we use one mode of presentation of that coarse grained proposition whereas in saying Erich Weiss escaped, we use another. This point is often put by saying that when we say that Harry Houdini escaped, we express a different fine grained proposition from the one we express when we say that Erich Weiss escaped. In these terms, the issue is: does Mary's new knowledge involve merely a new fine-grained proposition (in which case physicalism is unscathed because Mary's new knowledge does not eliminate any possibilities), or does it require a new coarse grained proposition (as well)? *It is the phenomenal mode of presentation of Mary's new subjective concept of the property that she already had an objective concept of that motivates the idea that she gains new coarse-grained knowledge.* The metaphenomenal move is at play: the thought is that that phenomenal mode of presentation brings in something fundamentally ontological and not something on the order of (merely) a different description. The idea is that when something phenomenal is part of a mode of presentation, it will not do for the physicalist to say that that phenomenal item is unproblematically physical. Whether one agrees with this or not, if one does not recognize it one misses a crucial step in the dialectic about Mary.

I said that Mary acquires a subjective concept of the experience of red, whereas what she already had was an objective concept of it. However, it is a particular kind of subjective concept she acquires, namely a phenomenal concept of the experience of red. If it was an objective concept that she acquired, say the concept of the type of experience that occurred at 5 PM, the argument would have no plausibility. But even some subjective concepts would not do, e.g. the concept of the type of experience that happened 5 minutes ago. This concept is subjective in that it involves the temporal location of the subject, but it is no more suitable for the Knowledge Argument than the objective concept just mentioned. What is required for the metaphenomenal move in the dialectic about the Knowledge Argument is that Mary acquires a mode of presentation that is either itself problematic for physicalism or that requires of the referent something problematic for physicalism. And in this, it is just like the Property Dualism Argument.

In this respect, both the Property Dualism Argument and the Knowledge Argument are distinct from modal arguments for dualism. Consider for example the idea that a zombie is possible, that is a creature physically and functionally just like us but without phenomenality. If a zombie is possible, then by a familiar argument in recent years articulated by Kripke and Chalmers, physicalism is false. (Perry's intuitive way of putting it: If the zombie world contains cortico-thalamic oscillation, then according to the physicalist, it contains phenomenality and so is not a zombie world; but if it does not contain cortico-thalamic oscillation, it does not fit the physical requirement of a zombie world. So physicalism cannot allow a zombie world.) But the zombie or the person the zombie is a non-phenomenal counterpart of need have no phenomenal concepts. A zombie dog would do as well. And we need not mention modes of

presentation or concepts in stating the argument. The argumentation surrounding the modal arguments does involve concepts. See, for example, the discussion below of Perry's explanation for why dualism seems to be conceivable in terms of concepts. But both the Knowledge Argument and the Property Dualism Argument turn on a more direct appeal to concepts in the metaphenomenal move, the idea that there is something about a phenomenal concept itself that undermines physicalism.

What Mary learns is sometimes put like this: "Oh, so *this* is what it is like to see red," where "what it is like to see red" is a phrase she understood in the black and white room, and the italicized 'this' is supposed to express a phenomenal concept. One could also say that what she learns is that *this* is the experience of red, where "the experience of red" is not supposed to express a phenomenal concept. Since there is some doubt as to whether a demonstrative concept can really be a phenomenal concept (Chalmers, 2003—I'll explain the doubt momentarily), we could put the point better by saying that what Mary learns is that P is the experience of red, where it is stipulated that 'P' expresses a phenomenal concept. But there is nothing special about this item of knowledge in the articulation of the point of the Knowledge Argument as compared with other items of knowledge that use 'P'. In particular, one could imagine that one of the things that Mary learns is that P = cortico-thalamic oscillation. She already knew in the room that the experience of red = cortico-thalamic oscillation (where it is understood that 'the experience of red' is something she understood in the black and white room), but she learns that P = cortico-thalamic oscillation. The proposition that P = cortico-thalamic oscillation is supposed to be a new coarse-grained proposition, one that she did not know in the black and white room. This version of the Knowledge Argument makes the overlap with the Property Dualism Argument in the metaphenomenal move explicit: there is supposed to be something problematic about the statement of physicalism itself *if it is stated using a phenomenal concept*. That is, what is problematic is something about the mode of presentation of the phenomenal side of the identity. Both arguments can be put in the form: even if we take physicalism to be true, that supposition is undermined by the phenomenal mode of presentation in the knowledge or statement of it.

Although it would take me too far afield to go into the differences between the Knowledge Argument and the Property Dualism Argument, I should mention one: that the Knowledge Argument as usually stated concerns a supervenience form of physicalism (no mental difference without a physical difference) whereas the Property Dualism Argument is directed against mind-body identity. Indeed, Jackson is thinking of a really extreme form of physicalism which makes a commitment to all the facts following a priori from a set of base physical facts. Chalmers (1996) also regards this view as entailed by physicalism. On that view of physicalism, the Knowledge Argument is much more persuasive, since all that has to be shown is that what Mary learns does not follow a priori from what she already knows. On that form of physicalism, the move made here and in Perry's

book of thinking of Mary as learning (or in Perry's case acquiring a sensitivity to) a new subjective concept of a property she already had an objective concept of has little purchase. However, the Knowledge Argument can be discussed as it is here and in Perry's book from the perspective of a mind-body identity account of physicalism. The standard reply which I have discussed is from that perspective, so even though some of the adherents of the Knowledge Argument are thinking of physicalism in a different way, that is irrelevant to the points made here.

I have used, more or less interchangeably, terms such as 'pin down', 'mode of presentation', 'concept' and 'way of thinking'. But these terms are all terribly obscure. In particular, there is an ambiguity that must be resolved in order to get clear about these arguments. Before I turn to that topic, I will give a critique of Perry's approach to Max Black, the Knowledge Argument and Modal arguments for dualism.

(II) Perry's Treatment of the Two Arguments

Perry's (2001, 2004_{a,b}) approach to the Knowledge Argument is roughly along the lines mentioned above: that Mary does something like acquiring a new subjective concept of a property that she had an objective concept of already in the black and white room. But Perry gives the that response two new twists with two ideas: that the new concept is part of what he calls a "reflexive content" and that Mary need not actually acquire the new concept so long as she is appropriately sensitive to it.

Here is a quotation from Perry's (2001) that gives his response both to Max Black's problem and to the Knowledge Argument.

"We can now, by way of review, see how Black's dilemma is to be avoided. Let's return to our imagined physicalist discovery, as thought by Mary, attending to her sensation of a red tomato:

"This_i sensation = B₅₂" [where 'this_i' is an internal demonstrative and B₅₂ is a brain property that she already identified in the black and white room-- NB]

This is an informative identity; it involves two modes of presentation. One is the scientifically expressed property of being B₅₂, with whatever structural, locational, compositional and other scientific properties are encoded in the scientific term. This is not a neutral concept. The other is being a sensation that is attended to by Mary. This is a neutral concept; if the identity is true, it is the neutral concept of a physical property. Thus, according to the antecedent physicalist [who takes physicalism as the default view--NB], Mary knows the brain state in two ways, as the scientifically described state and as the state that is playing a certain role in her life, the one she is having, and to which she is attending. The state has the properties that make it mental: there is something it is like to be in

it and one can attend to it in the special way we have of attending to our own inner states." (2001, p. 205).

The concept specified by "being the sensation attended to by Mary" cannot be regarded as a topic-neutral concept unless the terms 'sensation' and 'attend' are themselves understood in a topic-neutral manner. For example, we might think of both in informational terms.

Construed in that way, exercising the concept "being the sensation attended to by Mary" requires no phenomenality—e.g. it could be a concept of a zombie—and is not a phenomenal concept in the sense required by the Property Dualism Argument. If Perry's suggestion were that we should solve Black's problem by substituting a topic-neutral demonstrative/recognitional concept for a phenomenal concept, it just change the subject, shortchanging the metaphenomenal move in the dialectic about Mary. An advocate of the Knowledge Argument and Property Dualism Argument could say Perry's reply simply doesn't recognize the metaphenomenal force of the arguments.

However, I have not yet explained how "reflexive content" is supposed to figure in. Propositional attitudes have "subject matter" contents which are a matter of the properties and objects the attitudes are concerned with. The subject matter content of my belief that Perry smokes could be said to be concerned with Perry and the property of smoking. But there are other contents that are concerned with the same subject matter and have the same truth condition: for example, that the person who I am now thinking of is in the extension of the property that is the object of my concept of being a smoker. This is a reflexive content of my thought. ('Reflexive' is meant to indicate that what is being brought in has to do with the way thought and language fit onto the world or might fit onto the world.) The subject matter content of the claim that this_i (where 'this_i' is an internal demonstrative) = B₅₂, if physicalism is right, is the same as that this_i = this_i or that B₅₂ = B₅₂. (The concepts in a reflexive content can be recognitional as well as demonstrative.) Perry's intriguing and insightful idea is that my belief can have reflexive contents, the concepts of which are not concepts that I actually have. However, he argues persuasively that these concepts may be psychologically relevant nonetheless if the subject is "attuned" to the concepts in reasoning and deciding. "Attunement and belief are different kinds of doxastic attitudes..."(2001, p.107) The subtext is that our intuitions about contents are often a matter of reflexive contents that we are attuned to rather than to subject matter contents that we explicitly entertain.

Perry's solution to Max Black's problem and his reply to Jackson is to focus on a reflexive content that is topic-neutral. (Smart said a topic-neutral analysis of a property term entails neither that the property is physical nor that it is non-physical.) In the passage quoted earlier, he says what Mary learns can be put in terms of 'This_i sensation is brain state B₅₂', where 'this_i' is a topic-neutral demonstrative/recognitional concept. If the suggestion is that Mary acquires the

belief that this_i is brain state B₅₂, the problem is as just stated, that the topic-neutral concept involved in this belief is not a phenomenal concept, so the real force of the Knowledge Argument is just ignored. However, I think that what Perry means is that Mary comes to be *attuned* to that reflexive content instead of merely coming to believe it. What Mary learns can be expressed in terms of something she is attuned to and Max Black's problem can be solved by appealing to attunement to the same topic-neutral concept. But does substituting attunement for belief avoid the problem of ignoring the real force of the argument? Does attunement help in formulating a response to Mary and Max Black that takes account of the metaphenomenal move in the Mary dialectic? I think not.

Distinguish between two versions of Jackson's example. Sophisticated Mary acquires a genuine phenomenal concept when she sees red for the first time. Naïve Mary is much less intellectual than Sophisticated Mary. Naïve Mary does not acquire a phenomenal concept when she sees red for the first time (just as a pigeon presumably would not acquire a new concept on seeing red for the first time), nor does she acquire an explicit topic-neutral concept, but she is nonetheless *attuned* to certain topic-neutral non-phenomenal concepts of the sort Perry mentions. Perry's idea, on this understanding of it, is that the Mary problem can be solved as follows:

- (1) What Mary learns is what Naïve Mary learns, namely attunement to the content of "This_i sensation is brain state B₅₂." More specifically, she is attuned to the concept 'this_i' rather than actually in possession of it. Just as attunement and belief are two different attitudes, so acquisition of attunement and acquisition of belief are two different forms of learning.
- (2) The 'this_i' in the reflexive content is or expresses a topic-neutral concept.

As I mentioned earlier, there is a well-known solution to the Mary problem that takes Mary as Sophisticated Mary. What Sophisticated Mary learns is a phenomenal concept of a physical property that she already had a physical concept of in the black and white room. Perry does not undercut this solution. But his solution is itself easily undercut by a Jacksonian opponent who shifts the thought-experiment from Naïve to Sophisticated Mary. Consider this dialectic. Perry offers his solution. The Jacksonian opponent says "OK, maybe that avoids the problem of Naïve Mary, but the argument for dualism is revived if we consider a version of the thought experiment involving Sophisticated Mary, that is a version of the thought-experiment in which Mary actually acquires the phenomenal concept instead of merely being attuned to it. What Sophisticated Mary learns is a content that contains a genuine phenomenal concept. And that content was not available to her in the room. What she acquires is phenomenal knowledge (involving a phenomenal concept), knowledge that is not deducible from the physicalistic knowledge she had in the black and white room. So dualism is true." Indeed, it is this explicit phenomenal concept that makes it at

least somewhat plausible that what Mary acquires is a new coarse-grained belief as well as a new fine-grained belief. Perry cannot reply to *this* version of the thought experiment (involving Sophisticated Mary) by appealing to the *other* one (that involves Naïve Mary).

Chalmers (2003) argues that phenomenal concepts cannot be demonstrative concepts. The main argument could be put as follows: for any demonstrative concept, say 'this_i', this_i has phenomenal property P would be news. But if the demonstrative concept was genuinely a phenomenal concept, there would be some claims of that form that are not news. I agree with the "not news" rule of thumb, though I would not go so far as to agree that it shows no demonstrative concept can be phenomenal. However, whether or not it shows that there can't be a concept that is both demonstrative and phenomenal, the demonstrative concepts that Perry is talking about are not phenomenal concepts in the sense required to motivate the Knowledge Argument and the Property Dualism Argument, the sense required to ground the metaphenomenal move.

Let us now turn to Perry's solution to the Max Black problem. Although the Max Black problem is mentioned often in the book, his solution is expressed briefly in what I quoted above. He clearly intends it to be a by-product of his solutions to the other problems. I take it that that solution is the same as the solution to the Mary problem, namely that the problem posed by the alleged non-physical nature of the mode of presentation of the phenomenal side of a mind-body identity can be avoided by thinking of attunement to a content in which the phenomenal concept is replaced by a topic-neutral concept. The proponent of the Max Black argument (the Property Dualist) is concerned that in the mind-body identity claim 'P = B₅₂' where 'P' expresses a phenomenal concept, the phenomenal mode of presentation of 'P' undermines the reductionist claim that P = B₅₂. Someone who advocates this claim is certainly not going to be satisfied by being told that we can substitute a topic neutral concept for 'P' and we can substitute attunement for belief. The Property Dualist will say "So what? My concern was that the mode of presentation of 'P' introduces an unreduced phenomenality; whether the mind-body identity claim is something we believe or are merely attuned to is not relevant."

Perry also applies his apparatus to the modal arguments for dualism such as Kripke's and Chalmers'. Why do we have the illusion that "This_i sensation = B₅₂" is contingent, given that (according to physicalism) it is a metaphysically necessary truth? Perry's answer is that the necessary identity has some *contingent* reflexive contents such as: that the subjective character of red objects appears like so and so on an autocerebroscope, is called 'B₅₂', and is what I was referring to in my journal articles. Here the metaphenomenal move I mentioned earlier has no role to play. If 'this_i' does express a genuinely phenomenal concept, the identity will still have the same reflexive contents. I think Perry's point here has considerable force.

Though it is not relevant to other points here, let me mention one worry: The dualist can respond to Perry by saying "Look, I can identify the brain state by its *essential properties* and still wonder whether I could have that brain state (so identified) without *this; phenomenal property*. The contingency that Perry was supposed to have explained away just reappears." What Perry must do is make it plausible that *the main* justification for the claim of contingency depends on conflating reflexive contents with non-reflexive contents.

Though I agree with Perry on many things, maybe most things, and find his book with its notion of attunement to reflexive concepts insightful and useful, there is one key item from which all our disagreements stem. He does not recognize the need for, or rather he is vague about the need for, a kind of phenomenal concept which itself involves an experience. When saying what it is that Mary learns, he says "'This new knowledge is a case of recognitional or identificational knowledge... We cannot identify what is new about it with subject-matter contents; we can with reflexive contents.'" (2004, p. 147) I agree that what Mary learns is not a new subject matter content (in the sense explained earlier). But the problem is that it is unclear whether the recognitional or identificational concepts that Perry has in mind are truly phenomenal. When he proposes to explain away the intuitions that motivate the Max Black argument and the Knowledge Argument by appeal to a topic-neutral concept, he loses touch with what I called the metaphenomenal move and with it the intuitive basis of these arguments in phenomenal concepts, or so it seems to me.

The reader may have noticed that about a quarter of the paper has gone by without any explicit statement of the Property Dualism Argument. I have postponed the really difficult and controversial part of the discussion, the explanation of an ambiguity in 'mode of presentation', a matter to which I now turn. After explaining the two senses of 'mode of presentation', I will state the Property Dualism Argument. Then, in the second half of the paper, I will give my rebuttal.

(III) Modes of Presentation

The "mode of presentation" of a term is often supposed to be whatever it is on the basis of which the term picks out its referent. The phrase is also used to mean whatever it is about the terms involved that explain how true identities can be informative. (Why is it informative that Tony Curtis = Bernie Schwartz but not that Tony Curtis = Tony Curtis?) However, it is not clear that these two definitions converge on the same entity. Indeed it is not clear that there is any one type of entity that plays even one of these roles in all cases. For example, it is plausible that the basis for informativeness of identities is in some cases something that could be called the meanings of the words involved, but in other cases it seems something closer to the form of the words. (E.g. in "London = Londres".) In other cases, it is something that can differ even between what seem to be two occurrences of the same word. (E.g., 'Paderewski = Paderewski' where the first occurrence is intended to refer to the pianist and the second to the

politician.) In other cases, and importantly so for this paper, it seems to be something experiential. (Consider an informative case of 'That = that', where what distinguishes the two uses of 'that' is the different perceptions on the basis of which the terms refer—See Austin, 1990.) Following Alex Byrne and Jim Pryor (2004), one could speak of two different roles, the informativeness or cognitive significance role and the reference-determination role.

I believe that these two roles are not satisfied by the same entity, and so one could speak of an ambiguity in 'mode of presentation'. However, the Property Dualism Argument depends also on a quite different ambiguity in 'mode of presentation'.⁷ I will distinguish between the cognitive mode of presentation (CMoP) and the metaphysical mode of presentation (MMoP). The CMoP is the constellation of mental (cognitive or experiential) or linguistic (including semantic) features of a term that determines its reference, or, alternatively but not equivalently, is the basis of explanation of how true identities can be informative (and how rational disagreement is possible—I will take these to be the same). The importantly different and less familiar mode of presentation, the MMoP, is a property of the referent. There are different notions of MMoP corresponding to different notions of CMoP. Thus if the defining feature of the CMoP is taken to be determining reference, then the MMoP is the property of the referent in virtue of which the CMoP determines the referent. If the defining feature of the CMoP is taken to be explaining informativeness, then the MMoP is the property of the referent in virtue of which informativeness is to be explained.

For example, suppose, temporarily, that we accept a descriptive theory of the meaning of names. On this sort of view, the CMoP of 'Hesperus' might be taken to be 'the morning star' (or the meaning of that description). 'The morning star' picks out its referent in virtue of the referent's property of rising in the morning rather than its property of being covered with clouds or having a surface temperature of 847 degrees Fahrenheit. The property of the referent of rising in the morning is the MMoP. And this would be so for the notion of MMoP corresponding to both of the two conceptions of CMoP mentioned above, first, cognitive significance, or more specifically, the basis of explanation of informativeness of identities; and second, the determination of reference. The CMoP is much more in the ballpark of what philosophers have tended to take modes of presentation to be, and the various versions of what a CMoP might be are also as good candidates as any for what a concept might be. The MMoP is

⁷A similar but not identical distinction is introduced in arguing for Property Dualism in two unpublished papers by Stephen White (White, unpublished_{a,b}). These are my terms, not White's, and I do not agree with White about key features of the distinction. I will attribute very little specific content to White's unpublished papers, since those papers are in draft form as of the writing of this paper. My rebuttal of the Property Dualism Argument is not intended as a reply to those unpublished arguments but rather a reply to a family of arguments, some of which are inspired by White's papers, which I am thinking of as put forward by a hypothetical Property Dualist.

less often thought of as a mode of presentation—perhaps the most salient example is certain treatments of the causal theory of reference in which a causal relation to the referent is thought of as a mode of presentation. (Devitt, 19xx). However, in some contexts, for example, the Property Dualism Argument, the term 'mode of presentation' is frequently used in the sense of a property of the referent.

In the passage quoted earlier from Perry's statement of Max Black's argument, Perry seemed often to be talking about the MMoP. For example, he says: "...even if we identify experiences with brain states, there is still the question of what makes the brain state an experience, and the experience it is; it seems like that must be an additional property the brain state has... There must be a property that serves as our mode of presentation of the experience as an experience..." (p.101, underlining added). Here he seems to be talking about the MMoP of the brain state (i.e., the experience if physicalism is right). When he says what Max Black would say about what Mary learns, he says: "But then isn't there something about Q_R that Mary didn't learn in the Jackson room, that explains the difference between ' Q_R is Q_R ' which she already knew in the Jackson room, and (5) [(5) is: Q_R is this subjective character], which she didn't? There must be a new mode of presentation of that state to which ' Q_R ' refers, which is to say some additional and *apparently non-physical* aspect of that state, that she learned about only when she exited the room, that explains why (5) is *new* knowledge." (p. 101, underlining added) Again, 'aspect' means property, a property of the state. So it looks like in Perry's rendition, a mode of presentation is an MMoP. However, his solution to Max Black's problem involves the idea that the concept that Mary acquires or acquires sensitivity to is topic-neutral, and that makes it look as if the issue in the Property Dualism Argument is centered on the CMoP. He says, speaking of a mind-body identity: "This is an informative identity; it involves two modes of presentation. One is the scientifically expressed property of being B_{52} , with whatever structural, locational, compositional and other scientific properties are encoded in the scientific term. This is not a neutral concept. The other is being a sensation that is attended to by Mary. This is a neutral concept; if the identity is true, it is the neutral concept of a physical property." (The underlining is added by me.) The properties of being B_{52} , and being a sensation that is attended to by Mary are said by Perry to be properties, but also concepts. The properties are modes of presentation in the metaphysical sense, but concepts are naturally taken to be or to involve modes of presentation in the cognitive sense. The view he actually argues for is: "We need instead the topic-neutrality of demonstrative/recognitional concepts." (205)

When I described the metaphenomenal move in the dialectic concerning the Knowledge Argument, I said the phenomenal concept that Mary acquires itself contains or else requires unreduced phenomenality. Why "contains or else requires"? In terms of the CMoP/MMoP distinction: if the CMoP that Mary acquires is partly constituted by an unreduced phenomenal element, then we

could say that the concept contains unreduced phenomenality. If the MMoP that is paired with the CMoP involves unreduced phenomenality, one could say that the concept that Mary acquires *requires* an unreduced phenomenal property, as a property of the referent.

I will state the Property Dualism Argument first in terms in which MMoPs play the main role and bring in CMoPs later. But I will briefly say where I stand on the main issue. The Property Dualism Argument is concerned with a mind-body identity that says that phenomenal property Q = brain property B₅₂. The worry is that the mode of presentation of Q brings in a non-physical property. But mode of presentation in which sense? Start with the CMoP. Well, a phenomenal CMoP has a constituent which is phenomenal and is used to pick out something phenomenal. If I think about the phenomenal feel of my pain while I am having it, I can do that in a number of different ways. I could think about it as “the phenomenal feel of this pain”. Or I could think about it using the phenomenal feel of the pain itself as part of the concept. But if a phenomenal feel does double duty in this way, no extra specter of dualism arises. If the phenomenal feel is a physical property, then it is a physical property even when it does double duty. The double duty is not required by a phenomenal concept. One could in principle use one phenomenal feel in a CMoP to pick out a different phenomenal feel. E.g. the phenomenal feel of seeing green could be used to pick out the phenomenal feel of seeing red if the concept involves the description “complementary” in the appropriate way. But there is no reason to think that such a use—or the double duty use—brings in any new specter of dualism.

Move now to the MMoP. We can think about a color in different ways, using different properties of that color. I might think of a color via its property of being my favorite color or the only color I know of whose name starts with ‘r’. Or, I may think about it via its phenomenal feel. And what holds of thinking about a color holds for thinking about the phenomenal feel itself. I can think of it as my favorite phenomenal feel or I can think about it phenomenally. If the referent is a phenomenal property P, the MMoP might be taken to be the property of being (identical to) P. If P is physical, so is being P. So the MMoP sense generates no new issue of dualism. That is where I stand. The Property Dualist, by contrast, thinks that there are essential features of modes of presentation that preclude the line of thought that I expressed. That is what the argument is really about.

I spoke earlier of double duty. A phenomenal feel in a concept is used to pick out a phenomenal feel. But what I have just suggested amounts to “triple duty”. A phenomenal feel in the CMoP serves to pick out a phenomenal feel as referent via a closely related phenomenal feel as MMoP. I don't want to make very much of this “triple duty”. The notions of CMoP and MMoP are artificial notions that make more intuitive sense in some cases than in others. The distinction is needed in a discussion of the Property Dualism Argument but may not have much of a role in other issues. The apparatus I am using is a way of

coding (for the purposes of the Property Dualism Argument) the insight from Loar and others referred to earlier that a phenomenal feel can play a key role in referring to and thinking about a closely related phenomenal feel.

I have not given a detailed proposal for the nature of a phenomenal CMoP, since my case does not depend on these details. For my purposes, we could take the form of a phenomenal CMoP to be “the experience:_____”, where the blank is filled by a phenomenal property, making it explicit how a CMoP might mix descriptive and non-descriptive elements. (I take this formulation from Papineau (2002), but he does not use the CMoP/MMoP distinction.) If the property that fills the blank is phenomenal property P, the MMoP that is paired with this CMoP might be the property of *being P* and the referent might be P itself. So P would do “triple duty”, as the referent, brought in by the MMoP and as a constituent of the CMoP.

I will turn now to a bit more discussion of the CMoP/MMoP distinction and then move to stating and refuting the Property Dualism Argument.

The morning star/evening star case just mentioned is only one of many sorts of identity, and so a CMoP/MMoP distinction based on it is not general. There are good reasons for acknowledging non-descriptive CMoPs (e.g. recognitional dispositions as in Loar, 1990, 1997). Of course, the phenomenal CMoPs that will be the topic of this paper are non-descriptive. Further, different versions of the Property Dualism Argument presuppose notions of CMoP and MMoP geared to different purposes. I have mentioned two purposes, fixing reference and accounting for cognitive significance. A third purpose—or rather a constraint on a purpose—is the idea that the MMoP is a priori accessible on the basis of the CMoP. And since one cannot assume that these three functions (cognitive significance, fixing reference, a priori accessibility) go together, one wonders how many different notions of CMoP and MMoP there are. Byrne and Pryor (2004) give arguments that—although put in different terms—can be used to make it plausible that these three *raison d'être* of modes of presentation do not generally go together. I think the seductive nature of the Property Dualism Argument takes comfort from the tendency to think that these three functions do go together. However, I will rebut the argument without relying—except at one point—on any general claim that this or that function does not coincide with a different function. All of the versions of the CMoP that I will be considering share a notion of a CMoP as a mental or linguistic entity, for example a mental representation. The MMoP, by contrast, is always a property of the referent. Byrne and Pryor (2004) note (in different terms), when it comes to cognitive significance, so long as it seems that the MMoP applies to the referent, there is no need for it to actually apply, but I will be ignoring this point.

Physicalists say that everything is physical and thus they are committed to the claim that everything cognitive, linguistic and semantic is physical. However, not all issues for physicalism can be discussed at once, and since the topic of

this paper is the difficulty for physicalism posed by phenomenality, I propose to assume that the cognitive, linguistic and semantic features of CMoPs do not pose a problem for physicalism so long as they do not involve anything phenomenal. The key step in the Property Dualism Argument, the metaphenomenal move, requires a CMoP that is genuinely phenomenal in the following sense. In addition to the cognitive or linguistic or semantic features that are involved in straightforwardly descriptive CMoPs, the CMoP of the phenomenal term of a phenomenal physical identity thesis that raises the Property Dualism concern, has a phenomenal element that makes a cognitive difference.

I will argue that the key step in the Property Dualism Argument can be justified in a number of ways, assuming rather different ideas of what MMoPs and CMoPs are (so there is really a family of Property Dualism Arguments). I will start with a notion of CMoP and MMoP geared to cognitive significance. I will not assume that the CMoP and MMoP in this sense also fix reference or that there is an a priori relation between CMoP and MMoP. Then when I move to criticizing the Property Dualism Argument, I will bring in the criterion of fixing the referent and an a priori relation between CMoP and MMoP. There are many interesting and controversial issues about how to choose from various rather different ways of fleshing out notions of CMoP and MMoP. My strategy will be to try to avoid these interesting and controversial issues, sticking with the bare minimum needed to state and critique the Property Dualism Argument.⁸ The reader may wonder if all these different and underspecified notions of mode of presentation are really essential to any important argument. My view, which I hope this paper vindicates, is that there is an interesting family of arguments for dualism involving a family of notions of mode of presentation and that this family of arguments is worth spelling out and rebutting.

⁸ Suppose that someone rationally believes that he is seeing Hesperus but not Phosphorus. The subject is in an epistemic situation qualitatively like one he would be in at a world in which there are two heavenly bodies, each of which manifests one but not the other of two MMoPs. One can contrast two ways of filling this idea out, two stances one might take in explaining the error in terms of MMoPs. First, one could stick with properties such as (always) rising in the morning and (always) rising in the evening, which Hesperus has at all times but manifests at different times. The explanation of error would be that the subject is in an epistemic situation in which he observes the manifestation of one property and the lack of manifestation of the other and infers that that there are two distinct objects, each of which has one but not the other property. A second stance one might take is to think of the MMoPs not as the observer-independent properties, rising in the morning and rising in the evening, but rather as manifesting rising in the morning and manifesting rising in the evening. These are naturally taken to be indexical properties since Hesperus manifests one at one time and the other at other times. I will use the first non-indexical strategy.

Am I assuming the falsity of a Millian view, according to which modes of presentation do not figure in a proper understanding of concepts? Without modes of presentation, the Property Dualism Argument does not get off the ground, so inevitably one is immersed in that territory in discussing it. However, I will consider a view according to which the physical side of the mind-body identity thesis refers directly, without any kind of mode of presentation. And the view of phenomenal concepts that I will be using has some affinities with a direct reference view.

The issue arises as to whether there is a 1-1 correspondence between CMoP and MMoP. Can there be an identity statement with two cognitive modes (CMoPs) and one metaphysical mode (MMoP) or vice versa?

Prima facie, it seems that both can happen. Consider the identity 'the wet thing in the corner = the thing in the corner covered or soaked with H₂O'. Suppose the CMoP associated with the left hand side of the identity statement to be the description (including both syntactic and semantic properties) 'the wet thing in the corner'. Take the corresponding MMoP to be the property of being the wet thing in the corner. Analogously for the right hand side. But the property of being the wet thing in the corner = the property of being the thing in the corner covered or soaked with H₂O. MMoP₁=MMoP₂, i.e. there is only one MMoP, even though here are two CMoPs.

Of course, a theorist who wishes to see MMoPs as shadows of CMoPs can postulate different, more fine-grained quasi-linguistic-cognitive MMoPs that are individuated according to the CMoPs. There is no matter of fact here but only different notions of CMoP and MMoP geared to different purposes. Perhaps the more fine-grained MMoPs could be justified by appeal to an a priori relation between CMoP and MMoP. I will return to the issue of MMoPs-individuated-according-to-CMoPs later in rebutting the Property Dualism Argument.

For reasons that will appear (in footnote 14), I will mention a different type of example of one MMoP with two CMoPs.

Consider the familiar example of 'Paderewski = Paderewski', which can be informative to someone who has two uses of 'Paderewski' which he takes to denote different people but which actually denote one person. We could imagine that the subject has forgotten where he learned the two words and remembers nothing about one Paderewski that distinguishes him from the other. If asked, he may reveal that he thinks there are two Paderewskis, and that he knows nothing about one that is any different from what he knows about the other. Someone might argue that the semantic properties of the two uses of 'Paderewski' are the same. For the referent is the same and every property associated by the subject with these terms is the same. (Say he remembers that Paderewski in both uses is famous, male, European, living and that he heard about him from some friend.) We could give a name to the relevant cognitive difference by saying that the

subject has two “mental files” corresponding to the two uses of ‘Paderewski’. We could regard the difference in mental files as a semantic difference, or we could suppose that semantically the two uses of ‘Paderewski’ are the same, but that there is a need for something more than semantics in individuating CMoPs. In either case, there are two CMoPs.

As Loar (1988) notes, Paderewski type situations can arise for general terms, even in situations where the subject associates the same description with the two uses of the general term. An English speaker learns the term ‘chat’ from a monolingual French speaker who exhibits cats, and then is taught the term ‘chat’ again by the same forgetful teacher exhibiting the same cats. The student tacitly supposes that there are two senses of ‘chat’ which refer to creatures that are different in some respect that the student has not noticed or perhaps some respect that the student could not have noticed, something biological beneath the surface that is not revealed in the way they look and act. Then the student forgets all the specific facts about the learning of the two words, tacitly supposing that things that fit ‘chat’ in one sense do not fit it in the other. We can imagine that the student retains two separate mental files for ‘chat’. Each file has some way of specifying the appearance of chats, says they purr, are aloof, are called ‘chat’, and most importantly, each of which says that there are two creatures called ‘chat’: chats in the current sense are not the same as chats in the other sense. So if the student learns ‘this chat = this chat’ where the first ‘chat’ is linked to one file and the second is linked to the other, that will be informative. It is certainly plausible that there are different CMoPs, given that there are two mental files. But the MMoP associated with both CMoPs would seem to be the same—something to do with appearance, being called ‘chat’, and the like. As before, those who prefer to see MMoPs as shadows of CMoPs can think of the property of being a chat—relative to the link to one mental file—as distinct from the property of being a chat—relative to the link to the other mental file. That is, the MMoP would be individuated according to the CMoP to preserve 1-1 correspondence.

What about the converse—one CMoP, two MMoPs? People often use one mental representation very differently in different circumstances without having any awareness of the difference. Aristotle famously used the Greek word we translate with ‘velocity’ ambiguously, to denote instantaneous velocity, and in other circumstances, average velocity. He did not appear to see the difference. And the Florentine “Experimenters” of the 17th Century used a term translated as ‘degree of heat’ ambiguously to denote heat and the very different magnitude, temperature. Some of their measuring procedures for detecting “degree of heat” measured heat and some measured temperature. (Block and Dworkin, 1974) For example, one test of the magnitude of “degree of heat” was whether a given object would melt paraffin. This test measured whether the temperature was above the melting point of paraffin. Another test was the amount of ice an object would melt. This measured amount of heat, a very different magnitude. (Wiser and Carey, 1983) One could treat these cases as one CMoP which refers via

different MMoPs, depending on context. Alternatively, one could treat the difference in context determining the difference in CMoP, preserving the 1-1 correspondence. This strategy would postulate a CMoP difference that was *not available from the first person*, imposed on the basis of a difference in the world, which would not be an acceptable notion of CMoP for purposes that emphasizes its relevance to the first person, and thus should be unacceptable to someone who thinks that the *raison d'être* of modes of presentation (i.e. the CMoP, MMoP pair) inheres in the role in explaining informativeness and rational error.

(IV) Back to Stating the Property Dualism Argument

To frame the Property Dualism Argument, we need to use a contrast between deflationism and phenomenal realism about consciousness. Phenomenal realism is inevitably called “inflationism”, even by supporters of inflationism, given that we lack a single term that means neither inflated nor deflated; though “just-right-ism” has a meaning that phenomenal realist would prefer.⁹ In its strong form, deflationism is *conceptual reductionism* concerning concepts of consciousness. More generally, deflationism says that a priori or at least armchair analyses of consciousness (or at least armchair sufficient conditions) can be given in non-phenomenal terms, most prominently in terms of representation, thought or function.¹⁰ (If the analyses are physicalistic, then deflationism is a form of what Chalmers (1999) calls Type A physicalism.) The rationale for the terminology can be seen by comparing eliminativism and deflationism. The eliminativist says phenomenal properties and states do not exist. The deflationist says phenomenal properties and states do exist, but that commitment is “deflated” by an armchair analysis that reduces the commitment. The conclusion of the Property Dualism Argument is that physicalism and phenomenal realism (“inflationism”) are incompatible: the phenomenal realist (“inflationist”) must be a dualist and the physicalist must be a deflationist.

The Property Dualism Argument in the form in which I will elaborate it depends on listing all the leading candidates for the nature of the MMoP of the mental side. My emphasis on the MMoP at the expense of the CMoP is artificial

⁹ Deflationism with respect to truth is the view that the utility of the concept of truth can be explained disquotationally and that there can be no scientific reduction of truth. (Horwich, 1990, 1998; Field, 1994) Deflationism with respect to consciousness in its most influential form is, confusingly, a kind of reductionism—albeit armchair reductionism rather than substantive scientific reductionism--and thus the terminology I am following can be misleading. I may have introduced this confusing terminology (in Block, 1992, 1993), and though it is both confusing and misleading, it has already taken firm hold, and so I will use it here.

¹⁰ Why “a priori or armchair”? Many philosophers adopt forms of functionalism, representationism or cognitivism that, it would seem, could only be justified by conceptual analysis, while nonetheless rejecting a priority.

but has some dialectical advantages. The metaphenomenal move is what is really being explored, the view that with the statement of mind-body identity, either or both of the MMoP or the CMoP brings in unreduced phenomenality. Most of the issues that come up with respect to the MMoP could also have been discussed with respect to the CMoP. In rebutting the Property Dualism Argument, I will go back to the CMoP occasionally.

Recall that the phenomenal side (which I will always put on the left side of the sentence on the page) of the identity is 'Q'. Let the metaphysical mode of presentation of Q be M (for mental, metaphysical and mode of presentation). The basic idea of the Property Dualism Argument is that even if Q is physical, there is a problem about the physicality of M. I will discuss five proposals for the nature of M. M might be (one or more of)

- (1) mental,
- (2) physical,
- (3) non-physical,
- (4) topic-neutral or
- (5) non-existent, i.e. the reference is "direct" in one sense of the term.

Here is a brief summary of the form of the argument. (1) is correct but useless, since the problem for the physicalist is to show how M can be both physical and mental. (2) is (supposed to be) ruled out by the arguments given below, which will be the main topic of the rest of this paper. (5) changes the subject by stipulating a version of the original property identity 'Q=cortico-thalamic oscillation' in which Q is not picked out by a genuine phenomenal concept. So the remaining options are the dualist option (3), and the topic-neutral option (4). White (1983) argues that (4) is deflationist as follows: The topic-neutral properties that are relevant to the mind-body problem are functional properties. If M, the metaphysical mode of presentation of Q, is a topic-neutral and therefore functional property, then that could only be because the phenomenal concept has an a priori functional analysis. E.g. the concept of pain might be the concept of a state that is caused by tissue damage and that causes certain reactions including interactions with other mental states. But an a priori functional analysis is deflationist, by definition. The upshot is that only (3) and (4) remain; (3) is dualist and (4) is deflationist. The conclusion of the Property Dualism Argument is that we must choose between dualism and deflationism: inflationist physicalism is not tenable.

Of course the argument as I have presented it makes the title "Property Dualism Argument" look misguided. Anyone who does take the argument to argue for dualism would presumably want to add an argument against deflationism. However, Smart and Armstrong (and in a more convoluted version, David Lewis (1980)) used the argument the other way around: the threat of dualism was brought in to argue for deflationism. Their view is that 'pain' contingently picks out a physical state, for 'pain' is a non-rigid designator whose sense is *the item with such and such functional role*. But the view that stands

behind this picture is that the nature of the mental is given a priori as functional. 'Pain' is a non-rigid designator, but what it is to have pain, that which cases of pain all share in virtue of which they are pains, is a certain functional property, and that functional property can be rigidly designated by, for example, the phrase 'having pain'.¹¹ So the view is a version of deflationism.

White (1983) used the Property Dualism Argument in pursuit of deflationism but in some papers in preparation (White (unpublished_{a,b})), he uses it to argue for dualism. The point of view of the present paper is phenomenal realist (inflationist) and physicalist, the very combination that the argument purports to rule out. (Though see Block (2002) for a different kind of doubt about this combination.) As we will see when I get to the critique of the Property Dualism Argument, the argument fares better as an argument for dualism than for deflationism, so the name of the argument is appropriate.

Before I can go into the argument in more detail, I must say something about what is meant by 'physical property', 'mental property', etc. As Hempel (1969) noted, physicalism has a serious problem of obscurity. Physicalism about properties could be put as: all properties are physical. But what is a physical property? Hempel noted a dilemma (that has been further elaborated by Chomsky (2000); but see the critique by Stoljar (2001)): Horn 1 is: we tie physicalism to current physics, in which case physicalism is unfairly judged false, since there are no doubt physical entities and properties which are not countenanced by *current* physics. These entities and properties would be counted as non-physical by this criterion, even if the physics of next week will unproblematically acknowledge them. Horn 2 is: we define physicalism in terms of future physics. But what counts as physics? We cannot take physics as given in an inquiry about whether physicalism can be unproblematically defined. And we surely don't want to count as physics whatever is done in academic departments called 'Physics Departments'. For if theologians hijacked the name 'Physics', that would not make God physical.

But not all philosophy concerned with physicalism can be about the problem of how to formulate physicalism. For some purposes, physicalism is clear enough.¹² In particular, the debate about the Property Dualism Argument

¹¹ The rationale for the functionalist understanding of this point of view is spelled out in Block, (1980) and in more streamlined form in Block (1994). Lewis (1980) adopts a more complex mixture of functionalism and physicalism.

¹² The big problem in defining physicalism is getting an acceptable notion of the physicalistically non-problematic without simply using the notion of the physical. One approach is to use a paradigm of the physicalistically unproblematic. I have suggested (1978) defining physicalism as the view that everything is decomposable into particles of the sort that make up inorganic matter. This definition uses "inorganic" as a way of specifying what is physicalistically unproblematic (following Feigl, 1958,1967), and so would get the wrong result if the inorganic turns out to be physicalistically problematic,

seems relatively insensitive to issues about what exactly physicalism comes to. (If not, that is an objection to what follows.)

I will take the notions of physicalistic vocabulary and mentalistic vocabulary to be unproblematic. A physical property is a property canonically expressible in physicalistic vocabulary. For example, the property of being water is a physical property because that property = the property of being H₂O. The predicate '___ is H₂O' is a predicate of physics (or anyway physical science), the property of being H₂O is expressed by that predicate, and so is the property of being water, since they are the same property. (Note that the relation of "expression" is distinct from referring.) A mentalistic property is a property canonically expressible in mentalistic vocabulary. '___ is a pain' is a mentalistic predicate and thus expresses (or connotes) a mental property (that of being a pain). A non-physical property is a property that is not canonically expressible in physicalistic vocabulary. (So physicalism dictates that mental properties are canonically expressible in both physicalistic and mentalistic vocabularies.) I don't know if these notions can ultimately be spelled out in a satisfactory manner, but this is another of the cluster of issues involved in defining physicalism that not every paper concerning physicalism can be about.

Smart said that a topic-neutral analysis of a property term entails neither that the property is physical nor that it is non-physical. It would not do to say that a topic-neutral property is expressible in neither physicalistic nor non-physicalistic terms, since if physicalistic terms and non-physicalistic terms are all the terms there are, there are no such properties. The key kind of topic-neutral property for present purposes is a functional property, a second order property that consists

e.g. if pan-psychism obtains (electrons are conscious). Thus it fails as a sufficient condition of physicalism. It does not capture the meaning of 'physicalism' (and it does not even try to define 'physical property'), but it does better as a necessary condition of physicalism. See also Montero (1999). Papineau (2002) takes the tack of specifying the physicalistically unproblematic by (in effect) a *list*. He suggests defining physicalism as the thesis that everything is identifiable non-mentally, that is non-mental concepts can be used to pick out everything, including the mental. One problem with this way of proceeding is that "mental" has the same problem as "physical". We may one day acknowledge "mental" properties that we do not acknowledge today (much as Freudian unconscious mental properties are said to not always have been part of our conception of the mind). We can define the mental in terms of a list of currently acknowledged mental properties, which would be as problematic as defining the physical by a list. Or we could appeal to what will be recognized later as "mental", hitching our concept wrongly to the use of a term by future generations. If you think this is a merely hypothetical issue, note the controversies over unconscious inference in perception and unconscious cognitive processes in cognitive science more generally. To some extent, they hinge on a semantic issue of whether mentalistic terms should be applied to phenomena that resemble unproblematically mental phenomena but have the additional property of being unconscious.

in the having of certain other properties that are related to one another (causally and otherwise) and to inputs and outputs, all specified non-mentally. One could say that a topic-neutral property is one that is expressible in terms of logic, causation and non-mentally specified input-output language. The question may arise as to whether these terms are to be counted as part of physicalistic vocabulary or not. For purposes of this paper, I will leave that issue undecided.

I will briefly sketch each of the proposals mentioned above for the nature of M (the metaphysical mode of presentation of Q, which you recall was introduced in the sample identity, Q = cortico-thalamic oscillation) from the point of view of the Property Dualism Argument, adding some critical comments at a few places. Then, after a section on phenomenal concepts, I will rebut the Property Dualism Argument.

Proposal 1: M is mental.

If M is mental, then the same issue of physicalism arises for M, the metaphysical mode of presentation of Q, which arises for Q itself. So from the point of view of the Property Dualism Argument, we have gotten nowhere. It isn't that this proposal is false, but rather that it presents a challenge to the physicalist of showing how it could be true.

Proposal 2. M is physical.

The heart of the Property Dualism Argument is the claim that M cannot be physical.¹³ One argument proceeds as follows. If M is physical, it will not serve to account for cognitive significance: specifically, the informativeness of identities and the possibility of rational error. For example, suppose the subject rationally believes that Q is instantiated here and now but that cortico-thalamic oscillation is absent. He experiences Q, but also has evidence (misleading evidence, according to the physicalist) that cortico-thalamic oscillation is absent. We can explain rational error by appeal to two different MMoPs of the referent, only one of which is manifest. Let us take the metaphysical mode of presentation of the right hand side of the mind-body identity 'Q = cortico-thalamic oscillation' to be a matter of the instrumentation that detects cortico-thalamic oscillation. We can think of this instrumentation as keyed to the oxygen uptake by neural activity. (Functional magnetic resonance is a form of brain imaging that detects brain activity via sensitivity to metabolism of the oxygen that feeds brain activity.) The focus of this argument is the metaphysical mode of presentation of Q, namely M. According to the argument, if M is physical, it cannot serve the purpose of explaining rational error. For, to explain rational error, we require a metaphysical mode of presentation that makes rational sense of the subject's point of view. But the physical nature of M is not available to the subject. (The subject can be presumed to know nothing of the physical nature of M.) The problem could be

¹³ All three arguments are inspired by conversation with and published and unpublished papers by Stephen White, however, I doubt he would agree with my renditions or the conceptual apparatus they use.

solved if there was a mental mode of presentation of M itself, call it "M*". But this is the first step in a regress in which a physical metaphysical mode of presentation is itself presented by a mental metaphysical mode of presentation. For the same issue will arise all over again for M* that arose for M. Explaining rational error requires two modes of presentation, the manifestation of which are available to the first person at some level or other, so postulating a physical metaphysical mode of presentation just takes out an explanatory loan that has to be paid back at the level of modes of presentation of modes of presentation, etc. The upshot is that physical metaphysical modes of presentation do not pass the test imposed by the stipulated purpose of metaphysical modes of presentation.

There is also a related non-regress argument: if M is physical, a subject could believe he is experiencing Q, yet not believe he is in a state that has M. But there can be no epistemic gap of this sort between the metaphysical mode of presentation of a phenomenal property and the property itself.

Another argument that M cannot be physical is given by White (1983). He notes, plausibly enough, that "Since there is no physicalistic description that one could plausibly suppose is coreferential a priori with an expression like "Smith's pain at t," no physical property of a pain (i.e., a brain state of type X) could provide the route by which it was picked out by such an expression." (See p. 353 of the original publication and p. 706 of the reprinted version in Block, Flanagan and Güzeldere, 1997). Or in the terms of this paper, there is no physicalistic description that one could plausibly suppose is coreferential a priori with a mentalistic expression such as 'Q', so no physical property could provide the route by which it was picked out by such an expression. The property that provides the route by which Q is picked out by 'Q' is just the metaphysical mode of presentation (on one way of understanding that term) of Q, that is, M. So the upshot is supposed to be that M cannot be physical because there is no physicalistic description that is coreferential a priori with a phenomenal term.

A third argument that M cannot be physical is that MMoPs must be "thin", in the sense of having no hidden essence. Thick" properties include Putnamian natural kinds such as water. According to the Property Dualist, the explanatory purpose of MMoPs precludes thick properties serving as modes of presentation. For, it might be said, it is not *all* of a thick property that explains rational error but only an *aspect* of it. The same conclusion can be reached if one postulates that the MMoP is a priori available on the basis of the CMoP. Since hidden essences are never a priori available, hidden essences cannot be part of MMoPs. I will indicate later how the claim that MMoPs must be thin can be used to argue against the inflationist physicalist position. This consideration can also be used to bolster the two arguments presented earlier.

Earlier I suggested that there could be cases of a single MMoP with two CMoPs. One example was the identity 'the thing in the corner covered with

water = the thing in the corner covered with H₂O'. The CMoP associated with the left hand side is the description 'the thing in the corner covered with water', and the corresponding MMoP is the property of being the thing in the corner covered with water. Analogously for the right hand side. But the property of being the thing in the corner covered with water = the property of being the thing in the corner covered with H₂O, so there is only one MMoP. But if MMoPs cannot be "thick", being covered with water cannot be an MMoP. The relevant MMoP would have to be some sort of stripped down version of being covered with water that does not have a hidden essence.¹⁴

These three arguments are the heart of the Property Dualism Argument. I regard the three arguments as appealing to MMoPs in different senses of the term, and when I come to critiquing these three arguments later in the paper, I will make that point more explicitly.

Proposal 3. M is non-physical.

If M is non-physical, dualism is true. So this proposal will not preserve the compatibility of phenomenal realism with physicalism and will not be considered further here.

Proposal 4. M is topic-neutral.

In effect, I covered this topic earlier in my discussion of Perry. A genuinely phenomenal concept is required for getting the Property Dualism Argument (and the Mary argument) off the ground so a topic-neutral concept will not do.

Proposal 5. There is no M: the relation between 'Q' and its referent is "direct" in one sense of the term

A phenomenal concept is a phenomenal way of thinking of a phenomenal property. Phenomenal properties can be thought about using non-phenomenal concepts of them, for example, the concept of the property occurring at 5 PM. As I keep mentioning, the Property Dualism Argument requires a phenomenal concept in my sense of the term, and so if the mind-body identity at issue does not make use of a phenomenal concept, the Property Dualist will simply substitute a mind-body identity that does make use of a phenomenal concept. Of course, if it could be shown that there could not be any phenomenal concepts, then the Property Dualism Argument will fail. But I believe in phenomenal concepts and so will not discuss this view further.

Phenomenal concepts are often said to refer "directly", but what this is often taken to mean in philosophy of mind discussions is not that there is no metaphysical mode of presentation, but rather that the metaphysical mode of presentation is a necessary property of the referent.

¹⁴ The second example I gave involving Loar's 'chat' case is not vulnerable to this objection.

Loar (1990) says: "Given a normal background of cognitive capacities, certain recognitional or discriminative dispositions suffice for having specific recognitional concepts...A recognitional concept may involve the ability to class together, to discriminate, things that have a given objective property. Say that if a recognitional concept is related thus to a property, the property triggers applications of the concept. Then the property that triggers the concept is the semantic value or reference of the concept; the concept directly refers to the property, unmediated by a higher order reference-fixer".¹⁵

Consider the view that a phenomenal concept is simply a recognitional concept understood as Loar suggests whose object is a phenomenal property that is a physical property. I don't know if this would count as a concept which has no metaphysical mode of presentation at all, but certainly it has no phenomenal metaphysical mode of presentation, and so is not a phenomenal concept in the sense required for the Property Dualism Argument. For one can imagine a case of totally unconscious triggering of a concept by a stimulus or by a brain state. As Loar notes, there could be an analog of "blindsight" in which a self-directed recognitional concept is triggered blankly, without any phenomenal accompaniment. (Of course this *need* not be the case--the brain property doing the triggering could itself be phenomenal, or else the concept triggered could be phenomenal. In either case, phenomenality would have to be involved in the triggering of the concept.) And for this reason, Loar (1990, p. 98; 1997, p. 603) argues, a phenomenal concept is not merely a self-directed recognitional concept.

To sum up, the central idea of the Property Dualism Argument (and the Knowledge Argument) is the metaphenomenal move, the idea that in thinking about a phenomenal property, a further phenomenal property must be brought in as part of the CMoP or MMoP and that further phenomenal property poses a special problem for physicalism, because it is part of a mode of presentation. There are three functions of modes of presentation on one or another conception of them that putatively lead to this resistance to physicalism, a function in explaining cognitive significance, of determining reference, and of a priori availability on the basis of understanding the term.

¹⁵ The quotation is from the 1990 version of Loar's "Phenomenal States", op.cit, p. 87. This picture is abandoned in the 1997 version of Loar's paper in which he retains talk of triggering and the direct reference terminology, but with a new meaning, namely: refers, but not via a contingent property of the referent. The view common to both the 1990 and 1997 paper is that a theoretical concept of, e.g. neuroscience might pick out a neurological property "that triggers a given recognitional concept, and so the two concepts can converge in their reference despite their cognitive independence..." (1990, p. 88)

The Property Dualism Argument says that in the identity 'Q=cortico-thalamic oscillation', the metaphysical mode of presentation of Q (viz., M) must be either mental, physical, non-physical, topic-neutral or "direct", in which case there is no metaphysical mode of presentation. The mental proposal is supposed to be useless. The physical proposal is supposed to be ruled out because there is no a priori available physicalistic description of Q, because of supposed regress, and because the metaphysical mode must be "thin". The "direct reference" proposal appears to be ruled out by the fact that the concept of Q needed to get the argument off the ground is a phenomenal concept with a phenomenal metaphysical mode of presentation. So the only proposals for M that are left standing are the non-physical and topic-neutral proposals. The topic-neutral proposal involves a form of deflationism. So the ultimate metaphysical choice according to the Property Dualism Argument is between deflationism and dualism. The upshot is that the phenomenal realist ("inflationist") cannot be a physicalist. The argument is a way of making the metaphenomenal move described earlier concrete: the statement of a mind-body identity claim is supposed to be self-defeating because the MMoP (or the CMoP—but I have focused on the MMoP) of the phenomenal term of the identity is supposed to bring in unreduced phenomenality. The only way to avoid that unreduced phenomenality is to give a deflationist analysis; the alternative is dualism.

Objections Concerning Phenomenal Concepts

I have been using a notion of phenomenal concept based on the observation that a token of a phenomenal property can serve in thought to represent a phenomenal property. In such a case, there is a phenomenal property that is part of the CMoP. There is a special case of a phenomenal concept that I mentioned earlier in which a token of a phenomenal property can serve in thought to represent that very phenomenal property. In such a case, the phenomenal property does double duty: as part of the concept and also as the referent of that concept. Before I go on to rebutting the Property Dualism Argument, I will briefly consider two objections to this conception of a phenomenal concept.

Objection: (put to me by Kirk Ludwig): I can truly think "I am not having a red experience now" using a phenomenal concept of that experience, but that would not be possible on your view of what phenomenal concepts are.

Reply: Whether such a thought could be true depends on what is meant by 'phenomenal concept'. It is certainly reasonable to mean by 'phenomenal concept' a concept whose exercise does not involve an experience, and on such a concept of phenomenal concept, Ludwig is right that one can truly think "I am not having a red experience now" using a phenomenal concept of that experience. But on the concept of phenomenal concept I am using—which is not justified by stipulation but by its need for the Property Dualism Argument and the Knowledge Argument—such a thought would not be true. It is not hard to see how such a false thought is possible. For example, one might set oneself to

think something that is manifestly false, saying to oneself "I am not having a red experience now", using a phenomenal concept—in my sense of phenomenal concept-- of the experience.

Objection: On your view, a phenomenal property does double duty: as the referent but also as part of the mode of presentation of that referent. But if physicalism is true, cortico-thalamic oscillation would be part of its own mode of presentation. Does that really make sense?

Reply: The claim is not that the right hand side of the identity 'Q = cortico-thalamic oscillation' has an associated mode of presentation (CMoP or MMoP) that involves cortico-thalamic oscillation. I have been supposing that the modes of presentation of the right hand side have to do with the physical properties of oxygen metabolism that are revealed by scanning technology. Modes of presentation—both cognitive and metaphysical—are modes of presentation associated with *terms* or the concepts associated with the terms, and the identity involves *two* terms. There is no conflict with the indiscernability of identicals if one keeps use and mention distinct. That is, cortico-thalamic oscillation is part of its own mode of presentation only as *picked out by the phenomenal concept of it*.¹⁶

¹⁶ There is one outstanding issue involving phenomenal concepts that I will raise briefly without attempting to resolve. What makes it the case that a token phenomenal property in a phenomenal concept serves as a token of one phenomenal type or property rather than another. For example, suppose that a token of a mental image of red serves in a phenomenal concept to pick out an experience as of red. Why red rather than scarlet or colored? One answer is an appeal to dispositions. Suppose you are looking at chips in an ideal paint store that has a chip for every distinct color. (Robert Boynton estimates that there would be about a million such chips.) You are looking at Green_{126, 731}, thinking that the experience as of that color is nice, using a phenomenal concept of that experience. But what experience is it that your phenomenal concept is of? The experience as of Green_{126,731}? The experience as of green? The answer on the dispositionalist view is that it depends on the subject's disposition to say that another experience is an experience of the same type. If only another experience as of Green_{126,731} will count as an experience of the same type, the phenomenal concept is maximally specific; if any bluish green experience will count as an experience of the same type, the concept is more abstract. If any experience of green will count as an experience of the same type, the concept is still more abstract. (Views of this general sort have been defended in conversation by Brian Loar and Kati Balog.)

This sort of view is similar to one interpretation of Berkeley's answer to the question of how an image of an isosceles triangle can be a concept of triangle, a concept that covers non-isosceles triangles as well as isosceles triangles. His answer (on this interpretation) was: because the image functions so as to apply to all types of triangles rather than just to isosceles triangles.

There is a problem with Berkeley's answer that also applies to the view of phenomenal concepts I am talking about: namely, that it would seem that it is because

(V) Critique of the Property Dualism Argument

The Property Dualism Argument says that the metaphysical mode of presentation of Q, viz. M, cannot be physical (using the identity 'Q = cortico-thalamic oscillation' as an example). I mentioned three (subsidiary) arguments to that effect, a regress argument, an argument concerning a priori availability, and an argument based on the thin/thick distinction. I also mentioned 3 different *raisons d'être* of modes of presentation, each of which could be used with respect to any of the three arguments, yielding in principle, 9 distinct arguments—even 18 if one counts the CMoP/MMoP dimension-- making refutation potentially unmanageable. I will try to finesse this multiplicity by taking the strongest form of each argument, bringing in the other *raisons d'être* as they are relevant. (I have already mentioned my focus on the MMoP in most of the argument at the expense of the CMoP.) The exposition of the argument has been long, but the critique will be much shorter. As we will see, the first two arguments do not really stand alone, but require the thin/thick argument. My critique of the thin/thick argument is aimed at depriving the conclusion of support rather than outright refutation.

REGRESS

The first argument mentioned earlier against the physical proposal is a regress argument. The idea is that if M is physical, it will not serve to account for cognitive significance (informativeness). For example, suppose the subject rationally believes that he has Q but not cortico-thalamic oscillation. As noted earlier, there can be rational error in supposing A is present without B when in fact A=B. That error can be explained if there is a metaphysical mode of presentation of A, MMoP_A and a metaphysical mode of presentation of B, MMoP_B, such that MMoP_A is manifest and MMoP_B is not, leaving the subject in

one is *taking* the image of an isosceles triangle as a *triangle-image* rather than as an *isosceles-triangle-image* that it functions as it does, rather than the other way around. (This is not to impugn the functionalist idea that the role is what makes the concept the concept it is; rather, the point is that in some cases, there is something about the entity that has the role that gives it that role.) Similarly, it is because one is taking the experience of a specific shade of green as a green-experience rather than as a Green_{126,731} experience that makes it function as a concept of the experience of green rather than the concept of that highly specific shade of green. The dispositionalist view seems to get things backwards. However, no view of phenomenal concepts can sign on to the idea that an experience functions in a concept only under *another* phenomenal concept, since that would lead to a regress. My tentative thought is that there is a form of "taking" that does not amount to a further concept but is enough to explain the dispositions. But I cannot go into the matter further here.

the epistemic situation that he would be in in a possible world in which $MMoP_A$ and $MMoP_B$ were modes of presentation of two different items.

Applied to the case at hand, the physicalist thesis that $Q =$ cortico-thalamic oscillation, let us assume that the $MMoP$ of 'cortico-thalamic oscillation' is the one mentioned earlier having to do with oxygen uptake by neural processes that affects a brain scanner. It is the other metaphysical mode of presentation that is problematic, viz., M , the metaphysical mode of presentation of the left hand side of the identity. The Property Dualist says that if M is physical, then M cannot serve to account for cognitive significance, since the subject need have no access to that physical description just in virtue of being the subject of that metaphysical mode of presentation. The problem could be solved if there was a *mental* mode of presentation of M itself, call it " M^* ". But this is the first step in a regress in which a metaphysical mode of presentation that is physical is itself presented by a metaphysical mode of presentation that is mental. For the same issue will arise all over again for M^* that arose for M . Accounting for the different cognitive significances of the two sides of an identity statement requires two modes of presentation that are available to the first person at *some level or other*, so postulating a physical metaphysical mode of presentation just takes out an explanatory loan that has to be paid back at the level of modes of presentation of modes of presentation, etc.

This argument is question-begging. The argument supposes that if M is physical, it could not serve to account for cognitive significance, since accounting for cognitive significance requires a mental $MMoP$. But the physicalist thesis is that M is *both* mental and physical, so the physicalist will not be concerned by the argument. So the regress argument in the form I described is like the old objection to physicalism that says that brain states involve the instantiation of, e.g. electrochemical properties (and even the properties of being in soggy gray stuff) but since pain does not involve the instantiation of such properties, pain can't be a brain state.

Of course if $MMoPs$ must be thin, then M , which is an $MMoP$, cannot have a hidden physical nature, and so it cannot be both mental and physical. But if that is the claim, the regress argument depends on the "thick/thin" argument to be discussed below, and does not stand on its own.

I assumed that the $MMoP$ of 'cortico-thalamic oscillation' is unproblematic, having to do, for example with oxygen metabolism as a result of brain activity. But the Property Dualist may say that this $MMoP$ does not uniquely determine the referent and need not be a property to which the subject has given a special reference-fixing authority. (I will use the phrase 'fixes the referent' to mean uniquely determines the referent and has been given the special authority.) Why is this a reply to my point concerning the question-begging nature of the regress argument? The question arises: if the regress argument's appeal to cognitive significance requires an $MMoP$ for 'cortico-thalamic oscillation' that does fix the

referent, what would that MMoP be? Someone could argue that that MMoP could only be the property *being cortico-thalamic oscillation itself*. And then it could be claimed that both sides of the identity statement are such that the MMoP of that side is identical with the referent. And this may be said to lead to dualism via a route that I will describe later under the heading of “A Cousin of the Property Dualism Argument”. I will not go into the matter now, except to note that it cannot be assumed that a property of the referent that accounts for cognitive significance also fixes the referent, and what counts in this argument is cognitive significance. As Byrne and Pryor (2004) note, it is easy to see that properties of the referent that account for cognitive significance (play the Frege role, in their terms) need not fix the referent. For example, *being a raspy-voiced singer* may play the Frege role for ‘Bob Dylan’, even though there are other raspy-voiced singers. And *being a raspy voiced singer* need only be a property that the subject saliently associates with the referent, not a property to which the subject has given the special authority.¹⁷ (This, incidentally, is the one point at which I appeal to general considerations about whether the three *raison d’être* for modes of presentation mentioned earlier go together.)

In sum, the regress argument depends on the “thin/thick” argument and does not stand alone.

A PRIORI AVAILABILITY

The second argument presented above was that (to quote White, 1983), “Since there is no physicalistic description that one could plausibly suppose is coreferential a priori with an expression like “Smith’s pain at t,” no physical property of a pain (i.e., a brain state of type X) could provide the route by which it was picked out by such an expression.” (p. 353).

The first thing to notice about this argument is that if “Smith’s pain at t” is taken to be the relevant mental concept in the Property Dualism Argument, it has the flaw of being purely linguistic and not a phenomenal concept of the sort I have argued is required for the argument. Still, it might seem that the argument goes through, for a genuinely phenomenal concept does not make a physical

¹⁷ Perhaps it will be said that not any old “associated property” is enough to rationalize error. Let us use the notation RF[‘Dylan’] to mean the property to which the subject has given the special reference-fixing authority for using ‘Dylan’. The view I expect to hear is that to rationalize error, we must ascribe to the subject a justified belief that RF[‘Bob Dylan’] is instantiated here, whereas, say RF[‘Robert Zimmerman’] is not. But this is a false picture of what it takes to rationalize error. If I have reason to believe that some abiding property, X, of Bob Dylan is instantiated here but that some abiding property, Y, of Robert Zimmerman is not, then other things equal, I have reason to think Dylan and Zimmerman are different people, no matter how unconnected X and Y are from reference-fixers.

description of anything that could be called the route of reference any more available a priori than the description "Smith's pain at t".

Note that the *raison d'être* of modes of presentation assumed here is not the cognitive significance appealed to in the regress argument but rather: the property of the referent (i.e. MMoP) that provides "the route by which it is picked out". What is "the route by which it is picked out"? I think the right thing to mean by this phrase is what I have called fixing the referent, but I doubt that anything hangs on which of a number of candidates is chosen. Consider a case in which the subject conceives of the referent as being the local wet thing. Let us suppose that:

- The property of being the local wet thing is a priori available to the subject on the basis of the CMoP
- The property of being the local wet thing uniquely determines the referent
- The subject has given this property the special reference-fixing authority mentioned earlier.

My strategy is to concede all that could reasonably be said to be involved in reference fixing and to argue that nonetheless the argument does not work. For being wet = being at least partially covered or soaked with H₂O. But the subject whose mode of presentation it is need not have a priori access to 'being at least partially covered or soaked with H₂O' or know a priori that this physical description is coreferential with the original description. The subject can give the property of being the local wet thing the special reference fixing authority and thus have that property a priori available from the first person point of view, without ever having heard the description 'H₂O'. I hereby stipulate that the name 'Albert' is the name of the local wet thing. The property of Albert's being the local wet thing is a priori available to me in virtue of my stipulation, and I have given it a special reference-fixing authority. But I can do all that without knowing *all* descriptions of that property. That property *can be and is physical* even though I do not know, and therefore do not have a priori available, its physicalistic description.

Earlier, I considered the idea that MMoPs should be individuated according to CMoPs and thus that the property of being the local wet thing—considered as an MMoP-individuated-according-to-CMoP—is not identical to the property of being covered or soaked with H₂O because the *terms* 'water' and 'H₂O' are not identical. And of course this way of individuating the MMoP would provide an objection to the argument of the last paragraph.

However, the question then arises of what it is for such properties to be physical and what the physicalist's commitments are with respect to such properties. I believe that this question is best pursued not by inquiring about how to think of such strange entities as MMoPs-individuated-according-to-CMoPs but by focusing on the CMoPs themselves. And a further reason for turning the focus to CMoPs is that although the subject need have no a priori access to the physical descriptions of the physical properties that provide the metaphysical

route of access, it may be thought that this is not so for CMoPs. After all, CMoPs are certainly good candidates for something to which we have a priori access!

Let us distinguish two things that might be meant by saying that a CMoP (or MMoP) is physical. First, one might have an *ontological* thesis in mind—that the CMoP (or MMoP) is identical to a physical entity or property or some conglomeration involving a physical properties or entities. In this sense, a CMoP (or MMoP) can be physical whether or not the subject has a priori access to any physicalistic description of it. (The issue with which the Property Dualism Argument is concerned is whether phenomenal properties are, ontologically speaking, physical properties. I said at the outset that the issue of whether the cognitive, linguistic and semantic apparatus involved in a CMoP is ontologically physical should be put to one side (except to the extent that that apparatus is phenomenal). My rationale, you will recall, is that although there is an important issue as to whether physicalism can handle cognitive, linguistic or semantic entities or properties, in a discussion of whether *phenomenal* properties are physical, a good strategy is to suppose that non-phenomenal cognitive, linguistic and semantic entities are not physically problematic.)

A second interpretation of the claim that a CMoP is physical is that it is *explicitly* physical or explicitly analyzable a priori in physical terms. In this paper, I have been using 'physicalistic' to mean explicitly physical. It is not obvious what it would mean to say that an MMoP is or is not physicalistic (since it is not a cognitive, linguistic or semantic entity), but it does make sense to say that something that involves conceptual or linguistic or semantic apparatus is or is not physicalistic. For example, the CMoP 'being covered with water' is not physicalistic (at least if we restrict physics to microphysics), whereas 'being covered with H₂O' is physicalistic.

Is the CMoP of a phenomenal concept physical? Physicalistic? Recall, that according to me, a phenomenal concept uses a (token of a) phenomenal property to pick out a phenomenal property. Thus the CMoP of a phenomenal concept contains a non-descriptive element: a phenomenal property. And a phenomenal property is certainly not *explicitly* physical, i.e., physicalistic, that is, it does not contain conceptual apparatus or vocabulary of physics. A phenomenal property is not a bit of conceptual apparatus and it contains no conceptual apparatus. So, focusing on the 'physicalistic' sense of 'physical', the CMoP of a phenomenal concept is not physical. Must the physicalist therefore admit defeat? Hardly, for physicalism is not the doctrine that everything is *explicitly* physical. Physicalism does not say that all descriptions or conceptual apparatus are couched in physical vocabulary or analyzable a priori in physical vocabulary. Physicalists allow that there are domains of thought other than physics. Physicalists do not say that economics, history and anthropology use physicalistic vocabulary or conceptual apparatus. This is an absurd form of conceptual or terminological reductionism that cannot be equated with physicalism.

Physicalism does not require that the CMoP of a phenomenal concept be physicalistic, but it does require that it is (ontologically) physical. Is it physical? That depends partly on whether all linguistic and cognitive apparatus is physical, an issue that I am putting aside in this paper. So the remaining issue is whether the phenomenal property that is part of the CMoP is physical. And that of course is the very issue of physicalism vs. dualism that this paper is about. The Property Dualism Argument cannot *assume* that it is not physical—that is what the argument is supposed to show.

Where are we? Here is the dialectic: the Property Dualist says that in order for physicalism to be true, the physical description of the property that provides the route of reference (of the phenomenal term in a phenomenal-physical identity) has to be a priori available to the subject; it is not a priori available; so physicalism is false. I pointed out that even on very liberal assumptions about the role of the MMoP, a priori availability of a physical description of a physical property is an unreasonable requirement. But then I imagined a Property Dualist reply which said that I had failed to individuate the MMoP according to the CMoP. I then suggested that we eliminate the middleman, looking at the CMoP itself instead of considering the MMoP-individuated-according-to-the-CMoP. I pointed out that there is a sense of 'non-physical' (namely non-physicalistic) in which the CMoP of a phenomenal concept is indeed non-physical. I noted however that physicalists are not committed to all language or conceptual apparatus being physicalistic. Physicalists are committed to ontological physicalism, not conceptual reductionism. How does this apply to the MMoP-individuated-according-to-the-CMoP? It is true that if you individuate MMoPs according to CMoPs, then if there is no a priori available physical description, the MMoP is not "physical", and in this sense White's argument is correct. But all "physical" comes to here is *physicalistic*, and it is no part of physicalism to make any claim to the effect that phenomenal MMoPs or CMoPs are physicalistic. Thus the assumption of the second argument (viz., the topic of this section, the a priori availability argument) that the physicalist requires an a priori available description of the MMoP of the mental side of the mind-body identity is false.

If MMoPs have to be thin, then perhaps the distinction between an MMoP being ontologically physical and explicitly physical does not come to as much as would otherwise seem. Since a thin physical property has no hidden essence, it might be said to wear its physicality on its sleeve. However, if this is the only way to save the argument from a priori availability, that argument does not stand on its own but depends on the thin/thick argument, to which we now turn.

But first a brief reminder of what has been presupposed so far about the nature of MMoPs and CMoPs. In rebutting the regress argument, I assumed, along with the argument itself, that the *raison d'être* of MMoPs is to account for cognitive significance. The issue arose as to whether an MMoP defined

according to its explanatory purpose must also fix reference or determine the referent. I noted that this can not be assumed. The issue of the nature of CMoPs did not arise. In rebutting the second argument, I did not make any assumption about MMoPs or CMoPs that should be controversial, allowing a priori availability of the MMoP on the basis of the CMoP, reference-fixing authority and determination of the referent.

THIN/THICK

The third argument (inspired by White, forthcoming_{a,b}) that the MMoP of a phenomenal concept cannot be physical involves the distinction mentioned between “thin” and “thick” properties. As we have seen above, the first two parts of the Property Dualism Argument fall flat on their own, but can be resuscitated using the thin/thick distinction. However, if it could be shown that MMoPs must be thin, these other arguments would be superfluous, since the claim that MMoPs must be thin leads to dualism by a shorter route, as I will explain shortly. Whether a property is thick or thin, as I use these terms, is a matter of whether it has a hidden essence. (Alternate definitions that capture something like the same idea—for example, that primary intension = secondary intension-- are possible, but this paper is already too long.) For example, water or the property of being water is thick, since our concept of water is a concept of something that has a scientific nature that goes beyond superficial manifestations of it.¹⁸ Examples of thin properties are mathematical properties, at least some functional properties, and phenomenal properties if dualism is true. (The last point about dualism could be challenged—see Nagel (2001)--but I will put the issue aside.) Artifact properties such as being a telephone might also be taken by some to be thin. Some of the most basic natural kind properties may be said to be thin, or perhaps it is indeterminate whether they are thin. Natural kinds are said to have an essential nature that goes beyond superficial characteristics. But is that so for basic natural kinds, kinds at a level which captures the essential nature itself, so that different ways of realizing that essential nature do not capture a still more essential nature? Perhaps at the most basic level the distinction between superficial characteristics and essential nature collapses.

Note that it is not necessary for the Property Dualist to claim that *all* MMoPs are thin; it would be enough if this were true only for phenomenal concepts. I do not have a blanket argument against all attempts to show that MMoPs for phenomenal concepts must be thin, but I do have arguments for a number of specific attempts.

Why believe that MMoPs must be thin? I will start with two arguments.

1. The A Priority Argument, which appeals to the idea mentioned earlier that the MMoP is a priori available on the basis of the CMoP.
2. The Aspect Argument, according to which, the cognitive significance role of MMoPs precludes thick properties serving as modes of presentation.

¹⁸ We might think of a thick concept as one that purports to pick out a thick property.

For, as mentioned earlier, the Property Dualist may say that it is not *all* of a thick property that explains rational error but only an *aspect* of it, the thin aspect.

These two arguments for MMoPs (at least for phenomenal concepts) being thin appeal to different features of MMoPs and their relations to CMoPs. Although I have registered doubt as to whether the same entities can serve both functions, I will put that doubt aside.

The A Priority Argument for Thin MMoPs

Let us assume that the MMoP of a concept is a priori available on the basis of the CMoP. This constraint might be taken to rule out thick MMoPs, for I do not know a priori whether I am on Earth or Twin Earth. A thick MMoP might vary as between Earth and Twin Earth, which would be incompatible with a priori availability on the basis of the CMoP which is shared between me and my twin on Twin Earth.

I will give a fuller treatment of such arguments in the next section, but for now I will reply for the special case of phenomenal concepts, using the points made earlier about a phenomenal property doing "double duty" (I won't need "triple duty").

I mentioned that a phenomenal property might be part of a CMoP, but also be brought in by the MMoP. Thus a phenomenal property P might be part of a CMoP, whereas the MMoP might be *being P*. (If the referent is P itself, P does triple duty.) Such a relation between the CMoP and the MMoP allows for the MMoP to be a priori available on the basis of the CMoP, even if the property P is a thick property with a hidden essence. That is, the property of being P is a priori available on the basis of grasp of a CMoP that has property P as a constituent whether or not P is thick.

Although the a priori relation in itself does not appear to pose an obstacle to thickness of the MMoP, it might be thought to pose a problem combined with another argument, to which we now turn.

The Aspect Argument

As mentioned, the idea of the Aspect Argument is that it is not *all* of a thick property that explains cognitive significance in general and rational error in particular, but only an aspect of it, the aspect that is available a priori on the basis of the CMoP. But on the face of it, *that aspect can itself be thick*. Recall the example of Albert, which I pick out on the basis of its being the local wet thing. Albert's property of being the local wet thing fixes reference, uniquely determines the referent, is *a priori available and also thick*.

The Property Dualist may say that the property that would serve in explanations of error is not that it is wet but that it *looks* wet. However, consider a non-perceptual case: I infer using inductive principles that something in the corner is wet, and pick it out via its property of being wet. In this case, the substitution of *looks wet* for *wet* is unmotivated. The MMoP just does not seem perceptual. Nor artifactual, nor, more generally, functional. On the face of it, the MMoP is a thick property, the property of being wet, i.e. (roughly) at least partially covered or soaked with water (which is thick because being covered or soaked with water is being covered or soaked with H₂O).

But perhaps this rebuttal misses the significance of aspects to the first person point of view. Perhaps the Property Dualist will say something like this:

If phenomenal property Q is a physical property, then it can be picked out by a physical—say neurological—concept that identifies it in neurological terms. But those neurological identifications are irrelevant to first person phenomenal identifications, showing that the first person phenomenal identification depends on *one aspect* of the phenomenal property—its “feel”—rather than *another aspect*—its neurologically identifying parameters. You have suggested that ‘cortico-thalamic oscillation’ picks out its referent via the effect of cortico-thalamic oscillation on instruments that monitor oxygen uptake from blood vessels in the brain. But this effect is not part of the first person route by which we pick out Q, so it follows that not every aspect of the physical property is relevant to the first person route. Therefore the identity ‘Q = cortico-thalamic oscillation’ is supposed to be one in which the terms pick out a single referent via different properties of it, different MMoPs. And so the Property Dualism Argument has not been avoided.

I agree that the two terms of the identity ‘Q = cortico-thalamic oscillation’ pick out the referents via different aspects of that referent, different MMoPs. And I also agree that the aspect used by the mental term of the identity is available to the first person whereas the aspect used by the physical term is not. But it does not follow that the aspect used by the mental term is thin. It is true that no neurological property is explicitly part of the first person route, but that does not show that it is not part of the first person route, albeit ontologically rather than explicitly. The MMoP of ‘Q’ is stipulated to be phenomenal, and may be taken to be the property of being Q. But being identical to Q, on the physicalist view, is a thick property, and nonetheless available to the first person. Being identical to Q is a physical property (being identical to cortico-thalamic oscillation) but is nonetheless distinct from the MMoP I have been supposing for ‘cortico-thalamic oscillation’, which has to do with the oxygen uptake that we use to identify it. On the physicalist view, the feel and the neurological state are not different aspects of one thing: they are literally identical. If they are aspects, they are identical aspects. But the MMoP of the right hand term of the identity is still different from the MMoP of the left hand term.

As mentioned earlier, some will say that oxygen uptake cannot provide the MMoP for the term 'cortico-thalamic oscillation, which should be taken to be cortico-thalamic oscillation itself, or perhaps being identical to cortico-thalamic oscillation. In this supposition, there is a germ of another argument for dualism, which will be covered in the section to follow "A Cousin of the Property Dualism Argument".

I say that the aspect of a property that accounts for cognitive significance can itself be thick, appealing to examples. But the Property Dualist may suppose that if we attend to the mental contents that are doing the explaining, we can see that they are *narrow* contents, contents that are shared by Putnamian twins, people who are the same in physical properties inside the skin that are not individuated by relations to things outside the skin. (For simplicity, I will say that Putnamian twins are the same in non-relational physical properties.) If the relevant explanatory contents are narrow contents, then the corresponding explanatory properties—MMoPs—will be thin.

Here is the argument, the Narrow→ Thin Argument, in more detail, offered in the voice of the Property Dualist:

N→ T Argument: Suppose my CMoP is "the wet thing in the corner" (in a non-perceptual case) and my twin on Putnam's twin earth would put his CMoP in the same words. Still, the difference between what he means by 'wet' and what I mean by 'wet' *cannot matter to the rationalizing explanatory force* of the CMoPs. And since CMoPs are to be individuated entirely by explanatory force, my twin and I have the same CMoPs: viz., the CMoPs are narrow. But since the MMoP is a priori available to anyone who grasps the CMoP, the twins must have the same MMoP as well as the same CMoP, so the MMoP must be thin. Narrow CMoP, therefore thin MMoP.

The N→ T Argument presupposes the familiar but controversial idea that only narrow content can serve in intentional explanations. However, on the face of it, my 'water'-concept explains my drinking water but would not explain my drinking twin-water. (See Fodor, 1982 and Burge's, 1982 reply.) The idea that only narrow contents can serve in a rationalizing explanation is certainly controversial. I will not enter into this familiar dispute here, since there is another less familiar problem with the reasoning.

The inference from narrow content/narrow CMoP to thin MMoP has some initial plausibility, but it is actually question-begging. I agree with the N→ T Argument that phenomenal CMoPs are narrow. (I won't go into the possibility that there is a descriptive part of the CMoP that is wide.) However, it does not follow that the MMoP is thin since the physicalist can allow that it is nonetheless thick.

The point can be approached by looking at the anomalous nature of phenomenal concepts with respect to Twin Earth thought experiments. Are phenomenal concepts of the sort that I have advocated natural kind concepts of the sort discussed by Putnam (1995), Kripke (1980) and Burge (1978)? Yes and no. They are natural kind concepts in one respect: they purport to pick out objective kinds, and if the physicalist is right, those kinds have scientific natures whose scientific descriptions cannot be grasped a priori simply on the basis of having the concept. But they differ from natural kind concepts in that the Twin Earth mode of thought experiment does not apply. The Twin Earth mode of thought experiment involves a pair of people who are the same in non-relational physical properties but with a crucial physical difference in their respective places or counterfactual situations. In Putnam's classic version, twins who are the same in non-relational physical properties pick out substances using the term 'water' that have physically different natures, so (it is claimed), the meanings of their 'water' terms and 'water'-thought contents differ. They are non-relationally physically the same, but different in 'water'-meaning and 'water'-content.

But how is the Twin Earth thought experiment supposed to be applied to phenomenality? If physicalism is true, the twins cannot be the same in non-relational physical properties and also differ in the physical natures of their phenomenal states! (That's why I say the N→ T Argument begs the question against physicalism.) So there is no straightforward way to apply the Putnamian Twin Earth thought experiment to phenomenal concepts. (The issue concerning Burgean thought experiments is more complex, since it hinges on the ways in which our terms express phenomenal concepts. I can't go into the matter here.)

But perhaps only a superficial analysis of "Twin Earth" thought experiments require that the twins be the same in non-relational physical properties. The twins need only be the same in relevant physical properties. Which physical properties are relevant. Well, they should be behaviorally alike. And, something that is stronger and entails behavioral likeness: they should be functionally alike. But, since the physical basis of consciousness could be missing even in a behavioral or functional duplicate, the physicalist in the sense discussed here (mind-body identity) will insist that functional sameness is not enough to ensure sameness in phenomenal CMoPs: we must add that the twins are the same in the physical basis of phenomenality. Now all those ways in which the twins must be alike is certainly compatible with many physical differences. But what it is not compatible with is a physical difference between the twins that makes a phenomenal difference. From the physicalist point of view, the shared phenomenality between the twins has to be explained by a shared physical basis. So the shared narrow CMoP is compatible with a shared thick MMoP.

The upshot is that phenomenal concepts are an *anomaly*. They are natural kind concepts in that they allow for objective scientific natures that are

“hidden” in the sense that the scientific descriptions are not a priori available on the basis of merely having the concept. But they are not natural kind concepts in that no Putnamian “Twin Earth” scenario is possible.

So even if the inference from narrow CMoP to thin MMoP applies in a variety of other cases, it should not be surprising that it fails to apply in this anomalous case. The CMoPs for phenomenal concepts can be narrow even though the corresponding MMoPs are thick. Indeed, the CMoPs themselves can be both narrow *and* thick. Narrow because non-relational, thick because they involve a phenomenal element that has a hidden scientific nature.

I have rebutted the Aspect and A Priority Arguments and a subsidiary argument, the $N \rightarrow T$ Argument, which all push for the conclusion that MMoPs of phenomenal concepts must be thin. But one can also look at the thesis itself independently of the arguments for it. Here are three considerations about the thesis itself.

Issues about the Claim of thin MMoPs for Phenomenal Concepts

First, the assumption of thin MMoPs is plausibly sufficient for the conclusion of the Property Dualism Argument *all by itself*. For what are the candidates for a thin MMoP for a phenomenal concept? Artifact properties like being a telephone (even assuming that they are thin) and purely mathematical properties are non-starters. No one would take phenomenal MMoPs to be like *that*. It is not clear whether there are any natural kind terms that express thin properties. It is pretty easy to come up with twin earth cases for many physical terms. For example, a counterfactual world in which everything is made of anti-matter would serve to motivate twin earth cases for terms such as ‘hydrogen’ or ‘electron’. (The twin-Earthers call anti-hydrogen and anti-electrons ‘hydrogen’ and ‘electron’. Of course these twin-Earthers would be themselves made of anti-matter, but that doesn’t stop their brains from being *relevantly* like ours.) Even if there are fundamental physical properties that are thin, the Property Dualist can hardly suggest fundamental physical properties as candidates for MMoPs for phenomenal concepts, since that has no independent plausibility and in any case would be incompatible with the conclusion of the Property Dualist’s argument. So it would seem that the only remotely plausible candidates for thin MMoPs by which phenomenal concepts refer are (1) purely functional properties, in which case deflationism would be true, and (2) phenomenal properties that are non-physical, in which case dualism is true. The conclusion would be the same as the conclusion of the Property Dualism Argument itself: that inflationist physicalism is untenable.

The upshot is that much of the argumentation surrounding the Property Dualism Argument can be dispensed with if the arguments of this paper are correct. The most obvious arguments that MMoPs of phenomenal concepts cannot be physical (the Regress Argument and the A Priori Availability Argument,

presented earlier) do not stand alone but rather depend on the Thin/Thick Argument. I have not shown that there is no argument for the claim that MMoPs of phenomenal concepts are thin, but I have rebutted some obvious candidates, and it is hard to see how the Regress and A Priori Availability Arguments could be used to justify the thinness claim since they presuppose it. So if my arguments are right, the burden of proof is on the Property Dualist to come up with a new argument for the claim that MMoPs of phenomenal concepts are thin.

Second, I doubt whether any of our ordinary concepts other than purely mathematical or made-up purely functional concepts are concepts of thin properties. Phenomenal concepts would be concepts of thin properties if a certain kind of dualism is true, but that cannot be presupposed in an argument for dualism. I doubt that any artifact concepts of natural language are thin. Hilary Putnam once noted that we can imagine a scenario in which we find out that cats are robot spies from Mars. (In terms of Davies and Humberstone's (19xx) and Chalmers' (1996) notion of a world conceived as actual, there is a world conceived as actual in which cats are robot spies from Mars.) A kind of converse case was suggested by Rogers Albritton (in conversation): that we could find out that pencils are living creatures which surreptitiously eat, reproduce, excrete, etc. So our concept of a pencil allows that we could find out that pencils are not artifacts after all. What the examples suggest is that so-called "artifact" concepts of natural language have a natural kind element, and so it is not clear that they are thin.

Artifact concepts and phenomenal concepts are the leading candidates for concepts of thin properties, but at least if they are ordinary concepts, they appear to be ruled out, suggesting that if MMoPs are thin properties, they are properties we do not have ordinary concepts of.

The same point can be justified in another way, by asking what it is about a concept that makes it a concept of a thick or thin property. I defined the thick/thin distinction in terms of hidden essences, but it is hard to see why a social dimension should not also come in. If the reason for excluding hidden essences from MMoPs is that they are supposed not to be a priori available on the basis of CMoPs, wouldn't this rationale apply equally well (or equally badly) to the social dimension of properties? As Burge (1978) has forcefully argued, all or most concepts that are not concepts of hidden essences (as well as those that are) are externalist. For example, the concept of red expressed by a person in a language community depends on the boundaries of shades in that language community. The upshot is that the property of redness that we talk about using the ordinary concept has a social dimension, which is just as plausibly (or implausibly) unavailable a priori as the hidden essence of natural kinds.

The nature of our concepts determines the nature of the properties they pick out. If all ordinary concepts are externalist, then it seems that the rationale for 'thick' concepts and thick properties in the property dualism argument would

suggest that all ordinary concepts pick out thick properties. Thus the Property Dualist has a further burden of proof—to say why we should think that our phenomenal concepts are not ordinary concepts.

Here is the third point. So far, I have argued that the assumption of thin MMoPs leads directly to dualism or deflationism, putting a heavy burden of proof on the Property Dualist to justify that assumption. But actually I doubt that deflationism really is an option. Let me explain. The functionalist characterizes functional properties in terms of the “Ramsey sentence” for a theory. Supposing that ‘yellow teeth’ is an “observation term”, the Ramsey sentence for the theory that smoking causes both cancer and yellow teeth is $\exists F_1 \exists F_2 [F_1 \text{ causes both } F_2 \text{ and yellow teeth}]$, i.e. the Ramsey sentence says that there are two properties one of which causes the other and also yellow teeth. Focusing on psychological theories, where the “observation terms” (or “old” terms in Lewis’ parlance) are terms for inputs and outputs, the Ramsey sentence could be put as follow: $\exists F_1 \dots \exists F_n [T(F_1 \dots F_n, \mathbf{i}_1 \dots \mathbf{i}_m, \mathbf{o}_1 \dots \mathbf{o}_p)]$. The ‘i’ terms are input terms and the ‘o’ terms are output terms. Functional properties of the sort that can be defined in terms of the Ramsey sentence are properties that consist in having certain other properties that have certain causal relations to inputs, outputs and other properties.¹⁹ The inputs and outputs can be characterized in many ways. For example, an output might be characterized neurally, or in terms of movements of a hand or leg, or distally, in terms of, e.g. water in the distance, or distally and mentalistically in terms of drinking water. *But all of these characterizations are plausibly thick, not thin.* Perhaps you will think that some of them are *themselves* to be cashed functionally, but then the issue I am raising would arise for the input and output specification of *those* functional properties. Since the problem I am raising depends on the thickness of the input and output properties, I put those terms for those properties, (**‘i₁’...’i_m’, ‘o₁’...’o_p’**), in bold in the Ramsey sentence earlier. The only functional properties I know of that are plausibly thin are *purely formal* functional properties that abstract from the specific nature of inputs and outputs, the kind of functional property that could be shared by a person and an economy. (See Block, 1978.) For example, in the case of the theory that smoking causes cancer and yellow teeth, a purely formal Ramsey property would be: being an x such that $\exists F_1 \exists F_2 \exists F_3 [F_1 \text{ causes } F_2 \text{ and } F_3]$ and x has F₁. This is the property of having a property which causes two other properties. Such a property could be shared by a person and an economy. Since not even a deflationist should agree that the metaphysical modes of presentation of our phenomenal states are *purely* formal, the only remaining option is dualism. So the assumption of thin properties plausibly leads right to dualism.

To sum up the points about the thin/thick argument: The “aspect” rationale for MMoPs being thin seems doubtful because the aspect can itself be thick. And

¹⁹ More specifically the functional definitions work as follows. If ‘F₁₇’ is the variable that replaced ‘pain’, ‘pain’ could be defined as follows: pain = the property of being an x such that $\exists F_1 \dots \exists F_n [T(F_1 \dots F_n, i_1 \dots i_m, o_1 \dots o_p) \text{ and } x \text{ has } F_{17}]$.

the rationale for thin MMoPs in terms of the supposed a priori relation between CMoP and MMoP is problematic because the key phenomenal feature of the MMoP can also be present in the CMoP, when the relevant concept is phenomenal. At least this is so on one plausible notion of phenomenal concepts, which the Property Dualist would have to challenge. Narrow CMoPs can be used to argue for thin MMoPs, but this reasoning begs the question against the physicalist. I explained at the outset that the emphasis on MMoPs at the expense of CMoPs was tactical: the metaphenomenal move—that says that modes of presentation bring in unreduced phenomenality-- can be discussed equally with respect to either mode of presentation. This is the place in the argument where the artificiality is most apparent—CMoPs must be brought in.

Moving to the thesis itself independently of arguments for it, the assumption of thin MMoPs amounts to much the same thing as the Property Dualism Argument itself. Further, the only remotely plausible candidates for thin MMoPs are purely formal properties that we do not have ordinary concepts of and phenomenal properties, dualistically conceived. The purely formal properties though more plausible than some other candidates, are not very plausible, even from a deflationist point of view. Deflationist functionalism is based on analyses of mentality in terms of sensory input and behavioral output. Purely formal properties do not adequately capture such analyses, and cannot without thick input and output terms. The upshot is that the assumption of thin MMoPs for phenomenal concepts adds up to dualism itself. To assume thin MMoPs begs the question against the physicalist.

Of course, I have not shown that there cannot be an argument for thin phenomenal MMoPs, but I hope I have shown that a number of candidates do not succeed.

(VI) A COUSIN OF THE PROPERTY DUALISM ARGUMENT

Saul Kripke (1980) argued for dualism as follows. Identities, if true, are necessarily true. But cases of mind without brain and brain without mind are possible, so mind-brain identity is not necessary, and therefore not true. (As mentioned earlier, if physicalism is true, a zombie is impossible (and similar considerations would apply to a disembodied mind): If the zombie world contains cortico-thalamic oscillation, then according to the physicalist, it contains phenomenality and so is not a zombie world; but if it does not contain cortico-thalamic oscillation, then it does not fit the physical requirement of a zombie world. So physicalism cannot allow a zombie world.) A standard physicalist response is that the mind-body relation is necessary, but appears, misleadingly, to be contingent: there is an "illusion of contingency". Most of the discussion of an illusion of contingency has focused on the mental side of the identity statement, but Richard Boyd (1980) noted that one way for a physicalist to explain the illusion of contingency of 'Q=cortico-thalamic oscillation' would be to exploit the gap between cortico-thalamic oscillation and its mode of presentation.

When we appear to be conceiving of Q without the appropriate cortico-thalamic oscillation (e.g. a disembodied mind or a version of spectrum inversion), all we are managing to conceive is Q in a situation in which we are misled by our mode of epistemic access to cortico-thalamic oscillation. What we are implicitly conceiving, perhaps, is a situation in which our brain-o-scope is broken. So the physicalist is free to insist that cortico-thalamic oscillation is part of what one conceives in conceiving of Q, albeit not explicitly, and, conversely, Q is part of what one conceives in conceiving of cortico-thalamic oscillation.

But the sole reason for believing in *implicit* commitment to epistemic failure such as failing brain measurement devices in these thought experiments is that it avoids the non-physicalist conclusion, and that is not a very good reason. The conceivability of zombies, inverted spectra, disembodied minds, etc. does not seem *on the surface* to depend on implicit conceiving of malfunctioning apparatus. For example, it would seem that one could conceive of the brain and its cortico-thalamic oscillation “neat”, i.e. without conceiving of any particular apparatus for measuring cortico-thalamic oscillation.²⁰

The idea that one can conceive of cortico-thalamic oscillation “neat”, leads to an argument very different from both the Property Dualism Argument and Kripke's argument for dualism. I will briefly present the argument here, but I cannot give it a full treatment.²¹

Consider an empirical mind-body property identity claim in which *both* terms—not just the mental term—have MMoPs that are identical to the referent. McGinn (2001) claims—albeit in other terms-- that this would be true for a standard physicalist identity claim, of the sort discussed so far in this paper. Is cortico-thalamic oscillation or potassium ion flow across a membrane its own metaphysical mode of presentation? That depends on what a metaphysical mode of presentation is supposed to be, and that depends on the purpose we have for them. I have mentioned a number of different conceptions of MMoPs, explaining cognitive significance, determining the referent, a priori graspability.

Suppose we took explaining cognitive significance as primary. We could easily explain why ‘cortico-thalamic oscillation = cortico-thalamic oscillation’ is less informative than ‘Q = cortico-thalamic oscillation’ without appealing to an MMoP of *being cortico-thalamic oscillation* for ‘cortico-thalamic oscillation’. For

²⁰ The term ‘neat’ in this sense is derived from its use in describing whiskey without ice or water or anything else.

²¹ I presented a version of the argument in a reply to Chalmers at the Philadelphia APA in 1997, partly as a result of conversations with Brian Loar. There is an argument in Loar (2000) that has some similarity to it. McGinn (2001) takes something of this sort to be the Property Dualism Argument, i.e. the one that Smart (1959) and White (1983) had in mind. I have heard unpublished versions of similar arguments by Martine Nida-Rümelin and John Hawthorne.

example, a scientist might conceive of it in terms of the machinery required to detect it. A scientist might even think of it perceptually, in terms of the experience in the observer engendered by the apparatus, as radiologists often say they do in the case of CAT scans.

Suppose instead that we take the special reference-fixing authority as the *raison d'être* of the MMoP. This conception has the advantage that if we have given the special reference-fixing authority to an MMoP, then it is a priori graspable that the referent, if it exists, has that property. (See Byrne and Pryor, 2004.) Again, it is not very plausible that the MMoP of 'cortico-thalamic oscillation' or 'potassium ion flow' is *being cortico-thalamic oscillation* or *being potassium ion flow*. What would be the point of fixing the referent for 'cortico-thalamic oscillation with the property of being cortico-thalamic oscillation'? It seems to amount to not fixing the referent at all. (See Byrne and Pryor, 2004.)

But there is a kind of mind body identity in which the right hand term does more plausibly have an MMoP on both the cognitive significance and the reference-fixing sense that is identical to the referent, or virtually identical to the referent, namely a mental-functional identity claim. I will skip the cognitive significance rationale, focusing on determination of reference. What is our way of fixing reference to the property of being caused by A and B and causing C and D if not that property itself (or the property of having that property itself): being caused by A and B and causing C and D? For many complex functional properties, it is hard to imagine any other reference-fixing property that could be taken very seriously, since it is hard to see how such functional properties could be detected without detecting each of the causal relations. Further, if a functionalist identity claim is to have any plausibility as a non-a priori claim, then each piece of the Ramsey sentence description of the sort mentioned earlier in this paper would have to be justified empirically, again making it plausible that we would think of the property in Ramseyish terms. Further, the functional property would be plausibly a priori graspable on the basis of a typical concept of it. These considerations suggest that a mental-functional identity claim is a better candidate for the kind of identity claim being discussed here than the standard mental-physical identity claim.

Since the candidate identity claim has to be plausibly empirical, let us think of the physical side as a *psychofunctional* property (see Block, 1978, where this term was introduced), that is, a functional property that embeds detailed empirical information that can only be discovered empirically. For example, we can take the functional definition to include the Weber-Fechner Law (which dictates a logarithmic relation between stimulus intensity and perceptual intensity). To remind us that we are taking the right hand side of the identity to be a psychofunctional property, let us represent it as 'PF'.

Let our sample mind-body identity be 'Q=PF', where as before, 'Q' denotes a phenomenal property. As before, let us use 'M' for the metaphysical

mode of presentation of Q, and let us assume something that has been in the background until now, that $M=Q$. Ex hypothesi, the metaphysical mode of presentation of PF is PF itself. But since $M=Q$, $Q=PF$ and $PF =$ its own metaphysical mode of presentation, it follows that $M =$ the metaphysical mode of presentation of PF, and so the MMoPs of both sides are the same. (See Figure 1 below.) But if the MMoPs of both sides are the same, then—supposedly—the identity cannot be a posteriori. And that would show that the original a posteriori identity claim—which embeds, you will recall the Weber-Fechner Law and so cannot be supposed to be a priori-- cannot be true: psychofunctionalism is refuted (or so it may seem).

The upshot would be that if we want a functionalist mind-body identity thesis, it can only be a priori (in which case deflationism holds). Or if we reject deflationism, the upshot is that functionalist mind-body identity is false (i.e. the relevant form of dualism is true). So the conclusion is the same as that of the Property Dualism Argument, but restricted to functionalist mind-body identity claims: only dualism and deflationism are viable—no inflationist physicalist option works. We could call this the Semantic A priority Argument for Dualism.

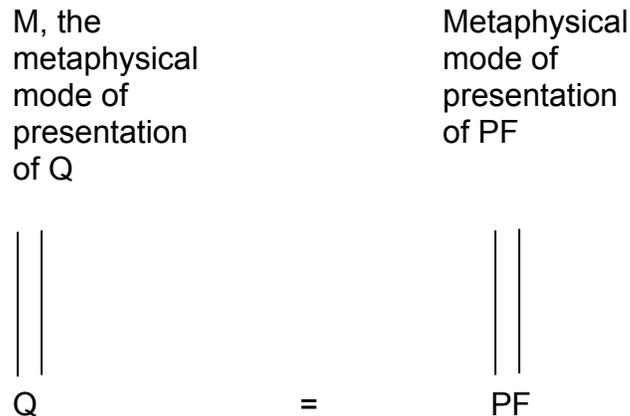


Figure 1: Semantic A priority Argument for Dualism

' $Q=PF$ ' is an a posteriori truth; $M=Q$, $PF =$ Metaphysical mode of presentation of PF, so *if it is true that $Q=PF$* , then $M =$ the metaphysical mode of presentation of PF, i.e. the two metaphysical modes of presentation are the same. But if they are the same, the identity is supposed to be a priori. However, since it is not a priori, the argument concludes, it is not true.

The same argument works as well if instead of the apparatus of modes of presentation we used the primary intension/secondary intension apparatus (Chalmers, 1996). The idea would be that for phenomenal and functional concepts, the primary intension is identical to the secondary intension. (Both views are endorsed by Chalmers (1996).) So if the secondary intension of a phenomenal/functional identity claim is true, so is the primary intension, and hence a phenomenal/functional identity claim is if true, a priori true. And since for reasons just given it is not a priori true, it is false.

I have a number of objections to this argument but I will only mention two major ones. Firstly, what determines a priority is much more plausibly sameness of CMoPs rather than sameness of MMoPs. I gave an example earlier in which $MMoP_a = MMoP_b$ but there is no hint of a priority. Recall the identity: the wet thing in the corner = the thing in the corner at least partially covered or soaked with H_2O . The MMoP of the left side, *being the wet thing in the corner* is plausibly identical (a posteriori) to the MMoP of the right side, *being the thing in the corner at least partially covered or soaked with H_2O* . But that hardly makes the identity a priori.²²

The point can be made with another type of example. Consider 'That property = that property' where the first demonstrative picks out the property of being water and the second picks out the property of being H_2O . It could be said, controversially, that each demonstrative picks out the property directly in the sense that the MMoP just is the property picked out. But if so, the form of the Semantic A priority Argument would give us a general argument against any empirical property identity!! If the notion of an empirical property identity is not to crumble, the upshot would seem to be that sameness of MMoP is not enough for a priority.

I have another response that depends on issues that cannot be explored here. But I will mention it briefly. A priority is not a *semantic* phenomenon and does not have semantic sufficient conditions. It is not enough for an identity to be a priori for the symbols flanking the identity sign to have the same total semantic values, even the same CMoPs, unless something epistemic is built into semantic value. In particular, if 'A' has the same meaning as 'B', it does not follow that 'A=B' is a priori, for what is required for a priority is that the subject have a priori access to that identity of meaning. One who asserts '5=5' will typically have a priori access to the semantic identity in virtue of simply intending the two occurrences of '5' to have the same semantic value. We regard the

²² Note that this objection does not apply straightforwardly to the version of the argument in terms of Chalmers' apparatus, since his apparatus does not make the CMoP/MMoP distinction. He has only one notion—primary intension--corresponding to the two used here.

statement or proposition as a priori in virtue of the identity of semantic values, but this judgment leaves out a step. In general, it is a category mistake to regard propositions as a priori; rather what is a priori is our grasp of propositions. In the case of the psycho-functional identity, the identity of semantic values, even if there is one, is not a priori available to us.²³

I remind the reader that the issue of this section is not the Property Dualism Argument but a related argument, one which deserves its own detailed treatment. Even if, contrary to what I have said, this is a good argument against a psychofunctionalist identity thesis, it does not back up the Property Dualism Argument against a much more general version of physicalism.

(VII) The Relation between the Property Dualism Argument and Some Other Arguments for Dualism.

Loar (1997) locates the flaw in Jackson's "Mary" argument and Kripke's modal argument in a certain principle (the "semantic premise") and Loar (1999) extends this analysis to Chalmers' and Jackson's modal arguments. (White, forthcoming_b, argues for a weakened version of the semantic premise and for its relevance to the Property Dualism Argument.) The semantic premise (on one understanding of it) says that if a statement of property identity is a posteriori, then at least one of the MMoPs must be contingently associated with the referent. The idea behind the principle is that if the two concepts pick out a property non-contingently, it must be possible for a thinker who grasps the concepts to see, a priori, that they pick out the same property. Again the issue arises as to what notion of MMoP is at stake. Consider, for example, the reference-fixing notion of MMoP. In this sense, the "semantic premise" is plainly false. Note that the person formed by a certain sperm = the person formed by a certain egg. This identity is a posteriori, yet both terms pick out their referents via essential and therefore necessary properties of it, assuming that Kripke is right about the necessity of origins. Call the sperm and egg that formed George W. Bush 'Gamete-Herbert' and 'Gamete-Barbara' respectively. The person formed from Gamete-Herbert = the person formed from Gamete-Barbara. "The person formed from Gamete-Herbert" does not pick out George W. contingently, nor does "The person formed from Gamete-Barbara". My example is put in terms of individuals but it is easy to see how to frame a version of it in terms of properties. Even if Kripke is wrong about the necessity of origins, the logic of the example remains. One thing can have more than one necessary but insufficient property, both of which can be used to pick it out, neither of which a priori entails the other. Thus the terms in a true a posteriori identity can pick out that thing, each term referring by a different necessary property as the MMoP.

²³ This reply does I think apply to the version of the argument in terms of Chalmers' apparatus mentioned in the last footnote.

Of course there is some contingency in the vicinity. Gamete-Herbert might have joined with an egg other than Gamete-Barbara or Gamete-Barbara might have joined with a sperm other than Gamete-Herbert. And this might suggest a modification of the principle (one that is discussed by White), viz. if a statement of property identity is a posteriori, then it is not the case that both terms refer via MMoPs that are necessary and sufficient conditions for the property that is the referent. Or, more minimally, if a property identity is a posteriori, then it is not the case that one term refers via a sufficient property of it and the other refers via a necessary property of it. But a modification of my example (contributed by John Hawthorne) suggests that neither of these will quite do. Let the identity be: the *actual* person formed from Gamete-Herbert = the *actual* person formed from Gamete-Barbara. Arguably, each designator refers via a property that is both necessary and sufficient for the referent. So the revised version of the semantic premise is also false.

The reference of the terms 'Gamete-Herbert' and 'Gamete-Barbara' need not be fixed via properties that involve George Bush. The gametes can be identified independently, for example before George Bush was conceived. But perhaps the names will pick them out via some contingent reference-fixing property, e.g. a perceptual demonstrative ("that egg") or by description. And that suggests a beefed up form of the semantic premise that says that there must be contingency either in the relation between MMoPs and referent or in the relation between MMoPs and the MMoPs of those MMoPs, or...And that is what White (forthcoming) suggests as a modification of the semantic premise. I don't know whether this claim is true or not, but in any case I don't think it is a premise in the Property Dualism Argument. More specifically, I don't see how it can be used to derail any of my rebuttals earlier in this paper.

(VIII) Conclusion

The Property Dualism Argument attempts to exploit the idea that the mind-body identity approach to phenomenality fails when it comes to the mode of presentation of a phenomenal state. Something is ontologically wrong with supposing that a phenomenal constituent of a CMoP is physical or that a phenomenal property that constitutes an MMoP is physical. More specifically, the Property Dualism Argument says that in the identity 'Q=cortico-thalamic oscillation', the metaphysical mode of presentation of Q must be either mental, physical, non-physical, topic-neutral or "direct", in which case there is no metaphysical mode of presentation. The mental proposal is supposed to be useless. The physical proposal is supposed to be ruled out because there is no a priori available physicalistic description of Q, because of a supposed regress, and because MMoPs in general or at least the relevant one (M) are supposed to be "thin". The "no MMoP" proposal appears to be ruled out by the fact that the concept of Q needed to get the argument off the ground is a phenomenal concept with a phenomenal metaphysical mode of presentation. So the only remaining options are the non-physical and topic-neutral proposals. The topic-

neutral proposal involves a form of deflationism. The conclusion of the Property Dualism Argument is that the phenomenal realist ("inflationist") cannot be a physicalist. The argument is a way of making concrete what I called the metaphenomenal move: the idea that in a phenomenal mind-body identity claim the CMoP is partly constituted by something with unreduced phenomenality or the MMoP is an unreduced phenomenal property.

My response has been to argue that phenomenality in modes of presentation is no different from phenomenality elsewhere. I tried to dissolve apparent impediments to the phenomenal element in the CMoP and the MMoP being physical. My way out involves a notion of a phenomenal concept that has some affinities with the "directness" story in which there is no metaphysical mode of presentation at all, since my phenomenal MMoPs are not very different from the referent itself. I considered a family of arguments based on the idea that MMoPs must be thin, arguing that appeal to narrow content does nothing to establish thinness. According to me, phenomenal concepts are both narrow and thick, which is why the phenomenality in the CMoP can be physical. Finally, I considered a cousin of the Property Dualism Argument which founders on the assumption that if the MMoPs of the two terms of an identity are the same, then the identity is a priori. I argued that whereas sameness of CMoP makes for a priority of the identity, sameness of the MMoP does not.

Although I expressed skepticism about whether any one thing can explain rational error, fix reference and be relevantly a priori available, I have not claimed that these *raisons d'être* fail to coincide except at one point at which I noted that an explanatory MMoP need not fix the referent. The other rebuttals were keyed to one or another specific version of MMoPs and CMoPs and their relation. My strategy was to avoid multiplying arguments based on different notions of CMoP/MMoP by choosing what seemed to me the strongest argument of each type. In the end, everything hinges on the claim that MMoPs of phenomenal concepts are thin, and I attempted to remove the most straightforward motivations for that view.

I have pursued a divide and conquer strategy, distinguishing among different senses of 'mode of presentation' and further dividing those by the *raisons d'être* of modes of presentation in those senses. My claim is that once we do that, the Property Dualism Argument dribbles away. I have not claimed to conclusively refute these arguments but I believe that the ball is in the Property Dualist's court.

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