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A POSTERIORI PHYSICALISM AND INTROSPECTION

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Abstract: Introspection presents our phenomenal states in a manner otherwise than physical. This observation is often thought to amount to an argument against physicalism: if introspection presents phenomenal states as they essentially are, then phenomenal states cannot be physical states, for we are not introspectively aware of phenomenal states as physical states. In this paper, I examine whether this argument threatens *a posteriori* physicalism. I argue that as along as proponents of *a posteriori* physicalism maintain that phenomenal concepts present the nature of their referents in a partial and incomplete manner, *a posteriori* physicalism is safe.

> … [M]aterialism holds that when we are *aware* of our mental states what we are aware of are mere physical states of our brain. But we are certainly not aware of the mental states as states of the brain. What then are we aware of mental states as? Are we not aware of them as states of a quite peculiar, mental, sort? (Armstrong 1968, p. 78)

1. Introspection presents our phenomenal states in a manner otherwise than physical: the mereological and causal complexity that we associate with physical states is not given, shown, or presented to us when we introspectively conceive of our phenomenal experiences.[1] This observation is often thought to amount to an argument against physicalism:[2] if introspection presents phenomenal states as they *essentially* are, then phenomenal states cannot be physical states, for we are not introspectively aware of phenomenal states as physical states. Call this objection to physicalism the 'Introspection Objection.'

The aim of this paper is to evaluate the Introspection Objection. In so doing, the paper focuses exclusively on *a posteriori* physicalism, that is, the variety of physicalism which holds that (a) phenomenal states are identical to (realized by, metaphysically necessitated by, or supervenient upon) physical states and (b) the fact that phenomenal states are identical to (realized by, metaphysically necessitated by, or supervenient upon) physical states cannot be known *a priori*.[3] Another way of expressing (b) is to state that phenomenal truths are not *a priori* entailed by physical truths. Hence, psychophysical identity statements such as, 'pain is c-fiber

stimulation,' are not knowable *a priori*, even though they are necessarily true. The same goes for conditionals of the sort 'if Iris' brain state b_{21} is activated, then she sees red.'

The paper proceeds as follows. §§ 2 - 3 articulate the thesis of *a posteriori* physicalism and present how proponents of *a posteriori* physicalism typically account for the *a posteriori* status of psychophysical identity statements or conditionals. §4 discusses the nature of the concepts that we deploy when we introspectively examine our phenomenal experiences. The remaining parts of the paper, §§ 5 – 16, present and evaluate the Introspection Objection along with some of its contemporary variants.

2. There are good reasons to focus our attention on *a posteriori* physicalism. Perhaps the most important of them is the fact that *a posteriori* physicalism is assumed by many to be the most viable form of physicalism: it is thought to withstand epistemic arguments against physicalism. Epistemic arguments hold that if phenomenal truths cannot be *a priori* deduced from physical truths, then consciousness and matter (or the physical) are ontologically distinct (Chalmers 1996, 1999, and 2004; Jackson 1982 and 1986; cf. Levine 1983 and 2001). *A posteriori* physicalism has a response to epistemic arguments. It denies the conditional upon which such arguments are based. According to *a posteriori* physicalism, the existence of epistemic gaps between phenomenal truths and physical truths is compatible with the truth of physicalism. A phenomenal state can be identical to (realized by, metaphysically necessitated by, or supervenient upon) a physical state, even if the fact that the two states are related in such a way cannot be known *a priori*. As long as there is a physicalistically acceptable account of how those epistemic gaps arise – viz., an account of how certain psychophysical statements or conditionals can be both necessary and *a posteriori* – then physicalism is secure.

How do proponents of *a posteriori* physicalism account for the *a posteriori* status of such statements or conditionals? Take the statement 'pain is c-fiber stimulation.' Many proponents of *a posteriori* physicalism assert that such a statement is *a posteriori* because the concepts involved in this statement are *conceptually isolated*. PAIN and C-FIBER STIMULATION are conceptually isolated, such proponents hold, not only insofar as one cannot provide an analytic definition of one concept in terms of the other, but also insofar as one cannot deduce on the basis of *a priori* reasoning alone whether the two concepts co-refer. One might know, for instance, that Iris' c-fibers are being stimulated without knowing *a priori* that Iris is in pain, even though the concepts PAIN and C-FIBER STIMULATION pick out the same physical property. What goes for

PAIN and C-FIBER STIMULATION goes for all phenomenal[4] and physical (or functional) concepts: the two types of concepts are conceptually or semantically isolated. Thus, not only can a physical property be subsumed under more than one concept, but also the fact that we cannot 'see' *a priori* that such concepts pick out the same entity does not entail that they do not. Stated otherwise: the fact that phenomenal truths are not *a priori* entailed by physical truths is not symptomatic of the falsity of physicalism. It is rather the consequence of the nature of phenomenal concepts. Physicalism can be true even if an epistemic gap between phenomenal and physical truths exists. [5]

3. Still, proponents of *a posteriori* physicalism ought to provide us with a physicalistic account of those features of phenomenal concepts that are thought to rescue physicalism from epistemic arguments. After all, proponents of *a posteriori* physicalism are *physicalists* about phenomenal concepts and their conceptual roles. As a result, proponents of *a posteriori* physicalism must hold that the reason why *a priori* connections exist between two types of concepts is because a certain physicalistically explicable psychological or cognitive relation exists. In the absence of such a relation, the two types of concepts would remain conceptually isolated.

One can carry this idea a step further by advancing (a sketch of) a neurological or subpersonal account that, if true, would explain conceptual isolation (see, e.g., Loar 2003, p.116ff and 2007, p.452; cf. Hill and McLaughlin 1999 and Aydede and Güzeldere 2005). For example, if it turns out that the reference-fixing and deployment mechanisms of phenomenal concepts involve different neural centers than those involved in the reference-fixing and deployment mechanisms of physical and functional concepts then this would explain the conceptual isolation of the two types of concepts. When we subsume a phenomenal experience under a phenomenal concept, we deploy a certain kind of concept. In so doing, we activate a neurological structure that is not connected in any direct fashion to the neurological structure responsible for the deployment of physical and functional concepts. That is to say, the deployment of a phenomenal concept does not need to bring about the deployment of a physical or functional concept. *Prima facie,* at least, this hypothesis is consistent with what introspection reveals. When introspectively examining the sensation of pain, not only can we form a conception of how it feels to be in pain but also, and importantly, we can do so without thinking about its physical or functional nature. Similarly, one can hypothesize that since the reference-fixing mechanisms of the two types of concepts are quite distinct (see §4), the neural

realizers of those mechanisms would also be distinct or, at the very least, they would be capable of working independently of each other.

To be sure, the suggested neurological sketch is only a caricature of what might be going on at the neurological level. And even though first-personal considerations might provide defeasible support for it, we should be especially careful when attempting to draw conclusions about the subpersonal level from personal-level observations (Dennett 1991; Hurley 1998). Still, a model that postulates that the reference-fixing and deployment mechanisms of phenomenal concepts involve different neural centers than those involved in the reference-fixing and deployment mechanisms of physical and functional concepts would constitute the beginnings of an empirically-grounded and testable explanation of the presumed conceptual isolation.

4. But what evidence can one provide in support of the claim that *as a matter of human psychology,* phenomenal concepts are conceptually isolated from physical (or functional) concepts?[6] First, the conceptual isolation claim accounts quite nicely for the existence of epistemic gaps between phenomenal truths and physical truths. One thus can advance an abductive argument in support of the conceptual isolation claim: the best explanation of the presence of epistemic gaps is the fact that phenomenal concepts are *actually* conceptually isolated from physical (or functional) concepts.

Proponents of *a posteriori* physicalism can do better. They can argue (and indeed some do so) that if we pay attention to the manner in which phenomenal concepts refer, then we should conclude that phenomenal concepts are conceptually isolated from physical (or functional) concepts. Let me explain. It is assumed that phenomenal concepts refer directly. They do so, but not only in the (weak) sense that a term *x* refers directly, insofar as there is no associated descriptive content with *x* that determines *x*'s reference. Suppose that you use a visual demonstrative to refer to a particular model of car. For instance, suppose that, while the car is present to both of us, you point to the car and say: '*That* is the car that I was talking about.' The demonstrative concept THAT refers to the car directly, i.e., without the mediation of a descriptive content. Nonetheless, the demonstrative is successful in picking out the intended car because there is a certain visual experience that we – the interlocutors – share. Although that visual experience is not the referent of the demonstrative – after all, you do not refer to a type of visual experience, but to a car – the presence of that experience is necessary in order for the demonstrative concept to pick out the car. Thus, although the demonstrative concept THAT

does pick out its referent directly in one sense – in the sense that there is no associated content with the concept – there is still another sense in which it does not. To wit, it does not refer directly insofar as the demonstrative THAT requires a certain mediating visual experience which is not identical to the referent of the concept.

Phenomenal concepts are directly referential, however, in both senses. That is to say, phenomenal concepts pick out their referents without the need of any mediating factors – be it a descriptive content or a mediating experience that is not identical to the referent of the concept. The phenomenal concept RED, for example, refers to a type of visual experience *in virtue of that visual experience*. There is nothing else that needs to be present when phenomenal concepts pick out their referents. I know that I am having a red experience simply by paying attention to the state I am in. Thus, the way that phenomenal concepts refer suggests that phenomenal concepts are conceptually isolated from physical or functional concepts: phenomenal concepts pick out their referents without any conceptual mediation.

The aforesaid conclusion can be bolstered even further if we concentrate on a specific view regarding the nature of phenomenal concepts. Consider, for instance, the view according to which phenomenal concepts are recognitional concepts: a subject *S* possesses *C*, where *C* is a phenomenal concept, only if *S* can *directly* recognize (or identify) that to which *C* refers (Loar 1997; Tye 2000; Carruthers 2003). The fact that phenomenal concepts are recognitional in this sense suggests that they refer without any conceptual mediation. The reference of a phenomenal concept, according to the recognitional account, is fixed *by the fact that subjects are disposed to deploy the phenomenal concept to internal states that are introspectively and directly experienced and are recognized as having a particular qualitative feel or phenomenal character*. In other words, if phenomenal concepts are assumed to be recognitional concepts, then one picks out their referents in virtue of having certain associated recognitional capacities – for instance, the capacity to re-identity tokens of the types of phenomenal experiences to which phenomenal concepts refer. Since these associated recognitional capacities pick out phenomenal concepts directly, the recognitional account of phenomenal concepts also provides an explanation of how phenomenal concepts can be conceptually isolated from physical or functional concepts. That is to say, a recognitional account of phenomenal concepts provides support for the view that phenomenal and physical (or functional) concepts are different psychological entities, insofar as they involve different deployment and reference-fixing mechanisms (see also Diaz-Leon 2008).

5. So far so good. *A posteriori* physicalism can explain the existence of epistemic gaps between physical truths and phenomenal truths by asserting that phenomenal concepts are conceptually isolated from physical (or functional) concepts. It can also provide us with reasons to think that the two types of concepts are, as a matter of human psychology, conceptually isolated. But can it respond to the Introspection Objection?

To some, it might seem strange that phenomenal concepts could pick out physical or neural states. Specifically, if phenomenal concepts refer directly and if their referents are ultimately physical or neural states, then when one deploys a phenomenal concept, one would expect to be introspectively aware of certain physical characteristics. But that is not what one is introspectively aware in such a case. Instead, one is aware of certain properties of phenomenal experiences that do not seem to be shared by physical or neural states.

It is true that when we introspectively focus on the qualitative features of our experiences those features appear to be otherwise than physical. Still, why couldn't a physicalist insist that although phenomenal concepts conceive of their referents phenomenally, they nonetheless denote physical entities? Let me concentrate briefly on the recognitional account of phenomenal concepts. According to this account, phenomenal concepts pick out the brain states that are responsible for the tokening of those concepts in certain identification or recognitional tasks. Now, if the recognitional abilities that individuate phenomenal concepts discriminate physical properties (say, the activation of certain brain states), then it seems that the physicalist can respond by saying that phenomenal concepts really do pick out physical properties. It is true that typically when one tracks physical properties one does not think that one is tracking phenomenal qualities (see Loar 2003, p. 124). But that is beside the point. The tracking of phenomenal qualities can be the tracking of physical properties.

One might insist that the observation that phenomenal experiences appear to be unlike physical properties is more problematic for *a posteriori* physicalism than I am making it out to be. Consider the following argument:

Premise 1: When we introspectively examine the phenomenal character of our experiences, we notice that our experiences lack certain features that physical states, and specifically brain states, possess. For example, experiences seem to lack a certain causal and mereological complexity.

Premise 2: Introspection provides a guide into the essential nature of phenomenal states.

Lemma: Phenomenal states lack properties that physical states possess.

Conclusion: Phenomenal states cannot be identical to physical states.[7]

Proponents of *a posteriori* physicalism are not without a response to this version of the Introspection Objection: they can reject premise 2. In fact, proponents of *a posteriori* physicalism, at least as their position has been articulated in this paper, are committed to the claim that introspection involves conceptualization. Consequently, it is likely that certain features of mental states will be obfuscated by the application and deployment of our concepts. Proponents of *a posteriori* physicalism appear to be under no obligation to accept premise 2.[8]

6. It is important at this point to take a brief detour. A different but related objection to *a posteriori* physicalism maintains that *a posteriori* physicalism commits itself to the following inconsistent triad (Chalmers 1999 and 2004; cf. Bealer 1996):

(i.) Phenomenal concepts are directly referential.

(ii.) Phenomenal concepts pick out physical entities.

(iii.) Psychophysical identity statements or conditionals are *a posteriori*.

It is easiest to see why the three claims are thought to be inconsistent if we first introduce Bealer's notion of *semantic stability*. Bealer defines semantic stability as follows:

> An expression [or term] is semantically stable iff, necessarily, in any language group in an epistemic situation qualitatively identical to ours, the expression [or term] would mean the same thing (Bealer 1996, p.134).

Consider the term 'cobbler.' Such a term is semantically stable. Any language group in an epistemic situation qualitatively identical to ours would use the term (provided that they use the term with the same intend as we do) to mean the same thing. It seems that competence with the concept COBBLER suffices in order to know what it is to be a cobber, for knowing what it is to be a cobbler is nothing more than knowing the application conditions of 'cobbler.' In other words, competence with the concept COBBLER suffices in order to know the essence of the

property *being a cobbler*. The term 'cobbler,' we can say, is transparent or essence-revealing (see also Loar 2003, p. 125).

Just like the term 'cobbler,' the terms 'pain' and 'c-fiber stimulation' are also semantically stable. Pain is picked out by the way it feels: whatever feels like pain is pain. Consequently, anyone who shares our epistemic situation will use the term 'pain' to refer to the same phenomenon to which we refer. The same goes for c-fiber stimulation. The term 'c-fiber stimulation' does not pick out its referent by one of its accidental properties. Just like pain, c-fiber stimulation is picked out essentially. It is picked out by one of its essential properties, say, by 'its being the state of a certain material object, being of such and such molecular configuration' (Kripke 2011, p.25). In a qualitatively identical epistemic situation, 'c-fiber stimulation' will pick out c-fiber stimulation, and never something else.

Insofar as terms such as 'pain' and 'c-fiber stimulation' are semantically stable, shouldn't then the essences of the properties conceived under such terms be transparent to us? But if the essences of these properties are transparent to us, then we should be able to tell *a priori* whether expressions which include only semantically stable terms are necessary or not (see Chalmers 1999 and 2004). Since both psychophysical identity statements and conditionals are semantically stable, then they cannot be known *a posteriori*. Instead, they have to be known *a priori*. Hence, the nature of phenomenal concepts (and that of neural or basic physical concepts) is inconsistent with the claim that psychophysical identity statements and conditionals are *a posteriori*. The *a posteriori* part of *a posteriori* physicalism is threatened.[9]

7. How should proponents of *a posteriori* physicalism proceed? They should deny that phenomenal concepts are transparent or essence-revealing. Phenomenal concepts, they should hold, do not reveal the essence of their referents. Insofar as they fail to reveal the essence of their referents, one should not expect psychophysical identity statements or conditionals to be *a priori*. In fact, proponents of *a posteriori* physicalism should clarify that the claim that phenomenal concepts are directly referential is not tantamount to (nor does it entail) the claim that phenomenal concepts are transparent or essence-revealing. The former is a claim about reference; the latter is a claim about what (and how much) phenomenal concepts reveal about their referents. One can accept the former without also committing to the latter. The independence of these two claims was originally pointed out by Loar. In a passage that is worth repeating, he states:

> [A] phenomenal concept rigidly designates the property it picks out. But then it rigidly designates the same property that some theoretical physical concept rigidly designates. This could seem problematic, for if a concept rigidly designates a property not via a contingent mode of presentation must that concept not capture the *essence* of the designated property? And if two concepts capture the essence of the same property, must we not be able to know this *a priori*? These are equivocating uses of 'capture the essence of.' On one use, it expresses a referential notion that comes to no more than 'directly rigidly designate.' On the other, it means something like 'be conceptually interderivable with some theoretical predicate that reveals the internal structure of' the designated property. But the first does not imply the second. What is correct in the observation about rigid designation has no tendency to imply that the two concepts must be a priori interderivable (1997, p. 603).

Unfortunately for the proponents of *a posteriori* physicalism, the distinction between *being directly referential* and *being essence-revealing* (or *being transparent*) does not settle the issue. This is because the term 'not essence-revealing' is equivocal. To say that a concept *C* is not essence-revealing can mean (a) that *C* reveals nothing about the nature of its referent; or (b) that *C* reveals a part of the nature of its referent but conceals (or fails to reveal) another part of its nature; or (c) that *C* only reveals accidental properties of its referent - those accidental properties, however, are enough to fix the reference of *C* in the actual world. This three-fold distinction was advanced by Goff (2011) and, in line with him, I shall call concepts that behave according to (a) 'radically opaque,' concepts that behave according to (b) 'translucent,' and concepts that behave according to (c) 'mildly opaque' (p.194). Goff's objective in his essay is to argue that none of these three understandings of the term 'not essence-revealing' serves the purposes of *a posteriori* physicalism. If Goff is right – i.e., if there is no acceptable understanding of the term 'not essence-revealing' – then *a posteriori* physicalism is in trouble: it cannot maintain that psychophysical identity statements and conditionals are *a posteriori*.

In what follows I present and respond to Goff's objection. Although Goff is not the first author to object to *a posteriori* physicalism on grounds that the nature of phenomenal concepts is inconsistent with such a metaphysical position (see, e.g., Chalmers 1999, 2004, and 2010; Levine 2006 and Nina-Rümelin 2006), Goff's objection demands our attention. Goff develops his objection in remarkable clarity, and does so in a way that does not depend upon the acceptance of a two-dimensional semantic framework. Proponents of *a posteriori* physicalism

have to address Goff's objection, for a successful response to Goff's objection is a not merely a response to one of many objections to *a posteriori* physicalism. It is also an articulation of both the nature of phenomenal concepts and that which introspection reveals.

7. Consider first the claim that phenomenal concepts are mildly opaque: phenomenal concepts reveal only accidental features or properties of their referents. Such a claim is incongruous with Kripke's (1980) remarks about the concept PAIN. According to Kripke, feeling pain is not an accidental feature of being in pain. It is rather an essential characteristic of it and therefore, if something feels like pain, then that something is pain: 'Pain is not picked out by one of its accidental properties; rather it is picked out by the property of being in pain itself, by its immediate phenomenological quality' (Kripke 1980, p.152). To insist that phenomenal concepts are mildly opaque is to insist that the feeling of pain is only contingently related to being in pain, and although in this world the feeling of pain picks out the state of being in pain, in some other possible world there might be a phenomenon that is picked out by the feeling of pain but which is not pain. In other words, to hold that phenomenal concepts are mildly opaque is to accept that it is possible that one might not be in pain, even if one feels pain.

From a folk psychological or commonsensical perspective, such a view regarding the nature of pain and sensations in general is revisionary. But *a posteriori* physicalism better not require a revision of our ordinary conception of pain and sensations. As Stoljar rightly writes: 'if we are in the business of revising our ordinary concept of pain, then any motivation for a posteriori physicalism is lost, since if we are operating with a revised conception of pain, the probability of there being an a priori analysis of pain -- for example, a functionalist analysis -- is greatly enhanced' (Stoljar 2000, p. 47). In other words, by requiring us to give up our ordinary understanding of sensations, *a posteriori* physicalism loses much of its appeal. First, *a posteriori* physicalism no longer honors the commonsensical view according to which the phenomenal feeling of a mental state is necessarily related to the presence of the state. Furthermore, if *a posteriori* physicalism turns out to be a revisionary position, then what reasons would one have to choose *a posteriori* physicalism over *a priori* physicalism? The contention that *a priori* physicalism is unacceptable because it commits itself to a counterintuitive view regarding the nature of phenomenal concepts can no longer serve as a premise for an argument in favor of *a posteriori* physicalism. *A posteriori* physicalism is now susceptible to the same objection. In light of these

difficulties, *a posteriori* physicalists are better off rejecting the contention that phenomenal concepts are mildly opaque.

8. If the contention that phenomenal concepts reveal only accidental properties of their referents does not work, what about the claim that phenomenal concepts reveal *nothing* about their referents? Can proponents of *a posteriori* physicalism accept such a claim? The suggestion that phenomenal concepts are radically opaque seems to be counterintuitive: it flies in the face of our intuitions about phenomenal concepts and introspection. Consider a specific example of a phenomenal concept, e.g., RED. To assert that the phenomenal concept RED reveals to us nothing about seeing red is to hold that thinking of seeing red phenomenally (i.e., in terms of the phenomenal experience of seeing red) tells us nothing whatsoever about seeing red. But this seems rather odd. If proponents of *a posteriori* physicalism accept that phenomenal concepts reveal nothing about the nature of their referents, then they are committing themselves to a counterintuitive view about the nature of phenomenal concepts and introspection. They would have to accept that although phenomenal experiences appear to us to be a certain way, in fact, they are *nothing* like the way they appear. Whether being counterintuitive is enough of a reason to reject the claim that phenomenal concepts are radically opaque is not clear. Nonetheless, for the reasons provided against the suggestion that phenomenal concepts are mildly opaque, it is best for *a posteriori* physicalists not to have to accept what seems to be a peculiar and revisionary view about phenomenal concepts, sensations, and introspection.[10]

9. The last remaining alterative is to hold that phenomenal concepts are translucent, which means that phenomenal concepts reveal the nature of their referents but only *partially*. Goff considers this option but ultimately rejects it (see Goff 2011, pp. 196-9). He writes:

> If the phenomenal concept of pain is translucent, then it reveals an aspect of that property. But crucially *an aspect of a wholly physical state is itself a physical state*. Therefore, if the phenomenal concept pain were translucent, it would reveal that how pain feels involves a physical state. […] But this is precisely what the *a posteriori* physicalist denies. *A posteriori* physicalism is inconsistent with the claim that phenomenal concepts are translucent (ibid., p.197).

Goff's position can be summarized with the following argument:

Premise 1: If *C* is a translucent phenomenal concept that refers to property *P*, then conceptualization of *P* under *C* reveals *that P* has a certain aspect (or *that P* is a certain way).

Premise 2: If *P* is a physical property, then every aspect of *P* is a physical aspect.

Conclusion 1: If *C* is a translucent phenomenal concept that refers to property *P* and *P* is a physical property, then conceptualization of *P* under *C* reveals that *P* has a *physical* aspect. {From *premise 1* and *premise 2*}

Premise 3: Conceptualization of *P* under *C* does not reveal that *P* has a physical aspect.

Conclusion 2: Either C is not translucent or *P* is not a physical property. {From *premise 3* and *conclusion 1*}

Premise 4: *P* is a physical property. {Assumption}

Conclusion 3: *C* is not translucent.

Proponents of *a posteriori* physicalism seem to be in trouble. If phenomenal concepts are translucent then what they reveal is part of the essence of phenomenal experiences. In that case, physicalism is threatened, for what phenomenal concepts seem to reveal are not aspects of physical properties. But if phenomenal concepts are not translucent, then they must be either mildly opaque or radically opaque. As we have seen, however, both of these alternatives are problematic insofar as they commit us to a counterintuitive view regarding our sensations. Hence, although *a posteriori* physicalism *must* hold that phenomenal concepts are not fully essence-revealing, there is no sense of the term 'not (fully) essence-revealing' that supports *a posteriori* physicalism. Notice further that proponents of *a posteriori* physicalism cannot reject premise 3. If they were to reject it, they would have to accept that phenomenal concepts reveal the physical nature (or at least part of that nature) of experiences. But if phenomenal concepts do so, then arguably we should be able to determine *a priori* that phenomenal and physical concepts co-refer. Thus, a rejection of premise 3 threatens to undermine the conceptual isolation thesis and consequently, *a posteriori* physicalism.

10. As presented above, Goff's argument assumes that conceptualizing phenomenal experiences under translucent phenomenal concepts involves a revealing *that*.[11] But couldn't proponents of *a*

posteriori physicalism reject that assumption? That is to say, couldn't they maintain instead that, if *C* is translucent, then conceptualization of *P* under *C* reveals an aspect of *P* without having to reveal *that* it is an aspect of *P*? The issue can be stated more clearly if we distinguish between three related but ultimately differing views on what introspection reveals:

(T1) If C is translucent, then conceptualization of *P* under *C* reveals both certain aspects of *P* and *that P* has all those particular aspects.

(T2) If C is translucent, then conceptualization of *P* under *C* reveals certain aspects of *P* but fails to reveal *that P* has any of those aspects.

(T3) If C is translucent, then conceptualization of *P* under *C* reveals aspects of *P*, reveals *that* some of those aspects are aspects of *P*, but doesn't necessarily reveal *that P* has all those aspects.

(T2) should be rejected. It is a mistake to insist that introspection does not reveal *that* experiences have certain features or aspects. It is through introspection, for instance, that I typically learn that pains can be intense or that the taste of espresso is bitter. Introspective examination of our phenomenal states involves the deployment of phenomenal concepts. Consequently, it has a conceptual content. What is an issue, it seems, is not whether introspection involves a revealing that but rather how much of this particular revealing it involves.

(T3) seems to stand on firmer ground than (T1). Suppose that I have had a nagging dull pain for an about an hour and I am wondering whether I should take something to alleviate the pain. In trying to decide whether I should take medication, I might first try to discern whether the intensity of the pain has lessened or remained constant. While trying to determine the intensity of the pain, it seems plausible that the following claims hold true: (a) I am introspectively examining the character of my pain via the use of phenomenal concepts; (b) introspection reveals the pain as dull (after all, I am constantly *in* pain), and (c) introspection does not reveal *that* the pain is dull (in this particular moment I am not concerned with the type of pain that I am having, but with the intensity of pain). But if (a) – (c) are true, then (T1) should be rejected.

Whether examples like the one that I have just provided are decisive in showing that one should choose (T3) over (T1) matters little for present purposes. If *either* (T1) or (T3) is

true, then *a posteriori* physicalists have to accept that introspective conceptualization that deploys translucent phenomenal concepts is such that it involves a revealing *that*. Even if there are good reasons to accept (T3), all that the acceptance of (T3) achieves to show is the following: although introspection may reveal a number of aspects of a phenomenal state it does not reveal *that* the state has all the revealed aspects. But, even if accepted, such a conclusion will not perturb Goff. Under the assumption that *P* is a physical property and that all aspects of *P* are physical, then even if introspection does not reveal *that* P has all those aspects, it should still reveal *that* it has at least one of those aspects. But Goff can maintain that introspection fails to reveal *that P* has *any* physical aspect. Therefore, phenomenal concepts cannot be translucent.

Still, Goff's objection to *a posteriori* physicalism can be resisted. Indeed, in the remainder of the paper, I consider two responses to Goff's objection. The responses are closely related insofar as they both concentrate on what introspection reveals and specifically, on whether introspective conceptualization of *P* under a translucent concept *C* must reveal that *P* is a physical state. In §11, I examine whether *C* can be a translucent concept even if conceptualization of *P* under *C* does not reveal *that P* is a physical state. In §12, I argue that even if we grant Goff that introspection of *P* under *C* reveals that *P* is a physical state (or that *P* has a physical aspect), Goff's conclusion still does not have to be accepted. I claim this because even if introspection does reveal that *P* (or that an aspect of *P*) is physical, it reveals *P* (or its aspect) to be physical in a sense that fails to serve Goff's purposes.

11. Previously, I considered whether proponents of *a posteriori* physicalism could accept that introspective conceptualization of *P* under *C* reveals an aspect of *P* but deny that this conceptualization reveals *that* such an aspect is an aspect of *P*. Although such a response proved to be ineffective, it does pave the way for a different response. Can proponents of *a posteriori* physicalism deny that introspective conceptualization of *P* under *C* must reveal that *P* (or that an aspect of *P*) is physical, even if *C* is a translucent concept? Consider, for example, the concept JELLYFISH. The concept refers to a physical property (*jellyfish-hood* or *being a jellyfish*) and conceptualization under JELLYFISH reveals certain aspects of jellyfishes – the referent of JELLYFISH has tentacles, a soft body, it moves in a pulsating manner, etc. All these revealed aspects are physical aspects. Crucially, however, the concept JELLYFISH could reveal all those aspects as aspects of *jellyfish-hood* without revealing *that those aspects are physical*. If JELLYFISH is a translucent concept, then this example shows that a translucent concept could reveal certain

aspects of its referent, but fail to reveal *that* those aspects are of a specific (i.e., physical) underlying nature. Goff's argument requires that conceptualization of a physical property under a translucent concept reveals not only a physical aspect but also *that* this particular aspect is physical. Hence, if there are examples of translucent concepts such that conceptualization involving those concepts reveals physical aspects without revealing *that* those aspects are physical, then Goff's argument is in trouble. *A posteriori* physicalists can grant premises 1 and 2 without conceding conclusion 1.[12]

It is important to note that the above response is motivated by the assumption that JELLYFISH is a translucent concept. As such, the response is open to the following counter-reply: Goff could deny that JELLYFISH is a translucent concept. Instead, he could maintain that it is a mildly opaque concept. Consequently, the employment of JELLYFISH only reveals accidental properties of its referent: properties, however, that are enough to fix the reference of JELLYFISH in the actual world. *Having tentacles, having a soft body,* etc.*,* are not essential to being a jellyfish, for there could be something that looks like a jellyfish – insofar as it has tentacles, soft body, etc. – but that isn't a jellyfish. It could be, for example, an automaton that looks like a jellyfish or even another free-swimming marine animal that bears remarkable resemblance to a jellyfish but which has a rather different genetic lineage.

At this point, one could protest that maintaining that JELLYFISH is a mildly opaque concept, does not, by itself, settle the issue. What Goff has to show is not simply that JELLYFISH is a mildly opaque concept. Rather, what he has to show is that there are no concepts that are translucent and behave like JELLYFISH. That is, there are no translucent concepts of (manifestly) physical properties such that conceptualization involving those concepts reveals physical aspects without revealing *that* those aspects are physical. Although this could be a potentially fruitful dialectical move for proponents of *a posteriori* physicalism, it is not one that I wish to pursue further here. Goff's argument is plagued by an additional and, I believe, more serious problem. And even if Goff were to show that introspective conceptualization of *P* under *C*, where *C* is a translucent concept, must reveal that *P* is physical, proponents of *a posteriori* physicalism can still respond to his objection. Here is how.

12. In response to Goff's argument, proponents of *a posteriori* physicalism should draw a distinction between two senses of 'physical.' 'Physical' can refer to basic physical properties – i.e., properties that are posited by physics. Call this the *restricted* sense of 'physical.' Nonetheless,

'physical' can be used more liberally, insofar as the term 'physical' can pick out everything that is realized by, metaphysically necessitated, or supervenient upon a physical property in the *restricted* sense. Call this second sense of the term the *broad* sense of 'physical.' The distinction between the two senses or uses of the word 'physical' is neither recherché nor is it hard to motivate. It is not recherché for the distinction figures (often, at least) in everyday discourse. Objects such as stones, trees, chairs, or tables are taken to be paradigmatic cases of physical entities. But electrons, quarks, or magnetic fields are also said to be physical even though they are quite unlike stones, trees or tables. Second, the distinction is already assumed or presupposed by many proponents of physicalism. Indeed, without accepting that 'physical' can be understood in both senses it is hard to see how proponents of physicalism can insist that ordinary objects (e.g., chairs, stones, tables), social institutions (e.g., the Supreme Court), and the sorts of things that are posited by physics (e.g., fermions, charge, spin) are all physical.

With this distinction in hand, proponents of *a posteriori* physicalism can interpret premise 2 in the following two ways.

*Premise 2** If *P* is a physical property (in the restricted sense), then every aspect of *P* is a physical aspect (either in the restricted or in the broad sense)

Premise 2# If *P* is a physical property (in the restricted sense), then every aspect of *P* is a physical aspect (in the restricted sense).

Goff cannot insist that premise 2 should be read as premise 2#. To demand that all physical properties are physical in the restricted sense is to rule out metaphysical necessitation physicalism, supervenience physicalism, and realization physicalism by fiat. Given the context in which Goff's argument appears, it is illegitimate to make such a dialectical move. No premise of Goff's argument can entail the rejection of (certain varieties of) *a posteriori* physicalism.

Consequently, premise 2 has to be read as premise 2*. According to this reading of premise 2, Goff's argument takes the following form:

Premise 1: If *C* is a translucent phenomenal concept that refers to property *P*, then conceptualization of *P* under *C* reveals *that P* has a certain aspect (or *that P* is a certain way).

*Premise 2** If *P* is a physical property (in the restricted sense), then every aspect of *P* is a physical aspect (either in the restricted or in the broad sense)

*Conclusion 1**: If *C* is a translucent phenomenal concept that refers to property *P* and *P* is a physical property (in the restricted sense), then conceptualization of *P* under *C* reveals that *P* has a *physical* aspect (either in the restricted or in the broad sense).

*Premise 3**: Conceptualization of *P* under *C* does not reveal that *P* has a physical aspect (either in the restricted or in the broad sense).

Conclusion 2: Either C is not translucent or *P* is not a physical property (in the restricted sense).

Premise 4: *P* is a physical property (in the restricted sense).

Conclusion 3: *C* is not translucent.

Once the argument is presented in the form given above, an available response shows itself: proponents of *a posteriori* physicalism can now reject premise 3*. Conceptualization might not reveal that *P* has a physical aspect of *P* in the restricted sense, but it does reveal that it has an aspect in the broad sense. Consider briefly the variety of physicalism according to which all instantiated properties are metaphysically necessitated by physical properties. True, when we introspect we do not become aware of neurons (or fermions), nor *that* phenomenal states are composed of such entities. But the fact that a phenomenal concept does not reveal that sensations have physical aspects in the restricted sense of the term 'physical,' does not entail that it does not reveal that they have physical aspects in the broad sense of the term 'physical:' i.e., a property that is metaphysically necessitated by the physical properties posited by physics. Thus, proponents of *a posteriori* physicalism can accept that *P* is a physical property and yet deny that all of its aspects are physical in the restricted sense. Some aspects can be physical in the broad sense, and phenomenal aspects are physical in precisely this sense.[13] In fact, introspection is not unique or exceptional in this regard. The objects of perception are not given or revealed to us as physical in the restricted sense. We do not see quarks or leptons. Yet it would be unduly quick to conclude from this observation, that the objects of perception are not revealed (or presented) to us as physical. I see (or feel) *that* the table in front of me is solid without at the same time seeing (or feeling) *that* it is composed of microphysical particles or quantum fields.

Lastly, note that by assuming that phenomenal aspects of experiences are physical in this broad sense, one is not begging any questions. Goff's argument states that proponents of *a posteriori* physicalism cannot hold that phenomenal concepts are translucent. What we have shown is that under the assumption that *a posteriori* physicalism is true, there is a way of maintaining that phenomenal concepts are translucent: phenomenal concepts can reveal part of the essence of mental states (how mental states feel), even if what they reveal is not physical in the restricted sense.

13. I anticipate three responses to the objection that I offered to Goff's version of the Introspection Objection. Although the first two responses turn out to be unacceptable dialectical moves, it is still important to mention them, for they help to delineate the contours of the debate between *a posteriori* physicalists and proponents of the Introspection Objection. The third response cannot be so easily dismissed. Still, I shall argue that it fails to show that the Introspection Objection undermines *a posteriori* physicalism.

Response 1. One could hold that conceptualization of *P* under *C* reveals neither that *P* has a physical aspect in the restricted sense nor that it has a physical aspect in the broad sense.

It is rather hard to see how one could motivate this response. As mentioned above, one cannot simply deny that what introspection reveals are physical aspects in the broad sense. To do so is to reject certain varieties of *a posteriori* physicalism. However, the Introspection Objection is meant to conclude that physicalism is false; it cannot thus assume that is false.

Response 2. One could argue that if conceptualization of *P* under *C* reveals *that P* has a physical aspect, then subjects who introspectively conceptualize *P* should be moved to believe that such an aspect is indeed physical in the broad sense. Since subjects are not moved to believe that aspects of their phenomenal states are physical in a broad sense, then conceptualization of *P* under *C* fails to reveal *that P* has physical aspects in the broad sense.

This response runs together two views about revealing *that* that should be kept separate. That is, one could hold that introspection reveals *that* phenomenal states are physical (in a broad sense) without at the same time revealing *that* phenomenal states are metaphysically necessitated by (realized by, or supervenient upon) physical (in the restricted sense) properties. For instance, introspection reveals *that* a pain is dull without also having to reveal *that* dullness is a property

that is metaphysically necessitated by properties posited by physics. In other words, introspection reveals *that* phenomenal states have physical aspects (in the broad sense) insofar as it reveals that such states have certain features (sharpness, dullness, blueness, etc.). Yet introspection does not reveal both *that* phenomenal states have certain features and *that* there is a relationship between those features and physical (neuronal or microphysical) properties. To insist that one should be moved simply by introspection to believe that phenomenal aspects are metaphysically necessitated, for instance, by basic physical properties is to deny straightforwardly the *a posteriori* part of *a posteriori* physicalism. Consequently, if the response under examination demands that introspection should move one to believe that a specific metaphysical relationship holds between phenomenal properties and physical properties (in the restricted sense), then it begs the question against *a posteriori* physicalism.

Response 3. This response is a variation of the objection that I considered in section §6**.** The objection held that if phenomenal concepts are essence-revealing or transparent, then, contra *a posteriori* physicalism, psychophysical identity statements or conditionals turn out to be *a priori*. *A posteriori* physicalists, I suggested, can respond to this objection by denying that phenomenal concepts are transparent.

Response 3 revisits this issue. Following Goff, we now know that it is not enough to assert that phenomenal concepts are not transparent. One must also specify whether such concepts are translucent, mildly opaque, or radically opaque. I have been suggesting that *a posteriori* physicalists should choose the first option. But is the claim that phenomenal concepts are translucent consistent with the *a posteriori* part of *a posteriori* physicalism? In other words, can one hold both that phenomenal concepts are translucent and that psychophysical identity statements and conditionals are *a posteriori*? *A posteriori* physicalism wants to have it both ways. Response 3 says that it cannot.

It is best to explain how this response is intended to work with the use of an example. Suppose that PAIN and C-FIBER STIMULATION are both rigid designators[14] and that pain is identical to c-fiber stimulation. The statement 'pain is c-fiber stimulation' is thus necessarily true. If PAIN is a translucent phenomenal concept, then introspection reveals an aspect of what it is like to be in pain. But if C-FIBER STIMULATION is transparent, then conceptualization under C-FIBER STIMULATION reveals the *complete* nature of the experience of pain.[15] Consequently, it also reveals the nature of the aspect of what it is like to be in pain that is revealed by PAIN.

Unless there are two conceptually distinct ways of knowing what it is like for pain to be instantiated, *a posteriori* physicalism is false. Here is precisely where trouble seems to arise for *a posteriori* physicalism. We do not know how to make sense of the claim that a property can be instantiated in two conceptually distinct ways, or so Goff claims. He explains:

> Of course we can *refer* to a property in lots of different conceptually distinct ways: in terms of its accidental properties, in virtue of a causal or historical connection, etc. But it does not follow from this that we can *know what it is for a specific property to be instantiated* in numerous conceptually distinct ways. Someone understands what it is for an object to be spherical (in Euclidean geometry) just in case they know that a spherical object is a three-dimensional object which has all points on its surface equidistant from its centre. Someone understands what it is for something to be a bachelor just in case they know that a bachelor is an unmarried man, and they know what the institution of marriage is. It is difficult to make sense of the thought that the notion of a bachelor, or the notion of sphericity, could be understood in two conceptually distinct ways (p.198).

According to Goff, proponents of *a posteriori* physicalism who accept that phenomenal concepts are translucent are committed to TDI, which states that: 'For some property *F*, there are two conceptually distinct ways of knowing what it is for *F* to be instantiated' (*ibid.*). Yet, if Goff is right, and hence TDI lacks intelligibility, then TDI should be rejected. Proponents of *a posteriori* physicalism are therefore faced with a choice: either they reject that phenomenal concepts are translucent or they reject that they are conceptually isolated from physical or functional concepts.

14. Goff intends his claims to be a challenge to *a posteriori* physicalism. The force of his position, however, is not immediately transparent. For example, he writes:

> At the very least, if the *a posteriori* physicalist wants explicitly to defend the idea that we could know what it is for a single property to be instantiated under two conceptually distinct modes of presentation, she ought to spell out the details of this thesis, to put some flesh on the bone, and in doing so help us make sense of this initially obscure notion… No *a posteriori* physicalist has even begun to tackle these issues, or indeed even explicitly endorsed TDI (p.199; footnote deleted).

> We can see *a posteriori* physicalists as caught on the horns of a dilemma. Either they hold that phenomenal concepts are opaque, and put themselves at odds with deep intuitions we have about our phenomenal concepts, or they accept that phenomenal concepts are transparent/translucent and accept TDI (p. 201).

Goff's claims lend themselves to two distinct readings. First, Goff can be interpreted as claiming that TDI *is* in fact a thesis that lacks intelligibility and because of that it should be rejected. As mentioned above, a rejection of TDI is tantamount to a rejection of any variety of *a posteriori* physicalism that is committed to holding that phenomenal concepts are translucent. But Goff can also be interpreted as making a weaker, i.e., conditional, claim: *if* TDI is rejected, then proponents of *a posteriori* physicalism cannot insist that phenomenal concepts are translucent. According to this reading, Goff's claim that TDI is lacking intelligibility is an observation that further scrutiny can either confirm or discredit.

Of these two interpretations, ultimately only the latter can be maintained. Indeed, there are places in Goff's paper that clearly oppose the first (and stronger) interpretation. Consider, for instance, what Goff amasses as evidence in support of the view that TDI lacks prima facie intelligibility. His evidence consists in two counterexamples to TDI (being spherical and being a bachelor), none of which involves phenomenal concepts or properties (p.198). But without adducing reasons in support of the contention that what goes for concepts such as SPHERICITY and BACHELOR goes for phenomenal concepts, *a posteriori* physicalists are under no obligation to accept that TDI lacks intelligibility for pairs of phenomenal-physical concepts that co-refer. After all, it is a premise of *a posteriori* physicalism that phenomenal concepts are somehow special. Hence, to conclude that TDI is false on the basis of concepts such as SPHERICITY and BACHELOR is to fail to take seriously the *a posteriori* part of *a posteriori* physicalism.

What's more, proponents of *a posteriori* physicalism can amplify their response by even questioning Goff's contention that '[i]t is difficult to make sense of the thought that the notion of a bachelor, or the notion of sphericity, could be understood in two conceptually distinct ways' (ibid.). Diaz-Leon (2014) has convincingly (at least to my mind) argued that we can make sense of the idea that the property *being a bachelor* can be instantiated in a number of conceptually distinct ways. She writes:

> I take it that in order to *know* that a bachelor is an unmarried man, the subject has to entertain a proposition with the following content:
> (A): For *x* to be a bachelor is for x to be an unmarried man (Diaz-Leon 2014, 7).

But entertaining a different proposition – say (B): For x to be a bachelor is for x to be an unmarried male *Homo Sapiens* – is not only another way of knowing what it would be for the property *being a bachelor* to be instantiated, it is also a *conceptually distinct* way of knowing it. As she writes: '…if we are presented with different subjects who believe justifiedly only one of the propositions above (and a different one in each case), it would be a natural thing to say, first, that they all know what it is something to be a bachelor, and second, that they know what it is for something to be a bachelor in *conceptually distinct ways*' (ibid.) Similar claims can be made about the property *being spherical*. One can know what it takes for the property under question to be instantiated if one is justified in believing the proposition (A*): For x to be spherical x has to be a three-dimensional object that has every point on its surface equidistant from its center. But it is also possible to know when (and that) the property is instantiated if one believes with justification a different proposition, (B*): For x to be spherical x has to be a three-dimensional object the surface of which satisfies the following Cartesian equation x^2 + y^2 +z^2 = a^2. Since a rational subject could believe (A*) but fail to believe (B*), the propositions (A*) and (B*) are conceptually distinct.

Perhaps Goff has a different understanding of conceptual distinctness in mind than the one I just articulated. Suppose, for example, that, according to Goff, (A) and (B) are conceptually distinct iff a subject who fully possesses the concepts involved in (A) and (B) is unable to determine *a priori* that (A) and (B) are extensionally equivalent. In such a case, and given certain assumptions about the possession conditions of the concepts involved in (A) and (B), Goff could deny that (A) and (B) are conceptually distinct: to fully possess the concepts MAN and HOMO SAPIENS, he could insist, is to be able to know *a priori* that if x is a man, then x is a male Home Sapiens. Even if this is how the term 'conceptually distinct' is meant to figure in TDI, it does nothing to show that TDI is not intelligible. After all, it is possible that a subject may possess MAN but not HOMO SAPIENS. In that case, the subject would know what it takes for the property *being a bachelor* to be instantiated in one way but not in another. [16]

15. It is clear then that we can only interpret Goff as making a conditional claim: if *TDI* is a thesis that lacks intelligibility, then *a posteriori* is in trouble. This, I believe, is a significant result. It shows, at least at this point in the dialectic, that we cannot use the Introspection Objection to reject *a posteriori* physicalism. In other words, our investigation showed that there is no obvious way to interpret the Introspection Objection such that it demonstrates the falsity of this variety of physicalism. In fact, we even responded to Goff's variety of Introspection Objection. The provided response holds promise, even if its success ultimately depends on the fate of TDI. Questioning the intelligibility of TDI is tantamount to questioning the intelligibility of *a posteriori* physicalism. What we have thus shown in this essay is the following: *if a posteriori physicalism* is intelligible – viz., if one can make sense of the conceptual isolation of phenomenal and physical (or functional) concepts – it is safe from the Introspection Objection.

16. 'Is *a posteriori* physicalism a viable philosophical position?' 'Does the Introspection Objection undermine *a posteriori* physicalism?' These two questions should be kept separate. A negative answer to the latter does not entail an affirmative to the former. In this essay, I have tried to answer the latter by arguing that *a posteriori* physicalists can resist the different varieties of the Introspection Objection that figure in the literature. To repeat our findings: proponents of *a posteriori* physicalism can articulate the idea that phenomenal concepts are not fully essence-revealing by asserting that phenomenal concepts are translucent. Insofar as they are translucent, phenomenal concepts present the nature of their referents in a partial and incomplete manner. Consequently, the fact that introspection does not reveal phenomenal states as physical states (i.e., as states with certain causal and mereological complexity) does not threaten physicalism. Phenomenal states can still be physical (in the broad sense of the term 'physical') even if they are introspectively given or presented to us in a manner otherwise than physical (in the restricted sense of the term 'physical').

To the question, 'Is *a posteriori* physicalism a viable philosophical position?,' I have not attempted to provide a definitive answer. The theoretical obligations of *a posteriori* physicalists do not end with a defense of their position from the Introspection Objection. Thus, Goff is correct to insist that *a posteriori* physicalists have to motivate and defend TDI. But the debate as to whether TDI is intelligible is a debate as to whether the (purported) conceptual isolation of phenomenal concepts can be meaningfully maintained by *a posteriori* physicalists. Even though I have sketched the beginnings of such an answer in §§ 3 - 4, and suggested that TDI does not

lack intelligibility for concepts such as SPHERICITY and BACHELOR, a complete answer to this complex and difficult question far exceeds what can be done within the confines of a single paper. The debate between proponents and opponents of *a posteriori* physicalists has to carry on.[17]

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NOTES

[1] If phenomenal states are physical states, then most likely, they are (partly or entirely) physical states of the *brain*, that is, they are patterns of neuronal activity. But the complexity that we associate with such neuronal activity is not presented to us when we introspectively conceive of our phenomenal experiences. Such experiences show none of the morphological characteristics of nerve cells (e.g., the arborization of dendrites) nor do they convey to us the fact that while we are having phenomenal experiences, there is a transfer of electrical signals at synaptic junctions between nerve cells. Of course, if phenomenal states are *physical* states of the brain, then they are also physical insofar as they are states composed of microphysical particles or fields. Again, introspection provides us with no indication that phenomenal states are states of such nature.

[2] Physicalism is an *a posteriori*, contingent, metaphysical thesis about the nature of our world. According to one formulation of the thesis, it holds that all instantiated properties are physical properties – that is, they are either properties posited by physics or properties that are realized by, metaphysically necessitated by, or supervenient upon properties posited by physics. The thesis of physicalism can and should be explicated further. However, this is not the place to do so. See instead Jackson (1998), Melnyk (2003), Ney (2008), and Stoljar (2010). For present purposes, what is important to note is that if phenomenal states are not physical states, then physicalism is false: the world contains properties that (i) are not identical to properties posited by physics and (ii) are not even realized by, metaphysically necessitated by, or supervenient upon those basic physical properties.

[3] For a discussion of the distinction between supervenience physicalism and metaphysical necessitation physicalism, see Stoljar (2010, p. 116ff.). For a discussion of the merits of realization physicalism, see Melnyk (2003, ch.2). The notion of supervenience is often thought to raise difficulties for physicalism; see, e.g., Horgan (1993) and Hill (2009). Of course, identity physicalism has its own problems: most importantly, it is threatened by the presumed multiple realizability of mental states.

[4] Phenomenal concepts are the concepts that we deploy when we introspectively examine or take notice of the phenomenal character of our experiences. They refer to types of phenomenal experiences (or to the properties such experiences instantiate) and they do so from an introspective perspective.

[5] Proponents of *a posteriori* physicalism who defend physicalism from epistemic arguments by citing the nature of phenomenal concepts include: Balog (2012a) and (2012b); Diaz-Leon (2008) and (2010); Elpidorou (2013a) and (2013b); Hill (1997); Hill and McLaughlin (1999); McLaughlin (2001); Levin (2002) and (2006); Loar (1997), (2003), and (2007); Papineau (2002) and (2006); Perry (2001); and Tye (1995) and (2000). Not everyone is convinced that such a response to epistemic arguments is successful. See, e.g., Chalmers (1999) and (2006); Horgan and Tienson (2001); Stoljar (2005); and Tye (2009).

[6] I should point out that although most proponents of *a posteriori* physicalism hold that phenomenal concepts are actually conceptually isolated from physical and functional concepts, what is crucial for the viability of their position is a weaker claim. What proponents of *a posteriori* physicalism need to demonstrate in order to respond to epistemic arguments against physicalism is the conditional claim that if conceptual isolation holds, then mind-brain identity statements and conditionals will turn out to be *a posteriori*. Epistemic arguments against physicalism conclude the falsity of physicalism typically

on the basis of the conceivability-possibility thesis – i.e., the claim that under certain conditions, the conceivability of a proposition leads to its possibility. But precisely because the conceivability-possibility thesis has to be both *a priori* and necessary, then any coherent account of phenomenal concepts that disputes it will constitute a response to conceivability-based objections to physicalism. If the conceivability-possibility thesis were not *a priori*, then knowing it would depend on empirical evidence. It is rather unclear however what type of evidence would provide justification for such a thesis. Furthermore, if the thesis were allowed to be contingent, then the conceivability-possibility thesis would not be true in every possible world. But if there are possible worlds in which the thesis is false, then what guarantees that the *actual* world isn't one of those worlds in which the thesis is false?

[7] The current formulation of the argument only targets identity physicalism. In order for the argument to threaten realization physicalism, metaphysical necessitation physicalism, or supervenience physicalism, additional premises must be provided. For instance, one might add that causal or mereology complexity are essential properties of physical states, and if phenomenal states lack those properties, then phenomenal states cannot be realized by, metaphysically necessitated by, or supervenient upon physical states.

[8] I am aware that a potential objection looms in the offing. One might argue that premise 2 is a consequence of the claim that phenomenal concepts are directly referential. Therefore, proponents of *a posteriori* physicalism cannot so easily dismiss it. I consider this objection shortly.

[9] It is worth noting that proponents of *a posteriori* physicalism cannot respond to this objection by simply denying that the term 'c-fiber stimulation' is semantically stable. Ultimately, it does not matter whether the term 'c-fiber stimulation' turns out to be semantically stable. Opponents of *a posteriori* physicalism can replace it with one that (very likely) is. In other words, instead of focusing on the epistemic status of the psychophysical identity statement 'pain is c-fiber stimulation,' one could focus on the statement 'pain is such-and-so pattern of interaction between microphysical particles.' If the expression 'such-and-so pattern of interaction between microphysical particles' is semantically stable and essence-revealing (or transparent), then the statement 'pain is such-and-so pattern of interaction between microphysical particles' should turn out to be *a priori*. But such a result is incongruent with *a posteriori* physicalism.

Could one deny that the expression 'such-and-so pattern of interaction between microphysical particles' is semantically stable (and/or transparent)? Although such a dialectical move is available, it is not one that is particularly attractive to proponents of physicalism. By allowing that the expression 'such-and-so pattern of interaction between microphysical particles' is either semantically unstable or not transparent, one is admitting of an appearance-reality distinction in the case of fundamental physical particles or properties. But such an admission leads to an ontological view which is not recognizably physicalist. That is because the admission allows for the possibility of having something that seems (or behaves) in every way like an electron, for instance, but which is not an electron. In so doing, the admission denies that the manifest properties of particles such as electrons (e.g., a particle with an electric charge $-e$, mass 9.11×10^{-31} kg, and ½ spin) are essential to what it is to be such particles. But if physics can only reveal the dispositional properties of physical entities, then physicalists who accept that the terms referring to fundamental physical particles are either semantically unstable or not transparent have to accept that they are ignorant (in an important sense) of the underlying (or categorical) nature of such physical entities. If we are ignorant of the essence of physical entities, then to what does identity theory, metaphysical necessitation, or supervenience physicalism amount? When we state, for instance, that mental events supervene upon physical states of affairs, then precisely what do we mean by that? If the supervenience base is such that it consists of properties the essential natures of which we are ignorant, then we are ignorant of the supervenience base as well. I am grateful to an anonymous reviewer for asking me to elaborate on this issue.

[10] Lest I be misunderstood, I do not take this line of reasoning to constitute a definitive argument against the version of *a posteriori* physicalism that maintains that phenomenal concepts are opaque. Still, one might wonder whether phenomenal concepts are indeed opaque. Don't we have some knowledge about what it is for our phenomenal concepts to be satisfied? In other words, doesn't possession of

phenomenal concepts entail some knowledge regarding their application conditions? If so, doesn't this fact run counter the claim that phenomenal concepts are opaque? See also Diaz-Leon 2014. Since the viability of this version of *a posteriori* physicalism is not a topic that I wish to examine any further, I shall put it aside. My primary interest in this essay is with the variety of *a posteriori* physicalism that assumes that phenomenal concepts are translucent.

[11] There is plenty of textual evidence that suggests that this is precisely how Goff (2011) intends his argument. See especially pp. 196 – 97.

[12] I am grateful to an anonymous referee for pressing me to address this potential response to Goff's argument.

[13] The provided response to Goff's argument works best for metaphysical necessitation physicalism, supervenience physicalism, and realization physicalism. If it turns out that proponents of identity physicalism cannot respond to Goff's objection, then this inability to offer a response could be construed as an objection to identity physicalism.

[14] *R* rigidly designates *x* if *R* designates *x* in all worlds in which *x* exists and never designates anything other than *x* (see Kaplan 1989, p.569). This characterization of the notion of *rigid designator* does not specify the extension of *R* in possible worlds in which *x* does not exist. For instance, does *R* designate *x* even in possible worlds in which *x* does not exist? Kripke is ambiguous on this issue. Sometimes he suggests that in possible worlds in which *x* does not exist, *R* designates nothing (Kripke 1971, p.146). Elsewhere, however, he claims that if *R* rigidly designates *x*, then *R* designates *x* even in worlds in which *x* does not exist (Kripke 1980, p.78). Salmon (1981, pp. 33-4) calls the first type of rigid designator 'persistently rigid' and the second 'obstinately rigid.' For the purposes of this essay, it is not necessary to decide between these two characterizations of the notion *rigid designator*.

[15] Proponents of physicalism cannot easily reject the claim that 'c-fiber stimulation' is transparent. See note 9.

[16] I owe this point to Diaz-Leon.

[17] I would like to thank Guy Dove and Philip Goff for comments on a previous version of this paper. I am especially grateful to an anonymous referee for the *Pacific Philosophical Quarterly* for extensive and valuable suggestions.

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